I Want You to Sit There and Think About What You Did: An Examination of Isolation During Police Interrogations

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Abstract

The literature on police interrogations is vast, but little to no research has explored isolation during interrogations. Police officers are trained to isolate suspects (Cleary & Warner, 2016), officers report "isolating suspects from their family and friends" as the technique they use most commonly (Kassin et al., 2007), and this research provides evidence of its use. This study examined 20 police interrogation videos, finding that 95% of cases utilized isolation. The amount of time spent in isolation throughout the interrogation ranged from zero minutes to 6.49 hours (M = 2.58 hours). The average amount of time spent in isolation during an interrogation differed significantly from the Reid Model recommendation of five minutes, however, no relationship between time spent in isolation and the interrogation outcome (confession/no confession) was identified. Police were found to interrupt isolation periods more than once per interrogation, on average. Nonverbal behaviours provided few cues to interrogation outcome.

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Overview of Manuscript

To begin, a review of relevant literature is provided. This includes but is not limited to models of police interrogations in a historical context, deception detection, false confessions, safeguards for suspects, interrogation tactics, isolation, and other resources. This is followed by the current study; specifically, our hypotheses, methods, and procedures. Next, results, including relevant case facts, demographic information, and statistical tests, are presented. We then move to a thorough discussion and review the implications of this research, followed by a critical analysis of study limitations and future research directions. Considerations for conducting research like this conclude the main body of this manuscript.

I Want You to Sit There and Think About What You Did: An Examination of Isolation

During Police Interrogations

When a crime takes place, and the police identify a suspect, it is a common global practice to conduct an interview or interrogation to further the investigation. These interrogations aim to acquire more details concerning the crime, to identify any other potential perpetrators, to generate a timeline of events, and to obtain the truth. The literature on the topic of police interrogations is robust; however, the use of isolation remains unexplored. Police officers are trained to isolate a suspect during an interrogation (Cleary & Warner, 2016), yet minimal, if any, information regarding this tactic is available. Although we know the police are isolating suspects, we have no information as to what these isolation periods look like, how long they last, and what the suspects are doing during this time. This research attempts to fill this gap in the literature and focuses on isolation periods during police interrogations. Specifically, we take an exploratory approach to obtain general information regarding isolation during police interrogations.

History of Interrogation Models

The interrogation training that police officers receive varies by organization, jurisdiction, and can even vary within the individual detachments. Cleary and Warner (2016) investigated the formal and informal interrogation training that American police officers received on the job. It is important to note that these categories are not mutually exclusive, as officers may receive additional training as their career progresses. Ninety-one percent of the officers reported receiving informal interrogation training on the job,

55.9% reported receiving training on the Reid Technique (Reid), 8.2% reported training on the British PEACE Model (PEACE), 5.9% received training in HUMINT (often used by the U.S. military), and 48.8% reported receiving another version of formal training (Cleary & Warner, 2016).

In Canada, Snook, House, MacDonald, and Eastwood (2012) surveyed officers regarding the training, supervision, and feedback they receive for interviewing adult witnesses. Most commonly, officers reported receiving training in the field. Further, less than half of the police officers agreed that the interviewing approach they used was based in psychological science. Snook, Eastwood, Stinson, Tedeschini, and House (2010) reported that the majority of police officers in Canada who receive suspect interview training are being taught the Reid Technique (or training derived from the technique).

Reid.

Inbau, Reid, Buckley, and Layne (2013) created the Reid Technique in the 1940s and 1950s. This technique involves a non-accusatory interview with the suspect (the Behavioural Analysis Interview; BAI), followed by a guilt presumptive interrogation if the police think the suspect is guilty (Gudjonsson, 2011). It continues to be taught to police today (John E. Reid & Associates, 2020), despite a lack of empirical evidence proving its efficacy. Literature has shown that components of the Reid Model increase the risk of false confession (French, 2019) and that this technique is not based on empirical evidence. Another concern that warrants mention is that the Reid Model is guilt-presumptive, therefore concerns exist regarding the potential for confirmation bias within police interrogations. As the process is guilt-presumptive, interrogators may seek

to corroborate their existing biases and may ignore information that challenges or discredits their expectations (Salvati & Houck, 2019).

The main purpose behind the BAI is for the officer to determine whether the individual is guilty or not. These interviews can be either formal (e.g. at a police station) or informal (e.g. at the crime scene), but Inbau et al. (2013) recommend having the interview in a noncustodial environment whenever possible. The investigator should familiarize him/herself with the case history and should have notes to prepare for the questions they intend to ask the suspect. Rapport building with the suspect is encouraged during this interview. Part of the interview involves the investigator conducting a Behaviour Symptom Analysis to assess the suspect's verbal, paralinguistic, and nonverbal behaviours to gauge whether they are guilty. Inbau and colleagues (2013) noted that there are a variety of factors that can influence an individual's behaviour while in an interview (e.g. use of medications) and that there are behaviours that are common to both individuals who are truthful or untruthful, making this BAI more difficult. The BAI is based on the assumption that interrogators can detect deception based on verbal and nonverbal cues; however, literature has shown this is a flawed assumption (French, 2019). For example, a meta-analysis conducted by DePaulo, Malone, Muhlenbruck, Charlton, and Cooper (2003) found that many behaviours thought to be associated with lying (e.g. fidgeting) showed no detectable ties to deceit (or only weak ones). Additionally, Vrij, Granhag, and Porter (2010) report that prior meta-analyses very clearly show that there are no cues (verbal or nonverbal) that are uniquely associated with deceit.

If an investigator deems a suspect to be guilty based on the interview, they move on to the guilt-presumptive interrogation. This interrogation involves a nine-step approach, with the intent to elicit a confession from the suspect. The nine steps are laid out by Inbau et al. (2013) to follow during the interrogation, although interrogators are not required to follow these steps in order. Officers may need to go through some of the steps more than once to achieve their goal of a confession. Explanations of the steps are as follows:

- 1. Direct, Positive Confrontation: The police present the suspect with a direct statement confronting them that they believe he/she is the person who committed the crime in question. Following this statement, an interrogator should momentarily pause to examine the suspect's verbal and nonverbal reactions. The interrogator should provide a reason as to why the suspect should tell the truth, and it is at this point that the transition statement will introduce the theme of the interrogation.
- 2. Theme Development: The interrogator will suggest a reason that the suspect may have committed the crime and the officer should provide a moral excuse for the crime (e.g. blame it on another person and/or an unfortunate circumstance). Inbau and colleagues (2013) suggested that if a suspect appears to be listening attentively or considering the theme, it is suggestive of a guilty individual. If the suspect shows resent in regards to the theme, the authors suggest that it may be indicative of the suspect's innocence.
- 3. Handling Denials: The interrogator should discourage the suspect's denials and go back to the theme of the moral excuse that they presented during theme

development. Inbau et al. (2013) propose that both innocent and guilty individuals will deny involvement in the offence. An innocent person is thought not to allow their denials to be interrupted, and they will not become passive with continued interrogation; however, a guilty individual will stop denying the offence and/or the denials will become weaker.

- 4. Overcoming Objections: Inbau and colleagues (2013) classify objections as excuses for why the suspect could not have committed the crime. Objections from suspects should be permitted, and then the interrogator should seek to overcome these objections. Inbau et al. (2013) propose that objections are an offensive strategy used by guilty suspects.
- 5. Procurement and Retention of a Suspect's Attention: The suspect may withdraw from the interrogation if their objections and denials were not effective. At this point, the interrogator must obtain the suspect's full attention, and the interrogator should ensure that they appear sincere in what they are saying to the suspect and attempt to maintain eye contact with the individual.
- 6. Handling the Suspect's Passive Mood: By this point in the interrogation, the suspect is likely debating the benefits of telling the truth and interrogators can often observe physical changes in the suspect at this point (e.g. suspect is crying).
- 7. Presenting an Alternative Question: Alternative questions present the suspect with a choice regarding a component of the crime in question. One option is generally face-saving or thought of as more acceptable than the other option. When the suspect selects one of the alternative options, Inbau and colleagues (2013) suggest it is the equivalent of an incriminating admission.

- 8. Having the Suspect Orally Relate Various Details of the Offense: The suspect should recount details of the crime.
- 9. Converting an Oral Confession into a Written Confession: It is at this point that the oral confession is converted to a written or electronic copy.

Many researchers have looked at the Reid model of interrogation, including the effectiveness of the technique in obtaining confessions and the effect the technique has in relation to obtaining false confessions, among other areas. Kassin and Fong (1999) conducted an experiment that involved some participants' involvement in mock crimes (vandalism, shoplifting, breaking and entering, and computer break-in). Of the participants in these conditions, there were both innocent (did not commit the mock crime) and guilty (committed the mock crime as instructed to) individuals who would later experience an interrogation. A secondary group of participants were assigned to the training condition, and received training in deception detection (specifically, trained in aspects of the Reid model) or the naïve condition, who received no training. Those in the training and naïve groups judged the "suspects" on video being interviewed; all suspects denied committing the offence in question. Results showed that those who had received training were significantly less accurate than the individuals who received no training in deception detection.

King and Snook (2009) conducted one of the few studies that examined videorecorded police interrogations. The authors obtained a total of 44 interrogation videos. Results showed that, on average, 34% of the nine-step Reid model components had been used. The included interrogation videos resulted in a full confession 27% of the time, 23% contained a partial admission, 11% had no comment, and 39% contained suspect denials. King and Snook found that acquiring confessions was positively associated with the amount of Reid components used, as well as the number of influence tactics and coercive strategies used in the interrogation (King & Snook, 2009). The videos that resulted in a full or partial confession used a higher number of Reid components in comparison to the videos resulting in no comments or denials.

PEACE.

The PEACE Model of interviewing was developed in the United Kingdom since 1993 (Gudjonsson, 2011) and was created in response to wrongful convictions derived from manipulative and coercive police practices in interrogations (Snook, Eastwood, Stinson, Tedeschini, & House, 2010). PEACE is also the preferred interviewing method in New Zealand, Australia, and Norway (French, 2019). PEACE contains five phases, which represent "P" (Preparation and Planning), "E" (Engage and Explain), "A" (Account), "C" (Closure), and "E" (Evaluation). Investigators learn how to interview suspects, witnesses, and victims in an effective way (Snook et al., 2010), with the goal of the interview being to obtain a "full and accurate account" (College of Policing, 2016). The focus in PEACE is on fact-finding, rather than obtaining a suspect's confession (Gudjonsson, 2011). PEACE does not use the manipulative, or arguably, coercive, strategies that the Reid method uses.

The College of Policing (2016) provides a detailed explanation of what the PEACE model entails and what should take place at each point. The "P" of PEACE stands for Preparation and Planning. Before the interview begins, the investigator should thoroughly review the available case information and come up with a written plan for the interview. The written plan should contain the topics that aim to be covered, any exhibits,

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the information that leads the interviewer to believe the interviewee is guilty, amongst other pertinent information (e.g. the length of time the suspect has been in custody, any information that has been identified that may assist the investigation, etc.). The next phase to take place is Engage and Explain. This phase is where the interviewer builds rapport and gets the conversation moving. The interviewer should clearly state the reason the person is there (e.g. suspect, witness, victim), as well as outline any objectives for the interview, which the College of Policing suggests providing to the interviewee in a hard copy format (College of Policing, 2016). The interviewer should explain any routines or expectations for the session. The third step, Account, is when the interviewer has the interviewee provide their account of what happened. The interviewer should actively listen to the individual and should avoid interrupting their account of the situation. There are five types of questions that the interviewer could ask of the individual, including open-ended (e.g. Explain what happened), specific-closed (e.g. What did the person say?), forced-choice (e.g. Was the car black or white?), multiple (e.g. What did they look like, where did they go afterward?), and leading questions (e.g. You saw them do it, didn't you?) (for a thorough explanation of each and when to use them, see College of Policing, 2016). Typically, open-ended and probing questions are recommended, while the others should be avoided (Snook, Luther, Quinlan, & Milne, 2012). If the police are using PEACE to interview a suspect and identify inconsistencies, they may further probe and challenge the suspect to resolve them (Walsh & Bull, 2010), however, challenges should not be done aggressively or in an accusatorial way; they should instead be seen as an opportunity to clarify any discrepancies (Snook et al., 2010). In the Closure phase, the investigator should summarize what the individual has said and should take note of any

further clarification that is provided by the interviewee. The police should answer questions that the interviewee may have, and the officer should explain what will happen next. The final phase, Evaluation, takes place after the interviewed has concluded. The interviewer should evaluate the information that they obtained and compare it with what the department already knows. The officer will need to determine whether further action is or is not necessary.

RCMP Phased Interview Model for Suspect.

The most recently developed investigative interviewing model introduced to Canada is the Royal Canadian Mounted Police (RCMP) Phased Interview Model for Suspects (PIM) (RCMP, 2017). PIM has been adopted by several police departments beyond the RCMP, including Vancouver Police, Abbotsford Police, BC Transit Police, The Royal Newfoundland Constabulary, Peel Regional Police, Greater Sudbury Police, Edmonton Police Service, Saskatchewan Police College, and the Canadian Police College (RCMPb, 2017). This approach is thought to be a hybrid of the non-accusatory and accusatory-based interviewing models and was influenced by PEACE (RCMP, 2017). PIM involves six phases, including 1) Review, Preparation, and Planning, 2) Introduction and Legal Obligations, 3) Dialogue, 4) Version Challenge, 5) Accusation and Persuasion, and lastly, 6) Post Interview Review (Public Prosecution Service of Canada, 2019). This model evolved through a process which included receiving training from the London Metropolitan Police, a national RCMP focus group to examine the current RCMP approach to interviewing suspects, a thorough international literature review, and thorough examination of the current RCMP interview model, as well as PEACE and Reid models. Advantages and disadvantages were taken into consideration, and ultimately the

RCMP agreed that non-accusatory interviewing should be the central approach to interviewing suspects. The accusatory practices and persuasion were considered to still be relevant but only in limited contexts, and the RCMP determined that veracity testing should be objective rather than subjective, therefore removing the BAI, which utilizes subjective behavioural analysis to determine guilt (RCMPb, 2017). The RCMP state that PIM boasts high effectiveness, including within cases of homicide, serial homicide, organized crime, National Security Investigations, and sexual crimes (RCMPb, 2017).

Detecting Deception

The definition of deception is "a successful or unsuccessful attempt, without forewarning, to create in another a belief which the communicator considers to be untrue." (Vrij, 2008a, p. 15, as cited in Vrij et al., 2010). Individuals may deceive others about a variety of things, including how they are feeling, their opinion, their plans, or even their involvement in a criminal act. A meta-analysis conducted by DePaulo et al. (2003) examined cues to deception and whether liars are less forthcoming than truthtellers, whether deceptive accounts were less compelling than truthful ones, whether liars were more positive than truth-tellers, whether liars were tenser than truth-tellers, and whether the lies included fewer ordinary imperfections and unusual contents than truths did. Results indicated that the liars provided fewer details, were less forthcoming and talked for less time than the truth-telling individuals did. The lies also made less sense, were less likely to be structured logically and were less plausible. The liars themselves produced fewer gestures to illustrate their speech and sounded more unclear, impersonal, and evasive, compared to the truth-tellers. Unsurprisingly, the liars also made more negative statements and were less pleasant. Regarding whether the liars were tenser,

results indicated that they were more nervous and more vocally tense than those telling the truth. Additionally, liars appeared to avoid admitting imperfections (e.g. being unable to remember) more than truth-tellers, but mentioned relationships or events surrounding the key event more.

Without special training or aids, Bond and DePaulo (2006) identified that people accurately identify truths and lies, on average, 54% of the time. On average, individuals correctly identified truths as nondeceptive 61% of the time and lies as deceptive 47% of the time. In their meta-analysis, Bond and DePaulo (2006) also found that individuals are more accurate when they are judging lies through audio mediums than through visual ones. Participants saw the visual messages as less truthful than those presented through audio, audiovisual, and transcripts, which suggests that solely paying attention to visual cues could result in a tendency to believe that the individual is lying.

The literature on cues to deception and its effectiveness in being able to differentiate between a truth and a lie correctly is quite mixed. According to Vrij (2008), many police manuals regarding interrogation techniques have a strong focus on nonverbal cues to deception, especially visual cues, which may imply that they are more important than verbal cues. However, individuals who solely pay attention to nonverbal cues tend to be less accurate at identifying truths and lies, compared to those who additionally consider speech content, and are also more likely to accuse someone of lying (Vrij, 2008). As Porter and ten Brinke (2010) point out, there are limitations to all forms of deception detection, including nonverbal/body language, verbal/linguistic, facial, and physiological. The cues indicative of deception that appear the most valid in the literature, which one should consider together, include blink rate, vague descriptions,

repeated details, pause rate, contextual embedding, speech rate, illustrators, reproduction of conversations, and facial emotional leakage (Porter & ten Brinke, 2010). Fortunately for police officers, planning criminal activity and telling lies about it is difficult, and evidence exists that shows that lies are easier to differentiate from truths if the individual telling a lie is considered motivated to have individuals believe them (Bond & DePaulo, 2006), which an individual in a police interrogation would be.

Meissner and Kassin (2002) examined relevant literature and looked at the effects of training and prior experience on biases towards judging an individual as deceitful or truthful. The results showed that individuals who received training or who had prior experience had a bias toward seeing deceit, compared to those who did not have life experience of training. Meissner and Kassin (2002) classified this effect to be "investigator response bias." Authors further found that having life experience or training did not have a significant effect on being able to discern truth and deceit. Furthermore, Meissner and Kassin (2002) conducted a study to take a more in-depth look at investigator response bias, using the same materials as Kassin and Fong (1999). The resulting data showed that for overall accuracy, the student sample obtained by Kassin and Fong did not significantly differ from that of the investigators. However, the investigators were more likely to identify suspects as deceitful (the response bias) and were significantly more confident than the students.

Deception Detection Using the Reid Model

Inbau and colleagues (2013) outline the procedures for analyzing behavioural symptoms of suspects in custody. The authors suggest that there are three distinct channels that humans communicate through, including verbal, paralinguistic, and

nonverbal. Individuals who are lying, whether to the police or otherwise, experience anxiety when they lie, which often results in behavioural changes. Vrij, Mann, and Fisher (2006) tested the Behavioural Analysis Interview (BAI) outlined by Inbau et al. (2013) and found results that were consistent with deception literature - which was the opposite of how Inbau et al. reported liars would act. Inbau and colleagues stated that liars would be more likely to exhibit nervous behaviours and would be less helpful during the investigation than the truth-tellers would be. However, the individuals telling the truth produced more nervous behaviours and were more evasive and naiver when explaining the purpose of the interview (Vrij et al., 2006).

Again, it is crucial to note that literature has shown that the assumption that interrogators are able to detect deception based on nonverbal and verbal cues is unreliable and flawed (French, 2019). Hauch, Sporer, Michael, and Meissner (2016) reported that training involving verbal content cues found larger training effects on detection accuracy than those which examined nonverbal and paraverbal, feedback (feedback after judgements), or multichannel training. In fact, some studies examined in this meta-analysis were contradictory of one another, despite examining the same cues – finding significant negative effects, nonsignificant effects, and positive, large effects. DePaulo and colleagues (2003) reported that many behaviours did not show links to deceit, and that the behaviours that police are trained to believe are indicators or deceit are also indicative of other processes and states, not simply indicators solely of deceit. Vrij et al. (2014) suggest that individuals detecting lies place too much of an emphasis on verbal cues, and meta-analyses have shown no clear cues (verbal or nonverbal) that are unique

to individuals being deceptive. Descriptions of the three channels are described below and are the views of Inbau and colleagues (2013).

Verbal Channel.

The verbal channel examines the word choice that suspects use and how they arrange those words. Inbau and colleagues (2013) suggest that individuals who are healthy (mentally) and who have been socialized will experience anxiety when they tell a lie. When an interrogator directly asks a suspect a question, the suspect has four verbal response options: evasion, deception, omission, or the truth. Inbau and colleagues (2013) recognize several indicators of when an individual is truthful or deceptive by analyzing verbal behaviour. One of the first cues is those truthful suspects tend to respond directly to questions, whereas those who are deceptive will answer evasively. These evasive tactics can include leaving open possibilities in their response, responding to a question with a question, or lying by referral (when a suspect response is predicated on earlier communication). A second cue is that deceptive subjects may provide specific denials, compared to an honest subject, who will deny their implication broadly as they are more confident using more descriptive and broad language. Individuals who are being deceitful may also offer qualified responses, such as generalization statements (e.g. "typically"), memory blaming, and omission qualifiers (e.g. "hardly ever"). Interestingly, the association between memory blaming and deceit is not consistent with Statement Validity Analysis (SVA; a tool developed to asses child witness statements of sexual abuse) and Criteria-Based Content Analysis (CBCA; a tool created to differentiate between intentionally fabricated and event-based statements from witnesses involving sexual interactions and other crimes) (Griesel, Ternes, Schraml, Cooper, & Yuille, 2013). There

is an assumption that liars are motivated to provide an account of the event in its entirety and to respond to all questions; therefore, memory blaming is not expected from an individual who is being deceitful (Griesel et al., 2013). When deceptive individuals deny something, Inbau and colleagues (2013) suggest they may bolster the denial to make it seem more credible (e.g. "as God is my witness") or may make a statement that goes against their self-interest. Those who are denying an act may offer a response that appears as though it was rehearsed, whereas an individual who is being honest will produce spontaneous responses. For the rehearsed denials, there are two main cues: noncontracted denials (e.g. "No I did not" versus "No I didn't") and listing possibilities (e.g. 1st, 2nd, 3rd).

Paralinguistic Channel.

The paralinguistic channel considers characteristics of speech that are not spoken aloud. One of the things Inbau and colleagues (2013) suggest interviewers take note of during an interview is response latency, which is the length of time between the question and the response. Response latency varies by person, so it is important to establish a baseline by asking questions that should not evoke a negative response (e.g. number of children). Early responses are also considered a cue to look for within the paralinguistic channel. Inbau and colleagues suggest that often, honest subjects provide early responses due to their anxiety and may repeat their responses once the question is complete. However, deceptive subjects do not repeat their response once they have spoken, as they see the question as being answered. The next cue to analyze is the response length. The authors of the Reid Manual suggest that deceptive subjects may offer shorter responses with minimal information within them, compared to honest subjects, which provide

longer responses. Continuity of the response is also examined and considered a component of the paralinguistic channel. Someone who is being deceitful will start and stop their response abruptly and may begin again in a different direction. An individual who is being honest will provide a natural and spontaneous response that flows logically and will maintain the thought. The final cue to identifying deception within paralinguistic behaviour is erasure behaviour, which erases the implied meaning of the statement. This behaviour can include a cough, a laugh, or clearing one's throat, but Inbau et al. recognize that these behaviours may be common to honest subjects as well, so to only consider them as a cue to deception when they follow a denial.

Nonverbal Channel.

The final channel proposed by Inbau and colleagues (2013), the nonverbal channel, examines physical body movements. This channel includes leg and/or arm movements, suspect's posture, eye contact, as well as facial expressions, among other behaviours. Inbau et al. (2013) note that these nonverbal indicators can be misinterpreted by those observing them, especially if they are examined separately from the verbal cues.

The posture of an individual is thought to provide cues as to whether the person is truthful or deceitful. Inbau and colleagues suggest that someone who is being deceitful is more likely to slouch when sitting or may turn his or her torso away from the interrogator. Additionally, the deceptive suspect may sit on their hands, tightly cross their arms across their chest, tuck their feet under the chair, or remain static in one position throughout the interview. Someone who is being truthful may occasionally lean towards the interviewer, may align their body with the interviewer (straight on), and may cross

their legs in a relaxed manner. A suspect who is truthful is thought to feel comfortable alternating their posture to accommodate the needs of their body (e.g. muscle tension).

Hands are an additional thing to observe while trying to detect deception. Illustrating behaviour is when an individual's hands are away from their body, gesturing, and are often associated with an individual being truthful (Inabu et al., 2013). An adaptor is when an individual's hands touch a part of their body; of which there are three categories: grooming, personal, and supportive/protective gestures. Inbau and colleagues suggest that adaptors can be indicative of guilt under proper circumstances, such as when this behaviour is elicited when responding to a question and is an alteration from the suspect's baseline behaviour. The first category of adaptors is grooming gestures, which essentially involves the person's appearance (e.g. dusting clothing, fixing their hair), but Inbau and colleagues note that officers should examine these behaviours in conjunction with a verbal response. Personal gestures are another category and satisfy a need of the suspect (e.g. scratching your neck). The final of the three categories is protective and supportive gestures. Protective gestures protect the subject in some way (e.g. cover your eyes to avoid eye contact) and supportive gestures are when the individual's hand comes into contact with their head (e.g. leaning your hand on your fist). Despite the awareness of illustrators and adaptors and what they may imply, it is also possible that an individual may not move their hands or make gestures.

Watching a suspect's feet may also provide information as to whether the suspect is deceptive. When an interrogator is posing a question to the individual, either before their response or while they respond, a suspect may use their feet to push off the ground to allow for him or her to move their body off the chair to change their position. When

this is done before a response or during, Inbau and colleagues suggest it is an indicator of deception. An additional way to examine feet would be to observe someone bouncing their foot, specifically when an individual alters their behaviour during a response, as that may imply deception.

Examining a suspect's eye contact and facial expressions can provide information to interviewers regarding whether the person is honest or misleading. When a suspect who is known to be from a Western culture avoids eye contact (e.g. looks at the floor or the ceiling) that may indicate deception, alternatively, if a subject stares directly at the interviewer and does not avert their gaze, that can also be a cue to deception, as the person may be overcompensating. Inbau and colleagues provide four additional guidelines to evaluate a suspects' eye contact, including someone that does not make direct eye contact is likely to be withholding information from the interviewer; interviewers should not challenge the suspect to look at him or her directly in the eye; the interviewer should not stare directly at the suspect, but should instead try not to make the suspect uncomfortable, and observe his or her eyes and other behavioural symptoms more casually; and lastly, do not allow a suspect to wear dark glasses during the interview unless medically necessary. For each of these guidelines, there are additional factors to take into consideration as outlined by Inbau et al.

Precautions.

Inbau and colleagues (2013) outline several precautions to consider when examining a suspect's behaviour. One of the main cautions is that these behaviours should not be determinative of innocence or guilt but should be examined in conjunction with other factors (e.g. suspect's background, culture, attitudes). Upon interacting with a

suspect, interviewers should take note of the suspect's intelligence and nervousness and be aware of the potential of neurological disorders or possible influence from drugs. The interviewer may also have an individual complete a medical questionnaire to help identify any concerns.

Many behavioural symptoms can be common to both individuals who are being honest and those who are attempting to mislead an interviewer (Inbau et al., 2013). These behaviours include being reserved (reticence), nervous, not showing respect or being rude (impertinence), angry, and may also include showing signs of despair and/or resignation. Additionally, several things may lead an interviewer to misinterpret or mistake the behavioural symptoms the suspect is presenting. Such factors may include the suspect's use of medication, mental illness, cultural differences, the age of the suspect (e.g. child versus adult), intelligence, maturity, personality, social responsibility, and emotional condition. A final factor for interviewers to be aware of is overwhelming investigative findings, as to not have the officer fall victim to tunnel vision and allow the behavioural symptoms to outweigh what the evidence shows.

Additionally, Inbau et al. (2013) advise that the suspect behaviour should be analyzed following several guidelines. Officers should look for deviations from the normal behaviour of the subject. Deviations can be observed through unrelated questioning of the suspect of background investigative information. All the observed behaviours should be evaluated based on their timing (when they occur) and how consistent the behaviours are. Inbau et al. also note that the behaviours officers are assessing should be occurring in response to questions asked by the investigator or while the suspect is answering, to be reliable indicators of truthfulness or deceit. Moreover, it is

important that investigators evaluate these behavioural observations alongside the case evidence, and that the suspect's behaviour is only one aspect to be included in the legal process.

False Confessions

Confessions can either be true, when a truly guilty person provides a confession, or false when an innocent individual provides a confession. False confessions are a phenomenon that many think are counterintuitive and are unlikely to happen (Leo & Liu, 2009). Costanzo, Shaked-Schroer, and Vinson (2010) found that mock jurors believed that they would not confess to a minor crime (91.3%) or a serious crime (93.3%) when they were truly innocent. Despite the general assumption that individuals would not provide a false confession, data provided by the Innocence Project (2017) shows that more than 25% of those who have been exonerated by DNA evidence either provided a false confession or some form of an incriminating statement.

Kassin and Wrightsman (1985) identified three types of false confessions; voluntary, coerced-compliant, and coerced-internalized. Voluntary confessions are those that are provided by a willing, innocent individual, without any prompting. The coerced-compliant confessions are from suspects who recognize that they are innocent, yet confess. Suspects often provide these confessions because the suspect is trying to escape an interrogation, to avoid a threat, and/or to gain a promise or reward (Kassin, 2005). Interestingly, Kassin and Wrightsman (1985) indicate that once the stress of the interrogation fades, the people who provided a coerced-compliant confession are likely to retract their confession. Unfortunately, recanted confessions tend to be believed by investigators and fact-finders, as they believe that witnesses would be unlikely to provide

a statement that is not in their best interest (Malloy & Lamb, 2010). Coerced-internalized confessions are unique in that the suspect is innocent yet comes to believe that he/she committed the crime in question.

Kassin and Sukel (1997) provided mock jurors with three conditions involving murder trials, specifically containing a high-pressure confession, a low-pressure confession, or no confession (the control group). Researchers asked the mock jurors to provide a verdict in each scenario. Results showed that although participants recognized the confession statement in the high-pressure condition to be involuntary and indicated that it did not affect their decision, it significantly influenced convictions. In the noconfession control group, there was a 19% conviction rate; however, in the high-pressure condition, despite it being seen as involuntary, the conviction rate was 47%. This result occurred even though suspects were to disregard any confession evidence that they thought to be coercive.

Kassin and Kiechel (1996) conducted a now well-known study referred to as the "computer crash" or ALT key experiment. The participants were not to push the "ALT" key during a time reaction task, as it would cause the computer hard drive to crash. Participants were later falsely accused by the experimenter of pushing the ALT key, and in some conditions, the confederate reported that they had observed the individual hit the key. Although none of the subjects had hit the ALT key, 69% signed a confession that admitted to hitting the forbidden computer key. When false evidence (the confederate saying they witnessed the participant do it) was present, the rate went up to 94% of participants who signed a confession, despite their innocence. Furthermore, 9% of those

who signed a confession provided details to explain how they had accidentally crashed the computer.

A study conducted by Kassin, Meissner, and Norwick (2005) looked at whether students and police investigators could differentiate between true and false confessions. Participants watched or listened to ten inmate's confessions to crimes, of which half were true accounts and half were false. Results showed that the students were generally more accurate in their judgements than the investigators, although the investigators were significantly more confident in their judgements. Interestingly, the accuracy rates were higher for those who listened to the confessions (audiotape conditions) than those who viewed the confessions (videotape conditions). The authors conducted a second study, as the first study results indicated a guilty response bias from the police investigators. The authors speculated that this bias was a result of a discrepancy in the officer's expected base rates of false confessions and the number of false confessions that had been presented. The second study attempted to neutralize this bias by informing participants that half of the confessions were true and that the other half were false. This change neutralized the investigator bias; however, it did not increase the officer's accuracy, and they remained highly confident in their judgements. Perhaps unsurprising to some, it is not only police officers who are affected by confessions, but judges can be too (Wallace & Kassin, 2012). Wallace and Kassin found that confessions still influenced the verdict – even when the tactics used were considered "high-pressure." Despite the judges in this study's recognition that the confession conditions were likely to be coercive, they still provided guilty verdicts more often when a confession was provided.

Expanding the examination of confessions to factors specific to the suspect, Scherr, Miller, and Kassin (2014) studied the interaction between chronotypes and confessions. Chronotypes are the tendency for an individual to sleep at a particular time in 24 hours. Scherr et al. were interested in whether the time of day and the chronotype influenced confessions. Participants were classified as either morning-type or evening-type and assigned to a morning or evening session. The results showed that participants were more likely to provide a confession during the opposite time-period that they identified previously as better for them (e.g. morning-types confessed more in the evening), which has the potential to put many people at risk during interrogations.

Perillo and Kassin (2011) investigated the use of "bluff tactics" and the effect on confessions. A bluff tactic is when investigators pretend that there is evidence to be tested, but without claiming that it necessarily would implicate the suspect (Perillo & Kassin, 2011). The authors conducted three experiments, the first two of which utilized the computer crash paradigm created by Kassin and Kiechel (1996). The experimenter explained to the participant that the computer is connected to a server in another room and that all keystrokes on that computer were recorded, which would allow the experimenter to know if they pressed the key. The experimenter further explained that the server was password-protected; therefore, the experimenter would be unable to check the keystrokes until their professor returned. In the first experiment, there were five conditions, including a control, the bluff, false witness evidence, a combination of false witness evidence and bluffing, and the witness affirmed innocence control. The first study found that 60.6% of participants confessed to hitting the ALT key, and the bluff-only condition significantly increased the false confession rate. This experiment found

what previous studies also had (Kassin & Kiechel, 1996); that presenting an individual with false evidence alone will significantly increase the confession rate. In the second experiment by Perillo and Kassin (2011), the researchers also collected self-reports to identify the reasons the suspects provided (or did not provide) a confession, and whether their belief in future exoneration played a role in this decision. This experiment also differed in that participants were assigned to either the control or bluff condition. Results showed that the bluff condition had significantly more false confession rates; 47% in the control group to 74% in the bluff condition. Despite the high confession rates in both conditions, in the self-report questions following confession, 94% of participants indicated that they had some level of certainty that they did not press the ALT key, and 73% were completely sure that they had not pressed it. Overall, 57.9% of participants confessed to making the computer crash through the act of pushing the ALT key.

Taken together, the aforementioned studies show clear evidence of false confessions occurring and of factors that may influence confessions (e.g. chronotype, false evidence ploys). Individuals may not believe they would confess to a crime they did not commit; however, the literature provides insight that shows otherwise.

Risk Factors to Confess.

The White Paper, written by Kassin and colleagues (2010), identified risk factors for false confessions. In this paper, Kassin and colleagues provided an extensive summary of the literature that is available regarding police-induced confessions, in which the authors identified risk factors and provided recommendations regarding confessions moving forward. Situational factors that put innocent individuals at risk that were identified in the literature by Kassin and colleagues include prolonged isolation, sleep

deprivation, length of the interrogation, minimization, and presenting the suspect with false evidence.

As recommended by Inbau and colleagues (2013), investigators should place suspects in a private and quiet room with minimal distractions and noise. Ideally, Inbau et al. (2013) recommend leaving the suspect alone for five minutes before the investigator enters the room. The justification behind this technique is that while alone, the suspect will likely think about the crime he/she has committed (or is thought to have committed), what evidence the police may have obtained, and what potential consequences the individual may be facing. Isolating the suspect is thought to increase the suspect's apprehension levels and feelings of insecurity when the interrogation begins.

The appropriate length of interrogation before the suspect is under duress varies based on the individual and their needs (e.g. exhaustion, thirst, hunger). When considering whether the suspect is under duress, Inbau and colleagues (2013) suggest that an appropriate guideline to follow is to evaluate whether officers are intentionally dragging out the interrogation as a tactic to break the suspect's will. Authors also state that for an interrogation that is being done well (e.g. not using coercive techniques) and conducted on an average person, three or four hours is not long enough to place the individual under duress.

Minimization is an additional factor to take into consideration. Minimization is when investigators create an excuse or moral justification for why the suspect committed the crime, thus making a confession appear as though it is a reasonable option (Kassin et al., 2010). The reason that this is considered a risk factor is that suspects often imply

leniency from statements involving minimization, thus innocent individuals may confess based on an expectation of such leniency.

Police use of false evidence in interrogations is also considered a risk factor for eliciting false confessions. Individuals may feel trapped by this information and may even begin to internalize that they committed the crime, resulting in a coerced-internalized confession. An example of false evidence leading to a false confession is the computer crash study conducted by Kassin and Kiechel (1996), as mentioned above.

In addition to situational risk factors, many dispositional risk factors raise concerns for false confessions. Adolescence, immaturity, cognitive and/or intellectual disabilities, personality, psychopathology, unpleasant exposure to traumatic or unpleasant life events (Gudjonsson et al., 2007), as well as being innocent (Kassin, 2005), can increase the risk for providing a false confession. Adolescents are more suggestible than adults and are also more impulsive in their decisions. Additionally, they engage in more risky behaviours, are more susceptible to negative influences, and have a lower ability to consider longer-term consequences than adults (Kassin et al., 2010), all of which increase their risk to provide a confession falsely. Like adolescents, those who have intellectual disabilities are more likely to be susceptible to influence, including the tendency to want to please authority figures (Kassin et al., 2010), therefore increasing their risk for a false confession. Certain personality types, such as those who are more suggestible or compliant, are more likely to provide a false confession. Individuals who have antisocial traits have also been identified as more likely to provide a false confession, as they have an increased "tendency to make false denials as well as false confessions depending on their need at the time" (Kassin et al., 2010, p. 21). Suspects with exposure to traumatic or

unpleasant effects are at risk to falsely confess because these negative life events have left them psychologically vulnerable (Gudjonsson et al., 2007). Research exists that suggests being innocent itself is a risk factor to falsely confess (Kassin, 2005), as the suspect believes that truth and justice will prevail.

Safeguards.

One of the safeguards put into place in the United States to protect suspects is the Miranda Warning, which came about following Miranda v. Arizona. Police officers must inform individuals of their right to remain silent and their right to an attorney – both of which offer levels of protection to the suspect. Kassin et al. (2007) asked police officers to report on their interrogation beliefs and practices, including suspects' use of Miranda Warning. Officers reported an estimated 81% of suspects waive their Miranda rights. Leo (1996) observed 122 felony interrogations and an additional 60 videotaped felony interrogations. He found that 74.73% of suspects waived their Miranda rights, and an additional 0.55% moved to waive their rights during the interrogation.

The rights of Canadians are different from citizens in the United States. Although Canadians do not have Miranda rights, there are legal rights laid out for citizens in sections 7-14 of the Canadian Charter of Rights and Freedoms (Canadian Charter of Rights and Freedoms, 1982). These rights include (but are not limited to) the right to remain silent and the right to retain counsel. Although citizens in both countries have the right to remain silent, it is interesting to note that they do not mean the same thing. Police in Canada are permitted to continue questioning a suspect despite their invocation of this right. The right to counsel also differs across the border. Those in the United States have the right to have counsel present during police questioning, as well as the right to consult

a lawyer immediately upon arrest – in person (Patry, Connors, Adams-Quackenbush, & Smith, 2017). However, in Canada, one's right to counsel typically is satisfied after a conversation with a lawyer, and individuals do not have the right to have counsel present during police interviews or interrogations (Patry et al., 2017).

Eastwood and Snook (2010) examined whether Canadians' understand their legal rights and whether they are better understood in verbal or written format. When delivered in written formats, participants showed greater understanding of both their right to silence (48%) and right to counsel (32%), compared to their understanding of these rights when presented verbally (4% and 7%, respectively). Eastwood and Snook (2012) further expanded upon the research regarding comprehension of legal rights by examining modifications, specifically using three listenability factors (instructions, listing, and explanations). Results showed that repeating information (explanations) increased the comprehension of participants' legal rights, however, the caution that included all three listenability modifications showed the most participant comprehension. When comparing the standard caution to an improved listenability caution, the caution with a focus on listenability showed higher recall levels than that of the standard format (Snook, Luther, Eastwood, Collins, & Evans, 2016).

Patry and colleagues (2017) conducted three studies to examine Canadians' understanding of the rights of criminal suspects upon arrest, the first two of which looked at Canadian laypersons, and the third of which looked at Canadian legal professionals.

The results of the first study clearly show confusion regarding suspect's rights. Regarding the right to silence, 40% of participants believed that if the suspect decides to invoke their right to silence, the police must stop questioning them, which is inaccurate in Canada.

Although citizens in the United States that the right to have counsel present during questioning and having questioning stop upon a request for a lawyer, Canadians do not. Patry and colleagues (2017) found that approximately 75% of the sample indicated that Canadian suspects also had these rights. Like the first study, the second study showed confusion amongst participants. Approximately 86% of participants believed that Canadians have a right to have a lawyer present while being questioned by police, and 76.5% thought that they could stop the interrogation until their lawyer was there. The majority (65.2%) of participants also believed that they could end an interrogation should they opt to exercise their right to silence. The third study compared law enforcement officers (police and sheriffs) to lawyers perceptions of laypersons knowledge of their legal rights. Eighty-eight percent of police officers responded that they have had to explain the caution to an individual who did not understand. Explaining the caution to individuals who do not understand is not unique to police officers, as 57.14% of lawyers indicated that they have had to do the same thing. Results also showed that police officers and sheriffs have more faith in the police caution provided to suspects and were more likely to say that criminal suspects understand those rights.

Research has shown that Canadians misunderstand their rights, but are they invoking them anyway? King and Snook (2009) analyzed video footage of police interrogations in an Atlantic Canadian context, of which 27% acquired a full confession. Officers read the suspects their rights in 80% of the videos; however, 74% of suspects waived their rights, and 26% later invoked them. It is interesting to note that the rate in Canada of waiving rights (74%) is nearly the same as in the United States (74.43%), which suggests a trend toward not utilizing the protections that citizens have.

Researchers have made suggestions to help protect individuals and to aid in preventing false confessions. Kassin and colleagues (2010) have suggested that police forces electronically record all interrogations from start to finish, with an equal view of the interviewee and the interviewer. As false evidence, minimization, and false confessions have been associated in the past, Kassin et al. (2010) also recommend addressing these issues. Vulnerable populations might require additional protections compared to an average citizen, and Kassin et al. (2010) suggest having a lawyer present during questioning and having that be mandatory for these individuals. They also suggest providing special training for law enforcement personnel who direct and are involved in the interrogations.

In addition to safeguards within interrogations, there are also safeguards to protect an individual in court. These include assigning the prosecution the burden of proof, the use of expert testimony, and the presumption of innocence until proven guilty (Leo & Liu, 2009).

Interrogation Tactics

Tactics utilized by police investigators during interviews can be coercive or non-coercive. Non-coercive tactics are those that do not have a manipulating effect on an individual, such as building rapport or asking a suspect to provide an account of a situation. Coercive tactics are those that "remove an individual's perception of their freedom to make a meaningful choice during an interrogation" (Blandón-Gitlin, Sperry, & Leo, 2011). These tactics are seen as manipulative and increase the risk of false confession. Interestingly, the American Psychiatric Association amended their position on psychiatrists participating in interrogations involving the military or civil authorities to

state that psychiatrists should not help or be involved in any coercive interviewing of individuals in custody (Halpern, Halpern, & Doherty, 2008). The methods identified by the American Psychiatric Association as being coercive included humiliation, sleep deprivation, threats, isolation, and intentional infliction of pain, amongst other tactics.

Cleary and Warner (2016) reported on interrogation training programs provided in the United States (both formal and informal training). Of their sample of 340 officers, over half of the sample reported being trained to use psychologically coercive techniques on both juveniles and adult suspects, and the officers who received training on the Reid technique were significantly more likely to use manipulative techniques than the officers trained in other methods. The interrogation technique that officers were trained for the most was building rapport (95.6% for use with adults and 77.9% for juvenile suspects).

Kassin and colleagues (2007) assessed the self-reported attitudes and behaviours of 631 police officers on interrogation factors, such as deception detection, false confessions, and frequency of interrogation tactic use. The most commonly used technique identified was isolating the suspect from their family and friends, with 66% of participants saying they "always" do this. The least utilized tactic of the 16 assessed was to physically intimidate the suspect, with only 1% saying that they "always" did this and 73% indicating that they "never" use this technique. The officers estimated that only 17% of interrogations had been conducted during normal sleeping hours; however, the chronotype and time of day research by Scherr et al. (2014) suggests that interrogations during typical awake hours can still be problematic for many individuals.

Leo (1996) watched live and video-recorded interrogations and analyzed a variety of things, including the interrogation tactics the officers were using. Of the 182 observed

interrogations (both in-person observation and video-recorded), suspects provided a full confession in 24.18% of cases, a partial admission in 17.58%, an incriminating statement in 22.53%, and no incriminating statement in 35.71%. The tactic used most frequently was appealing to the suspect's self-interests (88%). Other than a tactic that was not used in any of the observed cases (touching a suspect in an unfriendly manner), the least used interrogation tactic was the good cop/bad cop routine (1%). Leo (1996) found that the number of tactics used by investigators was significantly related to the seriousness of the offence, the strength of the evidence, and the suspect's race. Of the 182 cases observed, only four were considered coercive.

Research conducted by Leo and Liu (2009) asked potential jurors about the perceived likelihood of 18 interrogation tactics eliciting a true or false confession, as well as their perceptions of the 18 psychological tactics. A five-point Likert scale was used for scoring the tactics, with a one indicating "Not at all coercive" and a five indicating "Extremely coercive." The tactic that was considered the least coercive was giving the suspect a lie detector test and truthfully telling the suspect that the results are inconclusive, and the tactic identified as the most coercive was beating or assaulting the suspect. The techniques were split into six categories for analyses, including accusation/re-accusation, challenging denials, confrontation with true evidence of guilt, confrontation with false evidence of guilt, promises of leniency, and threats/use of harm. Aside from the "confrontation with true evidence of guilt" category, participants thought of all the categories as being slightly coercive, with means above the middle of the scale. Although participants recognized that these categories and many of the individual tactics

alone were considered somewhat coercive, participants thought all the techniques would more likely to elicit a true confession from an individual than a false confession.

Isolation in Interrogations

Isolating a suspect from family and friends is a common practice reported by police (Kassin et al., 2007). It is a controversial practice and has been deemed coercive in the past by the American Psychiatric Association when used in certain situations (Halpern et al., 2008). Police interrogations and military services were previously allowed to utilize "third-degree" interrogation tactics to obtain necessary information from individuals (including terrorism suspects) who were not cooperative with the authorities. These tactics have since been banned from legal use but included prolonged confinement and isolation, among other tactics (Vrij, Meissner, Fisher, Kassin, Morgan III, & Kleinman, 2017). Police interrogations have been compared to the classic obedience study done by Milgram in 1963, including the use of isolation. Specifically, in both situations, the individual, who is either in the study or in an interrogation, is isolated without access to any means of social support. In research, isolation has been studied along with the use of other interrogation tactics, but rarely, if at all, has it been studied on its own.

Humans have a fundamental need for contact with other humans and a need to belong. Baumeister and Leary (1995) conducted a literature review for findings related to the belongingness hypothesis. Belongingness is associated with emotional patterns and cognitive processes, and the existing literature on the topic provides concrete evidence that humans have a need to belong and that it is a fundamental motivation. Due to this human need, belongingness can shape human thought, and when presented with events

and/or situations, people analyze them in the context of the implications for their current relationships. Anxiety is a common result when individuals experience a loss of a social bond or feel as though it is threatened (Baumeister & Leary, 1995) and is a consequence of being separated from important individuals in one's life. When an individual has social support, this can act as a protective factor against the negative effects of this stress. In the context of an isolation period during the interrogation process, suspects do not have access to social support to help buffer the negative effects of the stress. Additionally, a suspect will likely feel as though their social bond(s) or relationship(s) are threatened, therefore increasing their anxiety and creating a greater need for social support.

One can think of isolation during interrogation as a way of excluding the suspect — both from contact with police and from their social networks. Eisenberger, Lieberman, and Williams (2003) examined how social exclusion affects the brain. Researchers were interested in whether social pain had similar effects on the brain as physical pain, specifically, whether social pain activates the same areas as physical pain does. There were two types of exclusion analyzed in this study, explicit social exclusion ("participants were prevented from participating in a social activity by other players engaged in the social activity" (Eisenberger et al., 2003, p. 291)) and implicit social exclusion ("participants, because of extenuating circumstances, were not able to join in on a social activity with other players" (Eisenberger et al., 2003, p. 291). Participants who were experiencing either form of exclusion (explicit or implicit) had functional magnetic resonance imaging (fMRI) scans conducted, however, as explicit exclusion relates more directly to isolation, nothing further will be mentioned regarding implicit exclusion. In previous research, the anterior cingulate cortex (ACC) is activated when an individual

experiences physical pain. Not dissimilar to studies involving physical pain, Eisenberger and colleagues (2003) found that the ACC was more active when individuals experienced explicit exclusion than when being included. This result implies that explicit exclusion creates distress similar to the distress caused by experiencing pain. Being brought into a police station and isolated before interrogation can arguably be seen as a form of exclusion, as the individual is not only isolated from their family and/or other social relationships but are experiencing exclusion from social contact with the police officers.

Inbau and colleagues (2013) recommend isolating the suspect for approximately five minutes before an interrogation. The justification for this is as follows:

While alone in the room, the guilty suspect will think about the crime he committed, what possible evidence the investigator may have connecting him to the crime and the possible consequences he faces as a result of committing the crime. This period of introspection will tend to increase the level of insecutiry and apprehension the suspect experiences at the outset of the interrogation. Some guilty suspects will be so deep in thought and so concerned with their plight that when the investigator enters the room, they will become startled and immediately indicate by their eyes and general appearance that they expect their deception to be revealed. On the other hand, the innocent suspect, even though somewhat apprehensive, will usually turn easily toward the investigator when he enters; although understandably interested, there will be an "at ease look in the suspect's eyes and the appearance will be a favourable one." (Inbau et al., 2013, p. 191)

As Inbau et al. (2013) have written the manual to teach police officer's the Reid technique, it would be appropriate to say that most officers are trained to isolate suspects.

Cleary and Warner (2016) provided insight into the training programs that officers receive regarding interrogations, including both formal and informal training. Of the 340 officers, 76.8% had training that involved isolating adult suspects in the interrogation room, and 62.1% had training that taught officers to do the same with juveniles. Kassin et al. (2007) looked at the frequency of 16 interrogation tactics in a sample of 57 Canadian custom officials and 574 police investigators in the United States. The participants rated their use of the techniques on a scale of one to five, with one representing "Never" and five representing "Always." The most used technique in this sample was "Isolating the suspect from family and friends." King and Snook (2009) examined interrogation videos from a police department in Atlantic Canada and analyzed the use of Reid components and suggestions. In 61% of the video-recorded interrogations, the police had the suspect be alone in the interrogation room before the admittance of the interrogator. Areh, Walsh, and Bull (2016) were interested in police practices in Slovenia, including whether police use the techniques suggested by their police manual. A total of 86 investigators responded. The same scale that was used by Kassin et al. (2007) was utilized, with a one representing "Never" use the technique and a five representing "Always" use the technique. In the Slovenian sample, "Isolating the suspect from family and friends" was the fifth most common technique used out of the 20 that researchers asked about, suggesting the use of this technique is commonplace beyond Canada and the United States.

The research that is available that goes beyond solely examining the frequency of isolating the suspect, does not suggest that it is a positive measure. Irving and Hilgendorf (1980; as cited in Kassin & Gudjonsson, 2004)) discussed three factors (stressors) related

to the custodial environment that can adversely affect the suspect's decision-making abilities and mental state, of which the second is "social isolation from peers." Kassin and Gudjonsson (2004) propose that prolonged isolation from significant others can increase an individual's stress levels. Additionally, Kassin and colleagues (2010) suggest that isolating individuals from significant others can be considered deprivation, which can result in higher levels of distress and motivation to escape the situation – potentially by providing a confession.

The Current Study

In this study, we aimed to further the literature on police interrogations and to understand the use of suspect isolation better. Police are being trained to use, and are using, isolation as a tactic. It is, therefore, important to understand what a typical experience in isolation may look like and what effects that may have on other aspects of the interrogation (e.g. interrogation outcome). In this study, we analyzed police interrogation videos, provided by an Atlantic Canadian police department, to examine several aspects of isolation and nonverbal behaviour. Nonverbal behavioural cues that were identified by Inbau and colleagues (2013), along with several identified by the research team, were coded for within the videos.

The first factor we examined is time, specifically the total time that the suspect was in isolation. To our knowledge, no research exists that examines the average length of time that an individual spends in isolation during an interrogation. We hypothesized that the total time spent in isolation would be longer than the five minutes of isolation prior to interrogator entry as recommended by Inbau et al. (2013) in the Reid manual. This was hypothesized as five minutes does not seem lengthy when examined across the

length of an entire interview, and as the five minutes recommendation by Inbau and colleagues is for solely prior to the entry of the interrogator. Whether the suspect experienced isolation before interrogator entry is also included in the coding schema.

It is unlikely that all the provided interrogation videos will end in a confession. However, for those that do, we examined whether there was a relationship between time in isolation and whether the suspect confessed. Specifically, we hypothesized that a longer amount of time spent in isolation would be more likely to have the interrogation result in a suspect providing a confession.

The third aspect of the interrogation videos that we were interested in was interruptions, as we do not know whether police officers interrupt (e.g. a police officer goes into the interrogation room for a moment) the time suspects spend in isolation.

Interruptions were when an officer entered the interrogation room for a reason unrelated to specifics of the crime (aside from attorney updates). The number of interruptions while the suspect is in isolation were coded for, as well as how long the interruption lasted.

Additionally, we noted the reason for these interruptions. We hypothesized that interruptions would be infrequent in the police interrogation videos, as the purpose Inbau and colleagues (2013)suggest behind the isolation is to disorganize attempts at deception and increase insecurity felt by the suspect, and we anticipated police officers would not to interrupt this process.

This research also examined the prevalence and frequency of nonverbal behaviours that Inbau and colleagues (2013) believe to be indicators of deceitful and innocent suspect behaviour (N = 28), as well as several additional behaviours suggested by the IRT (N = 12). Although Inbau et al. warn that the nonverbal behaviours should

not be relied on to determine guilt and/or deceit alone, during isolation, there typically is no verbal or paralinguistic channels to rely upon. We hypothesized that several of these nonverbal behaviours that officers have the training to look for during the BAI might be present during isolation periods. Instead of indicating deception (as the suspect will not be attempting to deceive anyone while in the room alone), these nonverbal cues may instead indicate guilt, discomfort, or may simply indicate higher levels of anxiety. Several of the nonverbal behaviours, as mentioned by Inbau et al. (2013), could not be assessed during the isolation period, such as eye contact, facial expressions, illustrators, observing the suspect's feet, and certain hand movements during the interrogation. Although all the behaviours are not coded for, there is still a variety of behaviours that have the potential to be present during an isolation period (see Appendix A). Overall, we coded for 40 suspect nonverbal behaviours during these interrogations. Twenty-eight behaviours were obtained from the Reid Manual and identified by Inbau and colleagues (2013) as indicators of deception or innocence. The remaining 12 behaviours were compiled by the IRT and included to determine whether they too would occur during isolation.

Method

Sample

The Interrogations Research Team (IRT) obtained a sample of video-recorded police interrogations from an Atlantic Canadian police department (N = 33 cases), which includes 46 interrogations. Most primary investigators (PI) (87.0%), suspects (84.6%), and victims (68.4%) were male. The average age of the suspect (M = 28.78, SD = 10.87) was slightly younger than that of the victims (M = 31.72, SD = 17.20). The interrogations most commonly resulted in a full confession for the main crime the suspect is under

suspicion of committing (37%), followed by a partial confession (coded if a suspect admits some involvement in the offence but does not provide details or remains elusive when specifically questioned) (30.4%), no comment (19.6%), and denial as the least common (13%). The police department prepared the videos and included closed cases from the Major Crime and General Investigation Section (GIS). The files were provided electronically on external hard drives, and the research team only could watch them in the privacy of locked laboratories at Saint Mary's University. We did not receive any videos involving youth offenders, sexual assaults, or cases that involved technologically advanced police practices (procedures used to gain intelligence/information that involve technology). The files often included additional materials such as monitor notes from the interrogation (notes typed by an employee of the police station or other police officer who monitors what is taking place in the interrogation room and maintains a typed record of it), which assisted researchers by providing more information (e.g. interrogator ranks), and the Crown Brief (a document which contains all information about a suspect's charges, including police notes) was typically present.

A random subsample of 15 cases, resulting in 20 suspect interrogations (no victim interviews were included), was utilized in this research, and most demographic information is present in the results section. Cases were selected using a random number generator available from Google. The included interrogations took place from 2008 to 2017. The interrogation videos included a variety of charges, of which the most common was Homicide (25%, n = 5). Additional case types included: Attempted homicide (20%, n = 4), Manslaughter (20%, n = 4), Robbery (10%, n = 2), Assault (10%, n = 2), Voyeurism (5%, n = 1), Attempted Kidnapping (5%, n = 1), and Accessory After the Fact

Murder/Indecently Interfering with Human Remains (5%, n = 1). Seventy-five percent of suspects had additional charges related to their main offence but were not considered the "main crime."

Materials

The IRT created a coding guide in consultation with the research department at the police department who provided us with these videos. The coding document that we created included components of a coding scheme provided by King and Snook (2009), as well as additional information that was decided upon by the research team. Additionally, the team created a content dictionary which thoroughly outlined all information that was to be coded, as well as concise definitions, and coders were encouraged to refer to it as needed frequently. Both the coding document and content dictionary were Word documents and coders used them on the computer screen while coding, rather than paper copies.

Our coding document included case-relevant information such as start/end dates/times, length of the interview, relevant break information, and main crime type. The length of the interview was the overall length of time in minutes that the suspect was present for the interview, including the time spent in isolation and breaks. Interrogation length refers to the amount of time that the suspect was actively experiencing interrogation in minutes (e.g. both the suspect and interrogator(s) in the room). Breaks included when the officer provided the suspect with respite from the interrogation room (e.g. a bathroom break), coded for in minutes. The IRT coded all individuals present during the interview. Demographic information was collected for the suspect and victim(s) (e.g. biological sex, age), as well as for the PI and SI(s) (secondary interrogator)

(e.g. biological sex, ethnicity, rank within the department). We coded for whether police read the suspect the police caution (e.g. the right to counsel and to silence), who read the caution, and whether the suspect opted to waive their rights or not. The IRT coded the outcome of the interrogation, with the options being "No comment," "Denied offence," "Partial confession," "Full confession," or "Both full and partial confessions" (see Appendix B for the complete coding document and Appendix C for complete content dictionary). Additionally, the coding document included court outcomes, including the suspect plea (guilty/not guilty/unknown) and the final disposition (conviction/acquittal/withdrawn/stayed/unknown/other).

Relevant to this thesis, the author coded information regarding isolation use during interrogations. Whether the suspect was left alone in the interrogation room before the entry of the interviewer (as recommended by Inbau et al. 2013) was coded for (yes/no), as well as the total number of isolation periods that took place during an interrogation. For each isolation period, the IRT coded the isolation period number, start/end times, length of the isolation period, and whether there were interruptions to the isolation period before the beginning of the interview or the interview reconvening. If there were interruptions, the IRT noted details, including the start/end time of the interruption, the length of it, who interrupted (e.g. interviewer, lawyer, another officer), and the reason given for the interruption. We also coded all the isolation periods for suspect nonverbal behaviours (N = 40) (Appendix A). The IRT coded these behaviours throughout isolation, and the behaviours were timestamped, including during any interruptions to the period.

Procedure

Two projects involving these interrogations were conducted concurrently, the isolation project and the alternative questions project. Masters level and undergraduate student volunteers at Saint Mary's University coded the interrogation videos. All coders had to be placed on an agreement with the police department, which approved their viewing of the materials. Coders were also required to agree to the data handling procedures. Due to time restrictions and the intensive nature of coding these videos, we divided the research team across the two projects. Upon being assigned to one of the two projects, videos were randomly assigned to coders to complete. Coders were encouraged to examine case materials before viewing the video (e.g. the Crown Brief) to ensure that they did not recognize any of the individuals within the videos. Coders were able to state if there were certain types of videos they would prefer not to code for personal reasons (e.g. videos involving child abuse), and the research team accommodated as appropriate. Upon assignment of a video, the team began viewing and coding the videos. While coding, if any confusion arose as to whether to include a certain behaviour or not and they were unable to make the decision based on the definition within the content dictionary, coders were encouraged to include comments on the side of their coding sheet. Upon completion of coding, a second, independent coder was consulted to assist in determining the presence or absence of behaviour. The independent coder went through all the necessary cases to assist in determining whether the behaviour in question was present for each of the timestamps identified by the initial coder as questionable. All the data were entered into IBM SPSS by the author for analyses.

Two coders (the author and one other) actively coded videos for the isolation project. Researchers calculated interrater reliability (IRR) by strategically coding four

cases (which represents approximately 12% of all interviews and 17% of all cases coded by two members of the IRT) in their entirety. Two researchers coded these clips for the length of the interview, number and length of breaks, the outcome of the interrogation, and total time spent in isolation. Additionally, within each isolation period, start/end time, number and length of interruptions, whether the suspect's posture was static or dynamic, and whether several nonverbal behaviours included within the study were present or not present during the isolation period. Pearson's r was selected as a measure of IRR for time-related variables and frequencies as they were all continuous variables. Cohen's kappa (κ) was not utilized for those, as it is utilized with categorical variables. However, Cohen's kappa was used for the categorical variables included in the IRR coding, as it appropriately accounts for chance agreement between coders. As anticipated due to the nature of the information, reliability was high for variables involving lengths of time and simple frequencies, including interview length (r = 1, p < .01, n = 4), number of breaks during the interrogation (r = 1, p < .01, n = 4), and the total length of the breaks (r = 1, p < .01, n = 4)< .01, n = 4). Reliability for the total amount of time spent in isolation (r = 1, p < .01, n = 1)4) and the number of isolation periods (r = .999, p < .01, n = 4) were both excellent. The number of interruptions during isolation periods (r = .938, p < .00, n = 32) and the length of interruptions (r = .870, p < .01, n = 32) was slightly lower, but still very high. Similarly, reliability for outcome of the interrogation (0 = no confession, 1 = confession) was excellent ($\kappa = 1$). As much of the focus within this project was nonverbal behaviours, five behaviours were used to code for IRR. Aside from the suspect's posture which was coded as static (0) or dynamic (1), the other behaviours were coded as either present (1) or not present (0) during the isolation periods. Whether the suspect's posture was static or

dynamic, as defined in the content dictionary as "based off previous observations, did the suspect tend to remain in an unmoving position (static) more or did the suspect tend to remain moving (dynamic) during the interview?", yielded low reliability ($\kappa = .22$). Suspect arm movements were coded within the IRR cases, with the suspect hanging their arms loose on/or beside body (defined as "the suspect hangs his or her arms loose. The suspect's arms are now relaxed to their sides and/or relaxed on their body") resulting in the lowest reliability score ($\kappa = .00$), whereas the suspect crossing their arms (defined as "the suspect folds both arms across his or her chest as an attempt to put up a barrier" showed perfect reliability among coders ($\kappa = 1$). Crossing one's legs (defined as "the suspect has one leg crossed over another leg – knee over knee, or foot over knee") also showed perfect reliability ($\kappa = 1$). The final behaviour, suspect adjusting jewelry/accessories (defined as "the suspect deliberately changes the position of a jewelry item on their body or an accessory they are wearing (e.g., earrings, shoestrings, hat)") yielded low reliability among coders ($\kappa = .47$). As the reliability among coders varied greatly by behaviour, an average kappa value was calculated ($\kappa = .54$) and the agreement was considered moderate (0.41-0.60; McHugh, 2012) among coders, but not sufficiently high enough to satisfy the IRT (e.g. 0.61-0.80 is considered substantial agreement; McHugh, 2012).

Due to the concerns regarding IRR, this project proceeded with only analyzing the data from the primary investigator. The decision was made by the primary investigator alongside the internal committee to exclude the data from the second full-time coder. The primary investigator became aware of issues with the second coder upon completion of the coding (e.g. coding for behaviours without following the content dictionary

definitions), so in combination with the insufficient kappa, the decision was made to exclude the 13 cases completed by the second coder. Although this decision was difficult as it meant losing several months of work and data, the issues were unignorable.

Therefore, it was agreed upon that this study would proceed with the smaller sample size, recognizing and accepting that this gave the analyses less power, to ensure accuracy and researcher confidence within the data.

Results

Case Facts

Intercorrelations and frequencies for relevant case facts and demographic variables are presented in Table 1 and Table 2, respectively.

The interviews ranged from 49 minutes to 22.82 hours long (M = 7.85 hours, SD = 6.76 hours), which included time spent in isolation and breaks. The average length of time the interrogator was in the room with the suspect, actively interrogating, was 3.47 hours (SD = 3.04 hours). Suspects were given breaks from the interrogation (e.g. bathroom break or an opportunity to speak with their lawyer), and this included every instance that the suspect left the room. Breaks ranged from zero minutes (no breaks) in some cases to 8.73 hours (M = 1.81 hours, SD = 2.73 hours). The average number of breaks during interrogation was 3.35 (SD = 3.34)

Table 1

Intercorrelations for Interrogation-Relevant Variables (N = 20)

Variable	Interview Length	Interrogation Length	Number of Breaks	Total Length of Breaks	Isolation Length	Number of Isolation Periods
1. Interview Length (Minutes) ^a	-					
2. Interrogation Length (Minutes) ^b	.90**	-				
3. Number of Breaks	.69**	.59**	-			
4. Total Length of Breaks (Seconds)	.86**	.71**	.57**	-		
5. Isolation Length (Minutes)	.72**	.49*	.57**	.41	-	
6. Number of Isolation Periods	.70**	.65**	.80**	.43	.70**	-

Note. * p < .05. ** p < .01.

In most cases, both a PI and SI were present during the interview (60%). However, there was additional personnel present at various points throughout the interview, including forensic identification personnel (20%) and other officers (including the arresting officer) (45%). All the PIs were male, and most were Caucasian (85%). The vast majority of PIs dressed in formal attire (90%). Most of the PIs identified their rank as Detective Constable (55%); however, the information regarding PI rank was unavailable in two cases (10%). Twelve cases (60%) had SIs, and like PIs, the majority of SIs were male (75%). There was an even split between SIs who were Constables (45.5%) and Detective Constables (45.5%). Most of the SIs were Caucasian (91.7%), with only one SI being African Canadian. Most SIs wore formal attire (66.7%). In six cases (30%), there

^a Interview length refers to the total length of the interview (including breaks and isolation periods).

^b Interrogation length refers to the amount of time interrogators spent actively interrogating the suspect (both suspect and interrogator in the room; excludes breaks and isolation periods)

were more than two interrogators during the interview. Eight additional interrogators were a part of the interrogation, of which 37.5% were female, and most (87.5%) were of Caucasian descent.

Most of the suspects observed in the videos were male (90%) and Caucasian (60%). The average suspect age was 26.5 years old (SD = 7.74). Information regarding suspect prior records were available for most of the cases (80%), and 75% had a prior record (information was unavailable for 20% of suspects). Most of the previous crimes that were on the suspect's criminal record were unknown and unavailable to the researchers (45%), but the most common previous crime type was Property (15%). In 45% of cases, the suspect was solely involved in the crime currently being investigated, with one case being unknown as to whether the suspect committed the crime alone (5%).

In many cases, the age of the victim was unavailable (45%). For those cases that information regarding their age was available, the average age was 31.64 years old (SD = 13.16). Most victims were male (75%), and the biological sex of the victim was considered mixed in one case (a bank robbery). The IRT coded suspect-victim relationships, and the most common suspect/victim relationship was strangers (45%). In only 15% of cases, there was more than one victim identified, of which one of those crimes the suspect committed against a family, another was a 17-year-old male who was an acquaintance of the suspect, and lastly, one was a bank robbery.

In 80% of cases, the officer read the police caution to the suspect in the interrogation room. The other 20% were not read their rights on camera, but during the interrogation, the officers noted that they were read their rights upon arrest/before the

recording. It was most common for an officer who was not the PI or SI to read the suspect their rights (30%). In all the cases examined, the suspect opted to confer with an attorney.

As previously mentioned, the most common main crime of the suspect was Homicide (25%) followed by Attempted Murder (20%). There were extra charges in addition to the main criminal charge in 75% of cases. The additional charges varied drastically and included weapons charges, interfering with human remains, trespassing at night, and forcible confinement, in addition to other charges. The outcome of the interrogation had five possible options: no comment, denied offence, partial confession, full confession, and both full and partial confessions. It was most common for the suspect to provide both a full and partial confession (40%), or not to comment (25%), followed by denying the offence (20%) or providing only a full (10%) or partial (5%) confession. When possible, we included the information as to how the suspect pled in court concerning their main crime. Information was unavailable in most cases (65%), but most commonly, suspects pled guilty to a lesser charge (20%). Most final verdicts in the court were unavailable to the researchers (60%), as they were not present on the relevant court website and could not be found through online resources.

Table 2

Demographic Information

Variable	n (%)
Main Crime	
Homicide	5 (25%)
Attempted Homicide	4 (20%)
Manslaughter	4 (20%)

Assault	2 (10%)
Accessory/Indecently Interfering with	1 (5%)
HR	1 (570)
Attempted Kidnapping	1 (5%)
Voyeurism	1 (5%)
Robbery	2 (10%)
Additional Charges	
Yes	15 (75%)
No	5 (25%)
Interrogation Outcome	
Denied Offense	4 (20%)
No Comment	5 (25%)
Partial Confession	1 (5%)
Full Confession	2 (10%)
Both Full & Partial Confessions	8 (40%)
Main Crime - Court - Plea	
Guilty	2 (10%)
Not Guilty	1 (5%)
Guilty to a Lesser Charge	4 (20%)
Unknown	13 (65%)
Main Crime - Court - Final Verdict	
Conviction	8 (40%)
Unknown	12 (60%)
Additional Charges – Court – Plea	
Guilty	2 (10%)
Guilty to Some Additional Charges	1 (5%)
Unknown	11 (55%)
Not Applicable	6 (30%)
Additional Charges – Court – Final Verdict	
Conviction	3 (15%)
Unknown	11 (55%)
Not Applicable	6 (30%)
Caution Read	
Yes	16 (80%)
Not on Camera, but Stated Previously	4 (20%)
Who Delivered Caution	
PI	4 (20%)
SI	1 (5%)
Other Officer	6 (30%)
Caution Delivered More Than Once	5 (25%)
Unknown	4 (20%)
Present During Interview	
PI	8 (40%)
Both PI & SI	12 (60%)
PI Gender	
Male	20 (100%)

PI Ethnicity	
Caucasian	17 (85%)
African Canadian	3 (15%)
PI Attire	` ,
Formal	18 (90%)
Casual	2 (10%)
PI Rank	,
Constable	6 (30%)
Detective Constable	11 (55%)
Staff Sergeant	1 (5%)
Unknown	2 (10%)
SI Gender	,
Male	9 (45%)
Female	3 (15%)
Not Applicable ^b	8 (40%)
SI Ethnicity	` ,
Caucasian	11 (55%)
African Canadian	1 (5%)
Not Applicable ^b	8 (40%)
SI Attire	, ,
Formal	8 (40%)
Casual	4 (20%)
Not Applicable ^b	8 (40%)
SI Rank	
Constable	5 (25%)
Detective Constable	5 (25%)
Other	1 (5%)
Unknown	1 (5%)
Not Applicable ^b	8 (40%)
More Than Two Interrogators	
Yes	6 (30%)
No	14 (70%)
Suspect Gender	
Male	18 (90%)
Female	2 (10%)
Suspect Ethnicity	
Caucasian	12 (60%)
African Canadian	4 (20%)
Middle Eastern	2 (10%)
Indigenous	2 (10%)
Suspect Prior Record	
Yes	15 (75%)
No	1 (5%)
Unknown	4 (20%)
Prior Record Charges	4 /=
Drug	1 (5%)

Property	3 (15%)
Person	1 (5%)
Various/Multiple Charges	1 (5%)
Unknown	9 (45%)
Not Applicable	5 (25%)
Only Suspect	
Yes	9 (45%)
No	10 (50%)
Unknown	1 (5%)
Victim Gender	
Male	15 (75%)
Female	4 (20%)
Mixed ^a	1 (5%)
Suspect Victim Relationship	
Friend	2 (10%)
Family	1 (5%)
Romantic Partner	1 (5%)
Acquaintance	7 (35%)
Stranger ^a	9 (45%)
More Than One Victim	
Yes ^a	3 (15%)
No	17 (85%)

Note. ^a Mixed gender was selected for the bank robbery case as it was anticipated both male and females would be present during the crime. The suspect/victim relationship for this case was anticipated to be "stranger", as we did not expect the suspect to know the individuals at the bank. Lastly, it was decided that the robbery case would have more than one victim, as there is typically more than one person working and/or visiting the bank at a time.

Isolation

Ninety-five percent of cases involved the use of isolation. In 90% of cases, police isolated the suspect before the entry of the interrogator. The number of isolation periods within an interrogation ranged from zero to 18, with an average of 8.3 isolation periods (SD = 5.18) per interrogation. Length of time spent in isolation ranged from zero minutes to 6.49 hours, with the average amount of time a suspect would spend alone being 2.58

^b Sixty percent of cases had secondary interrogators (SI). The SI information for the 40% of cases that did not have SIs was coded as "Not Applicable".

hours (SD = 2.29 hours). We compared the mean length of time (minutes) to the five minutes recommended by Inbau et al. (2013). A single sample t-test showed that the average length of time suspects spent in isolation differed significantly from the recommendation provided by Inbau et al. (2013), t (19) = 4.87, p < .001.

We created a variable in which the outcome of the interrogation included two options: confession (including partial, full, and both partial and full) and no confession (no comment and denied offence) to create a binary outcome variable. A point biserial correlation examined the relationship between the total length of time suspects spent in isolation and the binary interrogation outcome. There was no association between the two variables, r(18) = -.06, p = .82.

The primary investigator coded information regarding whether police officers interrupt isolation periods. Of the 19 cases that had isolation periods, 16 cases had an isolation period that was interrupted at some point. The average number of interruptions that took place throughout the interrogation was $4.13 \ (SD = 4.95)$, with a range from one interruption to 20. The length of the interruption was coded in seconds, as many interruptions were quite short. The total length of interruptions ranged from 13 seconds to $28.25 \ \text{minutes}$, with an average of $2.94 \ \text{minutes}$ ($SD = 6.84 \ \text{minutes}$). Fourteen of the maximum 18 isolation periods contained interruptions. The person who interrupted was coded, and "Other officers" interrupted during eight isolation periods, and "Interviewers" interrupted during ten, with the two overlapping in four cases. Who interrupted was classified as "Unknown" in two of the isolation periods. Reasons as to why the isolation period was interrupted were collected, and a concise list is available in Appendix D. Note

that some explanations were provided more than once (e.g. brought the suspect food); however, they were only listed once in the appendix.

Forty nonverbal behaviours were included in the coding document to code for within each video. Of the 40 items, three (drummed fingers, used cellphone/electronic device, and vomited/dry heaved) had zero instances occur, therefore moving forward, we excluded those from analyses. For each of the behaviours, the average frequency was obtained (Table 3The most frequently occurring behaviours were touching ones face (M = 84.11, SD = 99.84), followed by slouching (M = 38.21, SD = 51.48) and adjusting clothing (M = 36.26, SD = 33.38). The behaviour that occurred the least (excluding the three behaviours that had zero occurrences) was covering one's ears (M = 0.05, SD =0.23), pulling on one's nose (M = 0.16, SD = 0.37), wiping sweat (M = 0.21, SD = 0.54)and pulling on the earlobe (M = 0.21, SD = 0.92).). The relationship between the existing nonverbal behaviours and interrogation outcome was examined, as Inbau and colleagues (2013) reported these behaviours were indicators during the BAI. This research took an exploratory approach, therefore the IRT examined whether these behaviours might provide cues as to the outcome of the interrogation. The relationship between each of the 37 nonverbal behaviours that occurred and their relationship with interrogation outcome (confession/no confession) was examined a point biserial correlation (Table 3). Of the 37 nonverbal behaviours, only one, crossing one's legs, was significantly associated with the interrogation outcome, r = 0.47, p = 0.04.

When examining nonverbal behaviours, one can also examine the interrelatedness of the behaviours. The one behaviour associated with interrogation outcome, crossing legs, was strongly correlated with several other nonverbal behaviours. These behaviours

included the suspect tucking their legs under the chair (r = .57, p < .05), having their arms loose to the body/side (r = .61, p < .01), cracking their knuckles (r = .74, p < .01), sitting on their feet (r = .72, p < .01), and wiping sweat (r = .76, p < .01). Crossing one's legs was also strongly associated with several posture-related behaviours, including sitting upright (r = .82, p < .01), slouching (r = .80, p < .01), and turning to the side in your seat (r = .68, p < .01), as well as sitting (r = .65, p < .01) and standing up (r = .52, p < .05).

Several nonverbal behaviours were almost perfectly associated with one another (.90 and above). Tucking one's hands under their legs and blowing one's nose was very strongly correlated (r = .97, p < .01), and the same relationship exists between sitting down and standing up (r = .97, p < .01). The suspect leaning forward in their seat and tucking their legs under the chair was strongly associated (r = .92, p < .01), and the suspect tucking their legs under the chair was similarly associated with slouching (r = .91, p < .01). The suspect leaning forward in their seat and pulling on their earlobe were also strongly correlated (r = .90, p < .01). Lastly, the behaviours of facing straight forward in the seat and turning to the side in the seat were strongly associated (r = .92, p < .01)

Table 3
Summary of Intercorrelations, Means, and Standard Deviations for Interrogation Outcome and Nonverbal Behaviours

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Interrogation Outcome ^a	0.55	0.51	-												
2. Arms Crossed	12.95	24.30	05	-											
3. Arms Loose	11.26	16.67	.43	.13	-										
4. Adjusts Clothing	36.26	33.38	.12	.10	.63**	-									
5. Adjusts Jewelry/Accessory	2.58	5.84	.36	22	.11	.06	-								
6. Clean/Inspects Nails	13.58	31.69	.16	.33	.13	.20	.10	-							
7. Dusts Clothing	3.16	8.85	.32	.35	.29	.37	10	.87**	-						
8. Fixes Hair/Beard	2.74	6.81	.25	17	.04	.27	.34	.04	.04	-					
9. Picks at Clothing	1.21	2.68	.16	.21	.22	.20	.81**	.17	00	.31	-				
10. Fidgets with Hands	16.42	25.14	.22	.08	.63**	.54*	.39	.22	.24	.17	.50*	-			
11. Hands Tucked Under Legs	0.47	1.84	.25	07	03	.26	04	.06	.22	.89**	02	06	-		
12. Crosses Legs	4.74	8.26	.47*	.20	.61**	.42	.21	05	.01	.38	.19	.32	.29	-	
13. Tucks Legs Under Chair	5.32	10.89	.04	.34	.44	.39	18	.05	.08	07	14	.54*	11	.57*	-
14. Blows Nose	0.32	1.16	.27	05	.04	.26	05	08	.09	.88**	04	07	.97**	.46*	.01
15. Cracks Knuckles	0.84	1.50	.19	.37	.44	.32	24	04	.06	.10	14	03	.19	.74**	.46*
16. Pulls on Earlobe	0.21	0.92	25	.09	16	.11	11	03	09	.01	11	.46*	06	02	.68**
17. Pulls on Nose	0.16	0.37	17	.19	.18	.15	15	.01	16	.04	20	.21	12	.41	.76**
18. Scratches Body	4.89	7.02	11	.60**	.04	.22	.27	.11	.04	.13	.58**	.57*	03	.05	.37
19. Touches Face/Head/Neck	84.11	99.84	05	.49*	.17	.40	01	.62**	.54*	.12	.19	.63**	.08	.14	.63**
20. Wipes Sweat	0.21	0.54	.18	.20	.44	.27	.24	05	13	.05	.24	.18	11	.76**	.45
21. Faces Straight Forward	2.32	3.74	.11	.36	.21	.37	01	.34	.32	.32	.06	.59**	.28	.46*	.81**
22. Leans Forward	34.42	61.37	09	.19	.18	.32	09	01	04	.01	09	.56*	08	.34	.92**
23. Lies Down	1.53	3.81	26	06	02	.35	15	17	12	15	14	11	11	.01	.09
24. Sits Upright	7.21	13.77	.36	.50*	.64**	.38	12	.17	.27	06	06	.18	01	.82**	.64**
25. Slouches	38.21	51.48	.21	.43	.57*	.52*	08	.16	.21	.12	01	.47*	.08	.80**	.91**
26. Turns to Side in Seat	3.68	5.54	.26	.44	.37	.45	08	.36	.41	.39	00	.46	.41	.68**	.79**
27. Covers Ears	0.05	0.23	25	05	12	25	02	10	09	10	11	14	06	14	07
28. Covers Eyes	0.95	1.43	04	.53*	.20	.42	.18	.74**	.61**	00	.47*	.40	07	.04	.24
29. Covers Head with Hood	2.32	3.70	27	30	23	.24	05	07	11	.32	19	25	.29	10	18
30. Hands in Pockets	9.47	14.60	.19	26	.10	.30	.67**	.09	06	.75**	.52*	.43	.42	.29	.05

	М	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
31. Leans Head on Hand	21.42	39.26	22	.14	03	.23	.22	.13	03	.21	.29	.66**	02	.05	.60**
32. Sits on Feet	0.37	0.90	.40	.05	.56*	.48*	13	14	.13	.61**	08	.24	.70**	.72**	.32
33. Drinks	11.53	15.26	.36	.32	.65**	.55*	.07	.68**	.76**	04	.13	.66**	03	.31	.51*
34. Eats	17.21	30.55	.18	.32	.52*	.69**	08	.67**	.77**	06	.12	.34	.05	.19	.24
35. Knocks on Door	2.16	5.00	08	.10	.18	.25	05	11	14	08	07	02	12	.43	.33
36. Sits	5.89	6.02	.16	.16	.59**	.74**	01	.05	.16	.06	01	.24	.06	.65**	.50*
37. Smokes	2.05	7.43	.17	13	.20	.13	.85**	.16	07	.30	.85**	.51*	08	.21	10
38. Stands Up	6.47	7.64	.06	.08	.52*	.69**	.00	04	.05	02	.02	.22	05	.52*	.42

Variable	14	15	16	17	18	19	20	21	22	23	24	25
1. Interrogation Outcome	14	13	10	1 /	10	17	20	21		23	24	23
2. Arms Crossed												
3. Arms Loose												
4. Adjusts Clothing												
5. Adjusts Jewelry/Accessory												
6. Clean/Inspects Nails												
7. Dusts Clothing												
8. Fixes Hair/Beard												
9. Picks at Clothing												
10. Fidgets with hands												
11. Hands Tucked Under Legs												
12. Crosses Legs												
13. Tucks Legs Under Chair												
14. Blows Nose	_											
15. Cracks Knuckles	.35	_										
16. Pulls on Earlobe	07	14	_									
17. Pulls on Nose	.01	.34	.54*	_								
18. Scratches Body	05	10	.56*	.20	_							
19. Touches Face/Head/Neck	.01	.06	.68**	.41	.66**	_						
20. Wipes Sweat	.07	.81**	10	.38	.01	.03	-					
21. Faces Straight Forward	.30	.29	.76**	.56*	.54*	.86**	.24	-				
22. Leans Forward	01	.20	.90**	.73**	.50*	.69**	.25	.85**	_			
23. Lies Down	07	.46*	.03	.06	10	07	.49*	04	.12	-		

-	14	15	16	17	18	19	20	21	22	23	24	25
24. Sits Upright	.14	.84**	09	.45	01	.22	.73**	.39	.31	.13	-	
25. Slouches	.22	.72**	.39	.69**	.28	.55*	.68**	.76**	.73**	.18	.85**	-
26. Turns to Side in Seat	.47*	.54*	.50*	.56*	.37	.73**	.40	.92**	.70**	03	.65**	.88**
27. Covers Ears	07	14	06	10	13	14	10	09	09	10	11	14
28. Covers Eyes	16	06	.18	.12	.50*	.69**	.09	.44	.23	05	.19	.31
29. Covers Head with Hood	.27	.20	02	.16	19	09	.11	11	05	.64**	17	08
30. Hands in Pockets	.41	17	.21	.24	.30	.24	.04	.31	.19	22	14	.10
31. Leans Head on Hand	04	19	.89**	.53*	.73**	.76**	.00	.76**	.82**	04	12	.38
32. Sits on Feet	.79**	.58**	10	.15	06	.04	.29	.33	.15	04	.53*	.52*
33. Drinks	08	.28	.17	.21	.25	.66**	.29	.55*	.38	.08	.52*	.60**
34. Eats	01	.18	09	03	.06	.48*	.11	.30	.09	.06	.41	.38
35. Knocks Door	.01	.78**	01	.31	10	01	.84**	.13	.23	.84**	.52*	.51*
36. Sits	.17	.78**	04	.35	03	.16	.75**	.28	.32	.65**	.73**	.72**
37. Smokes	08	06	07	12	.32	.12	.43	.08	03	.10	08	.02
38. Stands Up	.06	.72**	05	.28	03	.09	.75**	.17	.28	.77**	.61**	.61**

Variable	26	27	28	29	30	31	32	33	34	35	36	37	38

- 1. Interrogation Outcome
- 2. Arms Crossed
- 3. Arms Loose
- 4. Adjusts Clothing5. Adjusts Jewelry/Accessory6. Clean/Inspects Nails7. Dusts Clothing

- 8. Fixes Hair/Beard

- 9. Picks at Clothing
 10. Fidgets with hands
 11. Hands Tucked Under Legs
- 12. Crosses Legs 13. Tucks Legs Under Chair 14. Blows Nose
- 15. Cracks Knuckles
- 16. Pulls on Earlobe
- 17. Pulls on Nose

	26	27	28	29	30	31	32	33	34	35	36	37	38
18. Scratches Body	20	21			30	31	32			33	30	31	
19. Touches Face/Head/Neck													
20. Wipes Sweat													
21. Faces Straight Forward													
22. Leans Forward													
23. Lies Down													
24. Sits Upright													
25. Slouches													
26. Turns to Side in Seat	-												
27. Covers Ears	12	-											
28. Covers Eyes	.40	16	-										
29. Covers Head with Hood	08	15	24	-									
30. Hands in Pockets	.25	16	.10	.32	-								
31. Leans Head on Hand	.50*	07	.41	01	.48*	-							
32. Sits on Feet	.56*	10	20	.08	.25	10	-						
33. Drinks	.59**	18	.59**	12	.04	.27	.24	-					
34. Eats	.40	14	.76**	19	12	.01	.15	.70**	-				
35. Knocks on Door	.24	10	08	.49*	13	04	.16	.19	00	-			
36. Sits	.47*	20	.15	.36	.04	02	.47*	.49*	.45	.77**	-		
37. Smokes	02	07	.31	.00	.52*	.30	12	.19	.02	.21	.10	-	
38. Stands Up	.31	21	.10	.43	03	02	.36	.42	.37	.84**	.97**	.18	-

Note. * *p* < .05. ** *p* < .01.

Listwise N for nonverbal behaviours is 19.

 $^{^{}a}$ Interrogation outcome, N=20. Coded as 0 (no confession) and 1 (confession).

The primary investigators identified whether they considered the suspect's posture to be more static or dynamic during the isolation periods (Table 4). This was coded based on previous observations, and coders observed whether the suspect tended to remain in an unmoving position (static) more or whether they tended to remain moving (dynamic) during the isolation period. In two-thirds of the isolation periods, most of the suspects' behaviour was classified as dynamic. Only four isolation periods had the majority of suspect's behaviour coded as static, and in two cases, the number of suspects eliciting static and dynamic behaviours was equal. In addition to whether the suspect's behaviour was considered more static or dynamic, any additional behaviours that stood out to the researcher during the isolation period were made a note of (Appendix D for a list of behaviours). Note that behaviours that occurred more than once (e.g. suspect is asleep) were only included once in the list. How often unusual suspect behaviour occurred was examined, and in each of the 18 isolation periods, more suspects did not perform unusual behaviours than those who did.

Table 4

Overview of Suspects' Static or Dynamic Posture by Isolation Period

Isolation Period	n	Static	Dynamic
1	18*	7	11
2	19	9	10
3	17	3	14
4	17	8	9

5	14	7	7
6	13	8	5
7	12	4	8
8	10	4	6
9	9	2	7
10	8	4	4
11	7	3	4
12	5	1	4
13	4	1	3
14	3	1	2
15	3	0	3
16	2	2	0
17	2	2	0
18	2	2	0

Note. * One suspect in isolation was not visible during this isolation period, therefore it cannot be said whether posture was static or dynamic.

Nonverbal Behaviours & Outcome

Several binary logistic regressions analyzed the relationship between suspect nonverbal behaviours during isolation and the outcome of the interrogation. The outcome was included as a binary variable for each of the logistic regressions (confession/no confession), with "confession" coded as "1", as it was the focus category. Partial, full, and both partial and full confessions were a "confession," and no comment and denied offence coded as "no confession." Nineteen of the 20 cases were included in these analyses, as one case did not utilize isolation during the interrogation. As there were many nonverbal behaviours coded for, they were broken down into categories for analysis. The nonverbal behaviours that Inbau et al. (2013) suggested were indicative of deceit put into five categories: personal gestures (Table 4a), grooming gestures (Table 4b), protective/supportive gestures (Table 4c), arm/leg movements (Table 4d), and

posture relevant (Table 4e). Additional logistic regressions examined the behaviours that Inbau et al. (2013) suggest are indicative of innocence (Table 4f), as well as for the posture relevant (Table 4g) and additional behaviours that we anticipated suspects might do during isolation (Table 4h).

The first logistic regression utilized the personal gestures proposed by Inbau et al. (2013) and included fidgeting hands, cracking knuckles, pulling on the earlobe, pulling on the nose, scratching, touching one's face, and wiping sweat as predictors. The binary logistic regression model did not provide a significant prediction of interrogation outcome, $\chi^2(7, 19) = 8.53$, p = .29). The Nagelkerke pseudo R^2 indicated that the model accounted for 48.3% of the total variance. Classification accuracy in predicting the outcome (confession/no confession) was high, with an overall classification rate of 78.9%. Classification accuracy was higher for predicting no confession (88.9%) than for confessions (70%).

Table 4a

Binary Logistic Regression Results for Personal Gestures Predicting Interrogation

Outcome (N = 19)

Model	b	S.E.	Wald	df	p	$\text{Exp}(\beta)$
Constant	-0.46	0.77	0.36	1	0.55	0.63
Fidgets Hands	0.24	0.17	2.11	1	0.15	1.28
Cracks Knuckles	1.50	1.83	0.68	1	0.41	4.50
Pulls Earlobe	-6.72	10048.24	0.00	1	1.00	0.00
Pulls Nose	-0.48	2.39	0.04	1	0.84	0.62
Scratches Body	-0.07	0.14	0.26	1	0.61	0.93
Touches Face	-0.02	0.02	1.26	1	0.26	0.98

Wipes Sweat	-4.33	5.60	0.60	1	0.44	0.01
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Note. Nagelkerke $R^2 = 0.483$.

The second logistic regression included grooming gestures, including adjusting clothing, adjusting jewelry/accessories, cleaning or inspecting nails, dusting clothing, fixing hair/beard/mustaches, and picking at threads/clothing. This model provided a statistically significant prediction of interrogation outcome, χ^2 (6, 19) = 14.02, p = .03. The Nagelkerke pseudo R^2 indicated that the model accounted for 69.6% of the total variance. Classification accuracy for predicting interrogation outcome was relatively high, with an overall classification rate of 78.9%. Classification accuracy was slightly higher for confession (80%) than for no confession (77.8%).

Table 4b

Binary Logistic Regression Results for Grooming Gestures Predicting Interrogation

Outcome (N = 19)

Model	b	S.E.	Wald	df	p	Exp (<i>β</i>)
Constant	0.22	1.06	.04	1	.84	1.24
Adjusts Clothing	-0.04	0.04	.79	1	.38	0.96
Adjusts Jewelry/Accessory	0.37	0.43	.73	1	.39	1.45
Cleans/Inspects Nails	-0.46	0.50	.84	1	.36	0.63
Dusts Clothing	1.83	1.85	.98	1	.32	6.21
Fix Hair/Beard/Mustache	1.72	2.25	.59	1	.44	5.60
Picks at Clothing	-0.69	1.18	.34	1	.56	0.50

Note. Nagelkerke $R^2 = 0.696$.

The third model included five protective/supportive gestures, including tucking hands under legs, covering eyes, putting hands in pockets, leaning head on hand, and sitting on one's feet. This model was not a good predictor of outcome, χ^2 (5, 19) = 9.89, p = .08. The Nagelkerke pseudo R^2 indicated that this model accounted for 54.2% of the total variance. Classification accuracy for predicting interrogation outcome was lower than the two previous regression models with a 63.2% overall classification rate. The rate for correct classification of confessions (50%) was much lower than that of correct classifications of no confession (77.8%).

Table 4c

Binary Logistic Results for Protective/Supportive Gestures Predicting Interrogation

Outcome (N = 19)

Model	b	S.E.	Wald	df	p	Exp (<i>β</i>)
Constant	-0.32	0.70	0.21	1	0.65	0.73
Tucks Hands Under Legs	21.35	7631.54	0.00	1	1.00	1.864E+9
Covers Eyes	-0.50	1.01	0.24	1	0.62	0.61
Hands in Pockets	0.10	0.08	1.54	1	0.22	1.11
Leans Head on Hand	-0.03	0.06	0.29	1	0.59	0.97
Sits on Feet	10.21	7271.00	.00	1	1.00	27241.77

Note. Nagelkerke $R^2 = 0.542$.

The fourth model included the arm and leg movements that were deemed indicative of deception from Inbau et al. (2013). It included three predictors, including crossing arms, crossing legs, and tucking legs under the chair. This model provided a

statistically significant prediction of interrogation outcome, $\chi^2(3, 19) = 9.80$, p = .02. The Nagelkerke pseudo R^2 indicated that this model accounted for 53.8% of the total variance in interrogation outcome. Classification accuracy for predicting interrogation outcomes was relatively high, with an overall accuracy rate of 73.7%. No confession had a very high correct classification rate (88.9%), whereas the confession rate was much lower (60%).

Table 4d

Binary Logistic Regression Results for Arm and Leg Movements Predicting Interrogation

Outcome (N = 19)

Model	b	S.E.	Wald	df	р	$\operatorname{Exp}(\beta)$
Constant	-0.84	.75	1.24	1	.27	0.43
Arms Crossed	0.00	.02	0.01	1	.92	1.00
Legs Crossed	0.71	.49	2.14	1	.14	2.03
Tucks Legs	-0.13	.12	1.13	1	.29	0.88

Note. Nagelkerke $R^2 = 0.538$.

The final logistic regression examining the deceptive behaviours proposed by Inbau et al. (2013) included posture relevant behaviours, including turning the body to the side in the chair, slouching, and leaning forward in the seat. Note that leaning forward in the seat was suggestive of both innocent and deceptive behaviour; therefore, it was included in this regression model and the subsequent innocent-indicative behaviour model. This model was not a good predictor of interrogation outcome, $\chi^2(3, 19) = 5.45$, p = .14. The Nagelkerke pseudo R^2 indicated that the model accounted for 33.3% of the

variance in the outcome. The overall classification accuracy rate for predicting outcome was moderate (68.4), with no confession having a higher accuracy rate (77.8%) than confession (60%).

Table 4e

Binary Logistic Regression Results for Posture Relevant Behaviours Predicting Interrogation Outcome (N = 19)

Model	b	S.E.	Wald	df	p	Exp (<i>β</i>)
Constant	-0.29	.71	0.17	1	.68	0.75
Turns to Side	0.34	.43	0.62	1	.43	1.41
Slouches	0.02	.04	0.20	1	.66	1.02
Leans Forward	-0.04	.03	1.84	1	.18	0.97

Note. Nagelkerke $R^2 = 0.333$.

Inbau et al. (2013) discussed several behaviours that they consider indicative of innocence among suspects. This logistic regression included having one's arms loose by the body/side, facing forward in the seat, and leaning forward in the seat. This model did not significantly predict interrogation outcome, $\chi^2(3, 19) = 6.99$, p = .07. The Nagelkerke pseudo R^2 indicated that this model accounted for 41.1% of the total variance. Classification accuracy for predicting outcome was relatively high (73.7%), with no confession accuracy being quite high (88.9%) compared to confession classification (60%).

Table 4f

Binary Logistic Regression Results for Innocent-Indicative Behaviours Predicting Interrogation Outcome (N=19)

Model	b	S.E.	Wald	df	p	$\operatorname{Exp}(\beta)$
Constant	-0.51	.68	0.57	1	.45	0.60
Arms Loose	0.08	.06	2.08	1	.15	1.09
Facing Forward	0.45	.42	1.15	1	.28	1.57
Leans Forward	-0.03	.03	1.50	1	.22	0.97

Note. Nagelkerke $R^2 = 0.411$.

There were several additional behaviours during isolation periods that were decided upon by the research team and subsequently included. We analyzed these behaviours in two logistic regressions, the first of which included posture-relevant behaviours. Posture-relevant behaviours included lying down, sitting upright in the seat, sitting, and standing. This model did not significantly predict interrogation outcome, χ^2 (4, 19) = 7.70, p = .10. Nagelkerke pseudo R^2 showed that this model accounted for 44.5% of the total variance in interrogation outcome. Classification accuracy for predicting outcome was moderate (63.2%), with classification accuracy for no confession being slightly higher (66.7%) than confession (60%).

Table 4g

Binary Logistic Regression Results for Additional Posture Relevant Behaviours
Predicting Interrogation Outcome (N = 19)

Model	b	S.E.	Wald	df	p	$\operatorname{Exp}(\beta)$
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Constant	-0.75	.86	0.76	1	.38	0.47
Lies Down	-0.77	.77	1.00	1	.32	0.46
Sits Upright	0.15	.24	0.37	1	.54	1.16
Sits	0.07	.65	0.01	1	.91	1.07
Stands	0.13	.56	0.06	1	.81	1.14

Note. Nagelkerke $R^2 = 0.445$.

The final logistic regression included the behaviours added by the research team that are not considered posture relevant. The predictors in this regression included blowing one's nose, covering ears, covering the head with a good, drinking, eating, knocking on the interrogation room door, and smoking a cigarette. This model provided a statistically significant prediction of interrogation outcome, $\chi^2(7, 19) = 14.54$, p = .04. The Nagelkerke pseudo R^2 indicated that the accounted for 71.4% of the variance in interrogation outcome. Classification accuracy for predicting interrogation outcomes was high (89.5%). Classification accuracy was almost equal for no confession (88.9%) and confession (90%).

Table 4h

Binary Logistic Regression Results for Additional Non-Posture Relevant Behaviours
Predicting Interrogation Outcome (N = 19)

Model	b	S.E.	Wald	df	p	Exp (<i>β</i>)
Constant	-0.31	1.01	0.09	1	0.76	0.74
Blows Nose	89.22	8883.72	0.00	1	0.99	5.60E+38
Covers Ears	-20.90	40192.97	0.00	1	1.00	0.00
Hood Covers Head	0.17	0.34	0.25	1	0.62	1.19

Drinks	0.41	0.40	1.06	1	0.30	1.51
Eats	-0.16	0.21	0.58	1	0.45	0.85
Knocks	-5.36	4.60	1.36	1	0.24	0.01
Smokes	1.08	5039.83	0.00	1	1.00	2.95

Note. Nagelkerke $R^2 = 0.714$.

Discussion

This project expanded upon the wealth of knowledge on the topic of police interrogations. Although the literature on interrogations is vast, little to no research has examined police use of isolation and what takes place during these periods. Further, minimal research has had access to Canadian police interrogation videos, and thus this research is unique on two counts. The IRT examined isolation periods (e.g. length of time) and what took place during them (e.g. suspect nonverbal behaviours and police interruptions) for 20 videotaped police interrogations.

The length of police interviews (which includes isolation periods and breaks) varied substantially, ranging from just under an hour to almost 24 hours. On average, interrogators actively interrogated suspects for approximately three-and-a-half hours. Although the average time spent actively interrogating may not be alarming to some, the total length of the interviews should be, as this study provides evidence that some interviews last almost an entire day. Blair (2005) reported that a former investigator who utilized the Reid technique classifies interrogations that exceed six hours as being coercive (as cited in Kassin et al., 2010). Eleven of our 20 cases exceeded the six-hour point. The frequency of interrogations exceeding this time frame raises the ethical

question as to whether interrogations are lasting too long and whether beyond a certain point, they are becoming coercive or jeopardizing voluntariness of a confession.

Although more than half of our interrogations exceeded this time point, we did not find evidence that the length of the police interview was related to the outcome of the interrogation. This result suggests that it does not matter how long police spend conducting a suspect interview, as it is unrelated to whether the suspect will provide a confession and it does not appear to make suspects confess (perhaps falsely) in order to escape the situation. The length of time spent actively interrogating a suspect was also unrelated to whether the suspect provided a confession. Although coercion and interview length were not the primary focus of this research, we think it is important to be aware of what is happening within Canadian interrogation rooms.

Most interrogations in this research utilized isolation periods. This finding is unsurprising as Kassin and colleagues (2007) reported that it is a commonly used technique and one that more than half of officers reported always doing. Inbau and colleagues (2013) provided a recommendation of five-minutes of isolation prior to the entry of the interrogator. Although the IRT coded for isolation beyond the interrogator(s) entry, the time in isolation far exceeded that of the recommended time of five-minutes. The amount of time suspects spent in isolation varied, but suspects spent approximately two-and-a-half hours alone in the interrogation room, which is almost 31 times the recommendation. Although two-and-a-half hours may seem reasonable to some, it is important to recall that some suspects spent substantially more time alone. For example, one suspect spent six-and-a-half hours isolated throughout the interrogation — approximately 78 times the recommended five-minute isolation period. When

considering this amount of time, it is important to recognize that during isolation, the suspect is likely in a heightened state of distress and wants to escape the situation (Kassin et al., 2010). One concern that exists is that suspects who are isolated for longer periods may be more likely to provide a confession, perhaps with the perspective that it will get them out of the uncomfortable situation (such as with a coerced-compliant confession (Kassin & Wrightsman, 1985)). However, our research does not support that concern. We did not find a relationship between the length of time suspects spent in isolation and whether they did or did not provide a confession. Suspects who spent longer amounts of time in isolation were no more likely to provide a confession than those who spent much less time alone in the room. An additional concern is that there is currently no standard for when isolating a suspect becomes coercive. As Vrij and colleagues (2017) mention, the third-degree tactics used before Reid and PEACE involved prolonged confinement and isolation, and the American Psychiatric Association has previously identified isolation as a coercive method in some scenarios (Halpern et al., 2008). However, when does the isolation period become "prolonged" or "coercive"? Unfortunately, a "one size fits all" standard is unlikely to be an appropriate solution to this concern, as risk factors and factors that may lead to distress vary by the individual.

As minimal research has examined isolation periods, we took an exploratory approach to examine whether police officers (or staff) interrupted isolation periods, how long they did so for, and the justifications for the interruption. We found evidence that isolation periods were being interrupted during interrogations, although we cannot say for sure the intention behind interruptions or whether they were deliberate. Interruptions were present in isolation periods during many of our cases at some point, and on average,

were happening more than once per case. Interruptions were typically short, lasting less than three minutes. Most commonly, other police officers (who were not interviewers) and the interviewers interrupted the isolation period. Reasons for interruptions varied substantially, with some interruptions existing to bring something to the suspect (e.g. food, water, or clothing), to provide an update about legal representation, or for reasons not directly related to the suspect (e.g. checking the room for a chair). Although interruptions are likely to be innocent behaviours by police officers who are simply doing their jobs, they may serve as a stark reminder that the suspect is alone and unable to communicate with anyone other than the officers, as they remain in control of who is and is not allowed to see the suspect.

The research team coded 40 nonverbal behaviours during the interrogation videos. Twelve behaviours were suggested and added by the research team, and we incorporated 28 behaviours from Inbau and colleagues (2013). Inbau et al. (2013) suggest these behaviours are indicative of deception or innocence, and that officers should observe them during the BAI and add them to their repertoire of deception detection techniques. Of these 40 behaviours, 37 were present during interrogations. As this research was exploratory and because officers have the training to take most of these behaviours into consideration, we examined if any of these behaviours were associated with the outcome of the interrogation. One sole suspect nonverbal behaviour, crossing one's legs, was positively associated with providing a confession. Inbau and colleagues (2013) suggest using nonverbal channels (in combination with paralinguistic and linguistic channels) to determine guilt or innocence, however, these results suggest that for the most part,

suspect nonverbal behaviour during isolation is not indicative of whether a confession will be provided or not.

When examining the sole behaviour that is predictive of interrogation outcome, there were many positive, strong associations between it and other non-verbal behaviours, suggesting that as one behaviour increases, so does the other. For example, individuals who cross their legs are more likely to tuck their legs under the chair, have their arms loose to their body, crack their knuckles, sit on their feet, wipe sweat, sit upright, slouch, turn to the side in their seat, as well as sit down and stand up. Most of these behaviours are common to the average person and likely occur daily (e.g. sitting down or standing up). In combination, these behaviours may simply represent a person who fidgets and adjusts their body more (e.g. cracks their knuckles, wipes sweat, tucks their feet under the chair), or even someone with a sore back (e.g. sit upright, slouch, turn, sit, stand). These interrelated behaviours together likely represent that individual person more than they indicate deception among the population.

Exploratory logistic regression analyses were conducted using groups of nonverbal behaviours to determine if they were predictive of interrogation outcome. These groupings of behaviours were created based on similarity of characteristics, as all behaviours were unable to be entered into the regression simultaneously due to the small sample size (see limitations for a discussion of statistical power concerns). The regression analyses were unable to confirm that guilt presumptive behaviours such as personal gestures, protective/supportive gestures, or posture relevant behaviours suggested by Inbau and colleagues (2013) were able to predict a confession. However, the grooming gestures and arm/leg movements associated with being deceitful were able to predict

whether the suspect provided a confession. Inbau and colleagues proposed these behaviours as indicators of deception, and although we are unable to determine ground truth in these cases and whether the confession itself was truthful, this provides evidence that the outcome is consistent with guilt, as the suspect(s) confessed (although we recognize the existence of potential false confessions). Furthermore, the behaviours indicative of innocence, as proposed by Inbau and colleagues (2013) did not successfully predict obtaining a confession, which is what was expected. We examined the additional nonverbal behaviours that were added by the research team as two groups of behaviours: posture relevant and not posture relevant. Posture relevant behaviours were not predictive of a suspect providing a confession, whereas those unrelated to posture were predictive of the interrogation ending with a confession. These results suggest that although no behaviours are perfect predictors of interrogation results, some behaviours do exist that, when examined in combination with similar behaviours, may be able to predict the suspect providing a confession. Going forward, if police departments wish to continue to rely on nonverbal behaviours as indicators of guilt, it may be useful for officers to examine certain categories of behaviours to attempt to identify whether the suspect will or will not provide a confession.

King and Snook (2009) generously provided the IRT with the coding materials used in their study examining police interrogations, which was the basis of the coding document used by the IRT. It is interesting to note instances of similarities and dissimilarities between the two studies, as they were both conducted using actual police interrogations in the Atlantic Canadian provinces. Although the sample utilized by King and Snook was larger (N = 44), the videos provided to the IRT involved more recent

cases. The oldest case obtained by the IRT took place in 2008, with the most recent being a case from 2017, whereas the videos obtained by King and Snook date from 1996 to 2008. The charges the suspects faced varied compared to the videos used in this research, with robbery being the most common within the videos utilized by King and Snook and homicide as the most common within this study. Similar to King and Snook (2009), the majority of interrogators involved in this research were male, as were the majority of suspects. However, our videos included more male victims, whereas King and Snook had more female victims. The most common suspect-victim relationship within the videos used by King and Snook (2009) was family members, whereas the most common for the IRT was a stranger acting against a victim. Interestingly, the length of interrogation varied drastically between the two projects, with the maximum interrogation length being four-and-a-half hours for King and Snook's research, compared to the nearly 23-hour interrogation observed by the IRT. The interrogation videos utilized in this research had lower rates of obtaining a full confession, partial confession, and denying involvement in the offense, but much higher rates of the suspect not providing a comment. The current study also differed in coding when the suspect provided both partial and full confessions, which that of King and Snook did not. Having the suspect be alone in the interrogation room prior to the interrogator entering was only observed in slightly more than half (61%) of King and Snook's interrogations, compared to the 90% observed in our cases. Although close in distance, there are a lot of differences present within the samples. This unique comparison offers insight as to how different police practices and the cases police deal with may be, depending on where you reside.

Limitations & Future Research Directions

There are several limitations associated with this research. Due to time constraints, only 20 interrogation videos are present in this thesis. Coding is timeintensive, and despite best efforts, a larger sample was not possible within the time constraints of this thesis. For example, initially this project included coding for nonverbal behaviours throughout the entire interrogation, however, the primary investigator spent roughly five months on a single case and had not completed the coding. In consultation with the internal committee, it was decided that nonverbal behaviours were only necessary to code during isolation, as that was the main focus of this project. Upon revising the coding document, it took the primary investigator an additional five to six months of coding (full time) to obtain the subsample of 20 interrogations. Due to the small sample size, it is important to examine the results of the statistical analyses with this consideration in mind. Overall, this study has power issues and thus results should be interpreted with caution. There is an increased risk of making a Type II error (missing the signal) when power is low, and future research should attempt to code a more substantial sample of videos to increase power in analyses.

A valid concern regarding this study is alpha inflation and Type I error (false alarm). Alpha inflation is the probability of making a false conclusion when conducting a series of hypothesis tests and results in an increased Type I error rate. One way to deal with this concern is to calculate a Bonferroni correction (Field, 2013), which corrects for multiple comparisons when many statistical tests are conducted simultaneously.

Bonferroni essentially makes the alpha value more stringent, thus lowering the chance of making a Type I error. However, Bonferroni has been recognized as being too strict when lots of tests are being conducted (Field, 2013), and within this study, a Bonferroni

correction was thought to be too conservative. For example, the correlation matrix mentioned above examined the relationship between interrogation outcome and 37 nonverbal behaviours. When calculated, this results in a Bonferroni corrected alpha level of .001 - a result that is highly unlikely to be found (α /Number of Tests = .05/37 =.00135). An alternative to using a Bonferroni correction is the Benjamini-Hochberg procedure, which utilizes a False Discovery Rate. The equation for this procedure is "(i/m) Q"; where i is the individual p-values rank, m is the total number of tests, and Q is the false discovery rate (FDR). The Q value is selected by the researcher, and as no specific number is recommended, we calculated it several ways, using commonly used FDR values of 0.05, 0.10, and 0.20. The Benjamini-Hochberg critical values calculated for the only nonverbal behaviour significantly related to interrogation outcome (crossing legs; p = .044) were 0.001 ((1/37)*.05), .002 ((1/37)*.10), and .005 (1/37)*.20). Even if the most liberal FDR rate is used, crossing one's legs is no longer considered significantly associated with interrogation outcome. Due to the likelihood of alpha inflation in this study, again, we caution that results should be interpreted carefully and with this limitation in mind.

In addition to the small sample, another limitation is that all 20 videos came from the same police department. Despite being from two separate units within the department, the fact remains that there could be something different about these videos and/or the people within them, an example of which could be the comparison between this study and that of King and Snook (2009) in Newfoundland. Additionally, although we are by no means accusing this department of cherry-picking these videos, it should be acknowledged that the police department selected all videos. It is not feasible to obtain all

interrogation videos from a department, and it is extremely unlikely that university researchers would be able to ensure that the sample is random. However, in the future, an effort should be made to obtain interrogation videos from several police departments to get a more representative sample and a better understanding of Canadian interrogations.

Perhaps unsurprising due to the makeup of most police departments, all the PIs were male and mostly Caucasian, and the vast majority of SIs were the same. This is likely representative of the makeup of many police departments; however, it limits the researcher's ability to look for biological sex differences and/or ethnic differences among interrogators. Although anecdotal, during the interrogations, at times, it seemed as though the African Nova Scotian interrogator was approaching things differently when interacting with the suspect, and the same was seen with the female interrogator(s). Similar to the interrogators, most suspects were male and Caucasian. It is possible that suspects of different ethnicities may react differently during isolation periods or that some may take refuge in having the interrogator leave the room. The same can be said for the biological sex of the suspects – do they act differently? Having a sample that includes more ethnic and gender variety, among both interrogators and suspects, would be ideal and should be considered in future research.

A factor that the IRT thinks may have the potential to increase (or decrease) distress levels experienced by suspects during isolation is the reasoning or purpose behind the isolation period. It is possible that different "levels" or "types" of isolation exist, and that some may be more or less distressing to the individual. For example, when an interrogator leaves the room and provides the suspect an explanation that they are going to get food and water for the suspect, the suspect may not feel high levels of

distress and/or anxiety. However, when a suspect is first brought into the police station, read his/her legal rights, is uncuffed, and then left in the interrogation room without an explanation as to when someone will return (or who that someone may be), this form of isolation is likely to be highly alarming to the individual. It is also possible that suspects experience relief when left alone in the interrogation room (perhaps especially after an abrasive interrogator leaves). Future research should consider examining different forms of isolation based on the reasoning behind the individual isolation periods. Researchers should assess whether the suspect experiences more (or less) distress, whether suspects exhibit more nonverbal behaviours, and whether the different levels of isolation impact interrogation outcome.

Future research should continue to examine isolation during police interrogations. This study only provides a small amount of information regarding the technique, and as a widely used technique, researchers should attempt to understand it further. We can say with confidence that police officers are opting to isolate suspects, and as it increases distress among suspects (Kassin et al., 2010), it is crucial that we continue to study it and how it may affect the interrogation overall.

Additional Considerations for Future Research Like This

Although this research project was able to obtain data that is often inaccessible to researchers, it was not a perfect project. Despite our best intentions, there were several challenges that emerged. It was difficult to obtain volunteers who were willing to code this data and to commit the time that it takes. Videos were lengthy and coding nonverbal behaviours required researchers to review small video snippets repeatedly to ensure the behaviour was done properly. With hectic student schedules and work requirements, it

was difficult to obtain assistance and have volunteers be able to commit to the amount of time this project took. In future projects, volunteers should be better screened and ideally would commit to providing a certain number of hours per week to assist in informing the researchers what they can realistically expect from volunteers.

When individuals were assisting, it was often the case that there was no researcher overlap within the lab. Because of this, questions could be forgotten about and not clarified as needed. Going forward, I would recommend ensuring that hours for work are "set" to ensure that coding schedules overlapped frequently. By doing this, assistance is available to research assistants each day, and as questions arise, the research team can address them quickly.

Despite our best efforts to create a concise and easily understood content dictionary, there were concerns at times about the coding of behaviours. Although each member was informed of the dictionary (readily available on OneDrive) and reminded to use it, it was not the "go-to" document that we had hoped. Some opted not to consult the dictionary, thus resulting in unusable data. It is imperative to ensure that members of the research team are coding consistently and reliably, and it would likely be useful to perform check-ins at strategic points to ensure coding is up to the desired standard. Additionally, better training can be done with the volunteers to ensure reliable coding before being assigned their first case.

As one would expect, when watching true interrogation videos, you hear explicit details of many crimes. Despite feeling prepared to take this one, some of the cases were mentally exhausting. There were many upsetting details heard and nothing can prepare you for the lack of remorse some suspects show. As these videos are not publicly

available, details could only be shared with individuals whose names were approved by the police department. Unfortunately, this means that upon watching a video with upsetting details, coders could not go home and relieve the stress by discussing it with their loved ones. At times this was difficult but unable to be avoided. Additionally, there was no way to prepare coders for finding themselves in a public situation where one of the people from a video was (thought to be) present. These things should be discussed thoroughly when conducting a project like this, and the research should identify a support network (other coders, research supervisors) before watching any videos.

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Appendix A

Category	Behaviour	Definition
Arm Position	Crosses Arms on Chest	The suspect folds both arms across his or her chest as an attempt to put up a barrier.
	Hangs Arms Loose on or Beside Body	The suspect hangs his or her arms loose. The suspect's arms are now relaxed to their sides and/or relaxed on their body. Excluded instances when suspect has hands in pockets. This behaviour may be coded while suspect is laying down.
Grooming	Adjusts Clothing Item	The suspect deliberately changes the position of a clothing item on their body (e.g., jeans, sweater, t-shirt, shoes).
	Adjusts Jewelry/Accessories	The suspect deliberately changes the position of a jewelry item on their body or an accessory they are wearing (e.g., earrings, shoestrings, hat)
	Cleans/Inspects Fingernails	The suspect examines their fingernails and/or appears to pick at or tidy the fingernails.
	Dusts Clothing	The suspect makes a sweeping motion with their hand on their clothing (on or off body), appearing to brush off dust or dirt.
	Fixes/Tidies/Adjusts Hair/Beard/Mustache	The suspect touches and/or moves the hair on their head/beard/mustache with their hands.
	Picks at Clothing	The suspect appears to pick at/pull at threads, crumbs, dirt, or other substances on their clothing.
Hand Position	Fidgets with Hands	The suspect's hands/fingers make small, dynamic gestures. This may include rubbing their hands or playing with an object.
	Tucks Hands Under Legs	The suspect tucks their hand(s) under their thigh(s).
Leg Position	Crosses Legs	The suspect has one leg crossed over another leg – knee over knee, or foot over knee.

	Tucks Legs Under Chair	The suspect's legs are tucked backwards directly under the chair the individual is seated in.
Personal Gestures	Blows Nose	The suspect blows or wipes nose using tissue, or sleeve.
	Cracks Knuckles	The suspect intertwines their fingers and then bends them backwards in a way that would crack the knuckles and/or the suspect has their fingers in a fist and appears to press directly against the fist with their opposing hand to crack the knuckles.
	Drums Fingers	The suspect's fingers are extended and dynamic – each finger sequentially touches a table or chair.
	Pulls on Earlobe	The suspect pinches earlobe with their fingers and pulls.
	Pulls on Nose	The suspect pinches tip of nose with their fingers and pulls.
	Scratches Body	The suspect touches anywhere on body with their fingers in a
	Touches Face/Head/Neck	scratching, back-and-forth motion. The suspect may also use something besides hands to scratch (e.g., wall, pen, etc.) if it's clear that he/she is trying to relieve an itch The suspect touches anywhere above their neck with their hand for a brief moment (less than 5 seconds). This does not include 1) the suspect leaning on face or head; or 2) does it include pulling motions (e.g., pulling on nose or earlobes) – this is coded under suspect pulls nose.
	Wipes Sweat from Eyebrow/Forehead/Neck	The suspect makes a wiping motion with the front or back of their hand on
Posture	Faces Straight Forward in Seat	their eyebrow/forehead/neck. The suspect's body position shifts (from facing to the side) and is now facing forward in their seat, aligned with the direction that the chair is facing.
	Leans Forward in Seat	The suspect is leaned forward in their seat, with their back away from the back of the chair (approximately 45 degrees or more forward). The

		suspect may be leaning on their knees with their elbows.
	Lies Down	The suspect is positioned on the floor in a horizontal position.
	Sits Upright in Seat	The suspect changes posture and is now sitting in an upright position in the chair, with their back to the back of the chair.
	Slouches	The suspect is positioned slouching (sitting lazily) in chair. The suspect may be sitting with head and shoulders slumped forward or sitting with his or her head and shoulders back with his/her bottom slightly sliding off the chair.
	Turns to Side in Seat	The suspect's body turned away from the direction that the chair is facing.
Protective/Supportive Gestures	Covers Ears	The suspect blocks their ability to listen by placing their hand(s) over their ears.
	Covers Eyes	The suspect blocks their eyesight by
	Covers Head with Hood	placing their hand over their eyes. The suspect pulls hood from jacket or sweater over head, either covering the
	Hides Hands in Pockets	top of head or whole head. The suspect places their hands in the pocket of a clothing item that they are currently wearing.
	Leans Head on Hand	The suspect leans the weight of their head onto the open palm of their hand and/or their fist. The suspect is supporting his or her head.
	Sits on Feet	The suspect has their feet tucked under their body and is sitting on their feet.
Other	Drinks	The suspect takes a sip or gulp of drink. Each timestamp represents the instance when the suspect's mouth touches the straw or cup.
	Eats	Each instance the suspect takes a bite of food.
	Knocks on Interview Room Door	The suspect knocks on the interrogation room door from the inside, trying to get attention from one of the officers – this may be with hand, fist, foot, etc.

Sits Down	The suspect, previously standing, sits.
Smokes	Each instance when the suspect
	inhales smoke from a cigarette. This
	is only coded if the suspect is visibly
	smoking in the room (not when the
	suspect goes out for a smoke).
Stands Up	The suspect, previously sitting or
	laying down, stands
Uses Cellphone or	The suspect uses an electronic device,
Electronic Device	such as a cell phone, iPad, watch, or
	music player.
Vomits/Dry Heaves	As determined by watching the video.
	The suspect makes motion as if they
	are going to vomit.

Appendix B

Interrogations Project Coding Guide

Section I: Case Overview

Case Facts
Coder: Click to enter text.
Research Code: Click to enter text.
Interview Start Date/Time: Click to enter text.
Interview End Date/Time: Click to enter text.
Length of Interview: Interview End Time minus Interview Start Time.
Break given at any point during interview? ☐ YES ☐ NO
1. Break Start Date/Time: Click to enter text.
Break End Date/Time: Click to enter text.
Detail: Click to enter details regarding the break (e.g., reason, location).
Main Crime Type: Click to enter text.
Individuals Present:
☐ Primary Interviewer ☐ Secondary Interviewer ☐ Lawyer ☐ Add Other
Primary Interviewer Facts
Name: Click here to enter text.
Gender: Choose an item.
Ethnicity: Click to enter text.
Attire: Choose an item.
Rank: Click to enter text.
Highest Level of Training: Click to enter text.

Years of Experience: Click to enter text.

Secondary Interviewer Facts

Name(s):

Click to enter text / Click + icon for additional secondary interviewers.

Gender(s):

Choose an item / Click + icon for additional secondary interviewers.

Ethnicity:

Click to enter text / Click + icon for additional secondary interviewers.

Attire(s):

Choose an item / Click + icon for additional secondary interviewers.

Rank(s):

Click to enter text / Click + icon for additional secondary interviewers.

Highest Level of Training:

Click to enter text / Click + icon for additional secondary interviewers.

Years of Experience:

Click to enter text / Click + icon for additional secondary interviewers.

Suspect Facts

Age: Click to enter text.

Gender: Choose an item.

Ethnicity: Click to enter text.

Prior record? Choose an item. Nature of Previous Crime: Choose an item.

Suspect Solely Involved? Choose an item.

Victim Facts

Age: Click to enter text.
Gender: Choose an item.
Relationship to suspect?
☐ Acquaintance ☐ Friend ☐ Family ☐ Stranger ☐ Romantic Partner ☐ Unknown ☐ Add
Other
Preliminary Interview Preparations
Caution given? ☐ YES ☐ NO ●
Timestamp: Enter timestamp if "YES" selected.
Caution given by: Choose an item if "YES" selected.
Caution warning waived?
□ YES □ NO
Handshake between suspect and interviewer upon meeting?
Primary Interviewer:
\square YES \rightarrow Enter timestamp.
□NO
Secondary Interviewer:
\square YES \rightarrow Enter timestamp.
□NO
Interviewer asks behavioural analysis interview questions:
Primary Interviewer Timestamp(s): Enter frequency here.
Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.
Secondary Interviewer Timestamp(s): Enter frequency here.
Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer introduces self?

Decorative ornaments in room? ☐ YES ☐ NO

P	Primary Interviewer:	
	\square YES \rightarrow Enter timestamp. Interviewer provided his or her first name? \square YES	□ NO
	□ NO	
S	Secondary Interviewer:	
	\square YES \Rightarrow Enter timestamp. Interviewer provided his or her first name? \square YES	
NO		
	□ NO	
Interview	wer has evidence folder in hand upon entry?	
P	Primary Interviewer: ☐ YES ☐ NO	
S	Secondary Interviewer: □ YES □ NO	
Preferred	d name(s) asked?	
Г	\square YES \rightarrow Enter timestamp.	
	□NO	
Suspect h	handcuffed/shackled during interrogation? ☐ YES ☐ NO	
Suspect's	's needs addressed before interview? ☐ YES ☐ NO	
N	Needs Addressed:	
	□ Bathroom	
	Timestamp(s):	
	Enter timestamp.	
	□ Food	
	Timestamp(s):	
	Enter timestamp.	
	□ Water	
	Timestamp(s):	
	Enter timestamp.	
Interrog	gation Room Set-up	

Interviewer and suspect seated to directly face each other?		
Primary Interviewer: ☐ YES ☐ NO		
Secondary Interviewer: □ YES □ NO		
Room plain in colour? ☐ YE	S □ NO	
Small, loose objects within suspect's reach? ☐ YES ☐ NO		
Straight-back chairs? YES	S □ NO	
Telephone in room? ☐ YES	□NO	
Interviewer Competence		
Interviewer self-confidence:		
Primary Interviewer: Click to rank.		
Secondary Interviewer: Click to rank.		
Interviewer demonstrates knowledge of case details:		
Primary Interviewer: Click to rank.		
Secondary Interviewer: Click to rank.		
Interrogation was evidence based: Click to rank.		
Interrogation Outcome ••		
Interrogation outcome: Choo	se an item.	
Confessions:		
☐ Partial Admission		
Timestamp(s)	What was the statement given?	
Enter timestamp	Enter statement here for each corresponding timestamp. Hit	
here. Hit	"Return/Enter" for each timestamp.	
"Return/Enter"		

key to add extra	
timestamps.	
	I and the second se
☐ Full Confession	
Timestamp(s) Enter timestamp here. Hit "Return/Enter" key to add extra	What was the statement given? Enter statement here for each corresponding timestamp. Hit "Return/Enter" for each timestamp.
timestamps.	
Court Outcome Plea: Guilty Not Guilty Final Disposition: Conviction Acquittal	□ Unknown □ Withdrawn □ Stayed □ Unknown □ Add Other.
	Section II: Isolation
Suspect alone in interrogation	n room prior to entry of interviewer? YES NO
* If "YES" is selected, com ** If there is more than one i additional isolation periods	plete the box below solation period, use + icon at the bottom of section for each
<u>Isolation Period</u>	
Isolation Number: Click here	e to enter number.
Isolation Start Time: Click her	re to enter time.
Isolation End Time: Click here	e to enter time.
Length of Isolation Period: Er	nd Time subtract Start Time.

Interruption

Isolation Period Interrupted Before Interview Started: ☐ YES ☐ NO
Interruption Start Time: Click here to enter time.
Interruption End Time: Click here to enter time.
Length of Interruption: End Time subtract Start Time.
Individual(s) who interrupted:
□Interviewer □ Lawyer □ Other Officer □ Add Other
Reason Given for Interruption: Click here to enter text.
${\bf Additional\ Interruptions\ } (use\ the+icon\ to\ add\ additional\ interruptions\ for\ isolation)$
Interruption Start Time: Enter time.
Interruption End Time: Enter time.
Length of Interruption: End Time subtract Start Time.
Individual(s) who interrupted:
□Interviewer □ Lawyer □ Other Officer □ Add Other
Reason Given for Interruption: Click or tap here to enter text.

Suspect Non-Verbal Behaviour

Arm Position

Suspect crosses arms on chest

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect hangs arms loose on or beside body

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Grooming

Suspect adjusts clothing item

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect adjusts jewelry/accessories

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect cleans/inspects fingernails

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect dusts clothing

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect fixes/tidies/adjusts hair/beard/mustache

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect picks at threads on clothing

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Hand Position

Suspect fidgets with hands

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect tucks hands under legs

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Leg Position

Suspect crosses legs

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect tucks legs under chair

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Personal Gestures

Suspect blows nose

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect cracks knuckles

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect drums fingers

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect pulls on earlobe

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect pulls on nose

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect scratches body

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect touches face/head/neck

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect wipes sweat from eyebrow, forehead, or neck

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Posture

Suspect faces straight forward in seat

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect leans forward in seat

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect lies down

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect sits upright in seat

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect slouches

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect turns to the side in seat

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Was suspect posture more static or dynamic during the isolation period? \Box Static \Box Dynamic

Protective/Supportive Gestures

Suspect covers ears

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect covers eyes

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect covers head with hood

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect hides hands in pockets

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect leans head on hand

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect sits on feet

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Other

Suspect drinks

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect eats

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect knocks on interview room door

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect sits down

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect smokes

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect stands up

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect uses cell phone or electronic device

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect vomits/dry heaves

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Striking Behaviours

Behaviour(s) that stood out during isolation

Timestamp(s)

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

What was the behaviour?

Enter question here for each corresponding timestamp. Hit "Return/Enter" for each instance.

Total Number of Isolation Periods: Click here to enter number.

Section III: Interview

Non-Verbal Behaviours

Suspect Behaviour

Arm Position

Suspect crosses arms on chest:

Frequency: Click here to enter number.

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Suspect hangs arms loose on or beside body:

Frequency: Click here to enter number.

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Grooming

Suspect adjusts clothing item:

Frequency: Click here to enter number.

Timestamp(s) Did the interviewer reiterate guilt belief immediately after behaviour?

Suspect adjusts jewelry/accessories:

Frequency: Click here to enter number.

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Suspect cleans/inspects fingernails:

Frequency: Click here to enter number.

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Suspect dusts clothing:

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.

"Return/Enter" key to add extra timestamps.

Suspect fixes/tidies/adjusts hair/beard/mustache:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Suspect picks at threads on clothing:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Hand Position

Suspect fidgets with hands:

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	

key to add extra timestamps.

Suspect tucks hands under legs:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Leg Position

Suspect crosses legs:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Suspect tucks legs under chair:

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	
timestamps.	

Personal Gestures

Suspect blows nose:

Frequency: Click here to enter number.

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Suspect cracks knuckles:

Frequency: Click here to enter number.

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Suspect drums fingers:

Frequency: Click here to enter number.

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Suspect pulls on earlobe:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Suspect pulls on nose:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Suspect scratches body:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Suspect touches face/head/neck

Frequency: Click here to enter number.

Timestamp(s) Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

here. Hit

"Return/Enter"

key to add extra

timestamps.

"Return/Enter" for each timestamp.

Suspect wipes sweat from eyebrow, forehead, or neck:

Frequency: Click here to enter number.

Timestamp(s)

Enter timestamp

here. Hit

"Return/Enter"

key to add extra

timestamps.

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

Posture

Suspect faces straight forward in seat:

Frequency: Click here to enter number.

Timestamp(s)

Enter timestamp

here. Hit

"Return/Enter"

key to add extra

timestamps.

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

Suspect leans forward in seat:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Suspect lies down:

Frequency: Click here to enter number.

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after
	behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Suspect sits upright in seat:

Frequency: Click here to enter number.

Timestamp(s)	Did the interviewer reiterate guilt belief immediately after behaviour?
Enter timestamp	Enter "YES" or "NO" here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Suspect slouches:

Frequency: Click here to enter number.

Timestamp(s) Did the interviewer reiterate guilt belief immediately after behaviour?

Suspect turns to the side in seat:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Was suspect posture more static or dynamic during the interview? \square STATIC \square DYNAMIC

Protective/Supportive Gestures

Suspect covers ears:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Suspect covers eyes:

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

here. Hit

"Return/Enter" for each timestamp.

"Return/Enter"

key to add extra

timestamps.

Suspect covers head with hood:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

here. Hit

"Return/Enter"

key to add extra

timestamps.

"Return/Enter" for each timestamp.

Suspect hides hands in pockets:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

here. Hit

"Return/Enter"

key to add extra

timestamps.

"Return/Enter" for each timestamp.

Suspect leans head on hand:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

here. Hit

"Return/Enter"

key to add extra

timestamps.

"Return/Enter" for each timestamp.

Suspect sits on feet:

Frequency: Click here to enter number.

Timestamp(s)

Enter timestamp

here. Hit

"Return/Enter"

key to add extra

timestamps.

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

Other

Suspect drinks:

Frequency: Click here to enter number.

Timestamp(s)

Enter timestamp

here. Hit

"Return/Enter"

key to add extra

timestamps.

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

Suspect eats:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp E here. Hit "

Enter "YES" or "NO" here for each corresponding timestamp. Hit "Return/Enter" for each timestamp.

"Return/Enter" key to add extra

timestamps.

Suspect sits down:

Frequency: Click here to enter number.

Timestamp(s)

Enter timestamp

"Return/Enter"

here. Hit

key to add extra

timestamps.

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter "YES" or "NO" here for each corresponding timestamp. Hit "Return/Enter" for each timestamp.

Suspect knocks on the interview room door:

Frequency: Click here to enter number.

Enter timestamp here. Hit "Return/Enter" key to add extra

timestamps.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter "YES" or "NO" here for each corresponding timestamp. Hit "Return/Enter" for each timestamp.

Suspect smokes:

Frequency: Click here to enter number.

Timestamp(s) Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp Enter "YES" or "NO" here for each corresponding timestamp. Hit

here. Hit "Return/Enter" for each timestamp.

"Return/Enter" key to add extra timestamps.

Suspect stands up:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Suspect uses cell phone or electronic device:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

key to add extra

timestamps.

Suspect vomits/dry heaves:

Frequency: Click here to enter number.

Timestamp(s)

Did the interviewer reiterate guilt belief immediately after behaviour?

Enter timestamp

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each timestamp.

Key to add extra

timestamps.

Interviewer Behaviour

Interviewer crosses arms on chest:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer paces room:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer sits down:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer leans back in seat:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer stands up:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interrogation Tactics & Strategies

Reid Technique

Step 1 – Direct, Positive Confrontation			
Interrogation initiated with direct statement indicating certainty in guilt?			
\square YES \rightarrow Enter timestamp.			
□ NO			
Behavioural pause immediately after direct statement (if applicable)?			
\square YES \rightarrow Enter timestamp.			
□ NO			
□ N/A			
Interviewer gives transition statement:			
\square YES \rightarrow Enter timestamp.			
□NO			
Step 2 – Theme Development			
Interviewer proposes a theme for the crime's commission: ☐ YES ☐ NO			
Emotional Themes			
Interviewer exaggerates the nature/seriousness of the crime:			
Primary Interviewer Timestamp(s): Enter frequency here.			
Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.			
Secondary Interviewer Timestamp(s): Enter frequency here.			
Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.			

Interviewer points out the consequences and futility of continuation of criminal behaviour:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer points out the possibility of exaggeration on part of the accuser or victim:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer suggests anyone else under similar circumstances might have done the same:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer sympathized with suspect by condemning others:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer uses pride or flattery:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer uses third person theme:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Non-Emotional Tactics

If co-offenders involved, interviewer plays one against the other:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer points out the futility of resisting telling the truth:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer proposes non-criminal intent for the offence:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

If suspect continues to reject theme, interviewer changes theme:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Step 3 – Handling Denials

Suspect denies the offence:

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer reiterates moral excuse/theme after denial:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Step 4 – Overcoming Objections

Suspect offers objections:

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer reinstates theme after objection:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer allows suspect to voice objections:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Step 5 – Procurement and Retention of a Suspect's Attention

Suspect withdraws during interrogation:

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer moves closer to suspect:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer uses visual aids:

Primary Interviewer:

Frequency: Click here to enter number.

Timestamp(s)	Description of Visual Aids
Enter timestamp	Enter brief description here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Secondary Interviewer Timestamp(s):

Frequency: Click here to enter number.

Timestamp(s)	Description of Visual Aids
Enter timestamp	Enter brief description here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each timestamp.
"Return/Enter"	
key to add extra	
timestamps.	

Step 6 – Handling Suspect's Passive Mood

Suspect cries during interrogation:

	Did the interviewer provided	Did the interviewer reiterate guilt
Timestamp(s)	sympathy immediately after suspect	belief immediately following
	cries?	behaviour?
Enter timestamp	Enter "YES" or "NO" here for each	Enter "YES" or "NO" here for each
here. Hit	corresponding timestamp. Hit	corresponding timestamp. Hit
"Return/Enter"	"Return/Enter" for each timestamp.	"Return/Enter" for each timestamp.
key to add extra		
timestamps.		

Step 7 – Alternative Questions

Isolation Periods

1. Isolation Period

Isolation Number: Click here to enter number.

Isolation Start Time: Click here to enter time.

Isolation End Time: Click here to enter time.

Length of Isolation Period: End Time subtract Start Time.

Isolation Period Interrupted Before Interview Started: ☐ YES ☐ NO

Unique Alternative Questions

1. Unique AQ

** Click + icon at end of section to add additional unique alternative questions

		Indicate whether alternative questions was:
Timestamp(s)	What was the question?	denied, accepted, no response, or other
		response.
Enter timestamp here.	Enter question here for	Enter response here for each corresponding
Hit "Return/Enter" key	each corresponding	timestamp. Hit "Return/Enter" for each
	timestamp. Hit	instance.

to add extra	"Return/Enter" for each	
timestamps.	"Return/Enter" for each instance.	
	·	
What did the alter	native question ask about?	
☐ Reason suspect of	committed the crime	
☐ Detail oriented (e	e.g., weapons used, accomplices) De	tail:
☐ Other (please spe	ecify):	
Alternative question	n offers leniency	\square YES \square NO
Alternative question	n threatens inevitable consequences	□ YES □ NO
Alternative question	n mentions legal charges	\square YES \square NO
Total Number of U	Jnique Alternative Questions: Click	here to enter number.
	-	
One-Sided Alterna		
1. One-Sided		
** Click + icon at e	and of section to add additional uniqu	e one-sided alternative questions
Frequency: Click he	re to enter number.	
		Indicate whether alternative questions was:
Timestamp(s)	What was the question?	denied, accepted, no response, or other
		response.
Enter timestamp	Enter question here for each	Enter response here for each corresponding
here. Hit	corresponding timestamp. Hit	timestamp. Hit "Return/Enter" for each
"Return/Enter"	"Return/Enter" for each instance.	instance.
key to add extra		
timestamps.		

What did the alternative question ask about?

e

☐ Detail oriented (e.g., weapons used, accomplices)

Detail: Click or tap here to enter text.

☐ Other (please specify): Click or tap here to enter text.		
Alternative question offers leniency	□ YES □ NO	
Alternative question threatens inevitable consequences	□ YES □ NO	
Alternative question mentions legal charges	\square YES \square NO	

Total Number of Unique One-Sided Alternative Questions: Click here to enter number.

Positive Supporting Statements:

1. + Supporting Statement

** Click + icon at end of section to add additional unique positive supporting statements

Frequency: Click here to enter number.

Timestamp(s)	What was the statement?
Enter timestamp	What was the statement? Enter statement here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each instance.
"Return/Enter"	
key to add extra	
timestamps.	

Total Number of Positive Supporting Statements: Click here to enter number.

Negative Supporting Statements:

1. – Supporting Statement

** Click + icon at end of section to add additional unique negative supporting statements

Timestamp(s)	What was the statement?
Enter timestamp	Enter statement here for each corresponding timestamp. Hit
here. Hit	"Return/Enter" for each instance.
"Return/Enter"	

key to add extra timestamps.

Total Number of Negative Supporting Statements: Click here to enter number.

Statements of Reinforcement:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Step 8 – Orally Relating Various Details of Offense

If suspect makes a partial admission, interviewer returns to beginning of the crime:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Maximization Techniques

Interviewer accuses suspect of other crimes:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer appeals to his/her expertise/authority:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer asks case-relevant question (incriminating):

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

Interviewer asserts confidence in suspect's guilt:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer claims strong incriminating evidence (generally - e.g., "we have a lot of evidence"):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer claims strong incriminating evidence (specifically - e.g., "we have your gun"):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer comments/interprets evidence against suspect:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer confronts suspect with existing evidence of guilt:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer exaggerates the moral seriousness of the offence:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer exaggerates the nature/purpose of questioning:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer identifies contradiction in suspect's story:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer indicates confession is only path forward:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer invokes metaphors of guilt:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes case-relevant statement (incriminating nature):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer presents evidence against suspect:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer refers to physical symptoms of guilt:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer refutes suspect denial of guilt:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer states crime narrative (incriminating nature):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer undermines suspect's confidence in denial of guilt:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewers use good cop/bad cop routine:

Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Polygraph offer made to suspect:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer yells at suspect:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Minimization Techniques

Interviewer appeals to the importance of cooperation:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer appeals to the suspect's conscience:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer appeals to the suspect's self-interest:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer asks face-saving crime specific question:

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer question?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer question?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

Interviewer asks the suspect to tell more incriminating details:

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

Interviewer makes face-saving crime motive statement:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes general minimizing, empathetic perspective-taking statement (non-incriminating):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes general minimizing statement/story (incriminating area):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes honesty statement:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes moral minimizing statement (incriminating area):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes specific minimizing, empathetic perspective-taking statement/story (non-incriminating):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes specific minimizing, normalizing statement/story (non-incriminating):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes specific minimizing, normalizing statement/story (incriminating):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes specific moral minimizing statement about strong evidence:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes verbal 'go on' gesture with follow-up question:

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer question?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s) Does suspect answer question?

Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

Interviewer makes verbal 'go on' gesture without follow-up question:

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect continue to speak after prompted?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect continue to speak after prompted?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

Interviewer minimizes the facts/nature of the offence:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer minimizes the nature/purpose of questioning:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer offers moral justifications/psychological excuses:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer offers personal information to minimize consequences:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer touches suspect in friendly manner:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer uses praise or flattery:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Number of legal terms used to describe the crime: Enter number here.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Rapport Building

Interviewer Behaviour

Interviewer asks personal question:

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer question?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer question?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

Interviewer laughs at own statement (genuine):

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect laugh (joining in with interviewer)?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect laugh (joining in with interviewer)?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

Interviewer laughs at suspect statement (genuinely):

PRIMARY INTERVIEWER:

Enter timestamp here.
Hit "Return/Enter" key
to add extra

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each instance.

timestamps.

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)

Does suspect laugh (joining in with interviewer)?

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Enter "YES" or "NO" here for each corresponding timestamp. Hit "Return/Enter" for each instance.

Interviewer offers beverage:

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)

Does suspect accept beverage?

Enter timestamp here. Hit "Return/Enter" key to add extra

timestamps.

Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each instance.

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)

Does suspect accept beverage?

Enter timestamp here. Hit "Return/Enter" key to add extra Enter "YES" or "NO" here for each corresponding timestamp. Hit

"Return/Enter" for each instance.

timestamps.

Interviewer offers cigarette:

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)

Does suspect accept cigarette?

Enter timestamp here. Hit "Return/Enter" key to add extra

timestamps.

Enter "YES" or "NO" here for each corresponding timestamp. Hit

'Enter" key "Return/Enter" for each instance.

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)

Does suspect accept cigarette?

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Enter "YES" or "NO" here for each corresponding timestamp. Hit "Return/Enter" for each instance.

Interviewer Offers Food:

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)

timestamps.

Does suspect accept food?

Enter timestamp here. Hit "Return/Enter" key to add extra Enter "YES" or "NO" here for each corresponding timestamp. Hit "Return/Enter" for each instance.

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)

Does suspect accept food?

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps. Enter "YES" or "NO" here for each corresponding timestamp. Hit "Return/Enter" for each instance.

Interviewer uses profanity:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect Behaviour

Suspect asks personal question:

Frequency: Click here to enter number.

Timestamp(s)*Did interviewer answer or reflect the question?* Enter timestamp here. Enter response here for each corresponding timestamp. Hit "Return/Enter" for each timestamp. Hit "Return/Enter" key to add extra timestamps. Suspect makes an accommodation request (e.g., smoke): Frequency: Click here to enter number. Was request denied, granted, or reflected? Timestamp(s)Enter response here for each corresponding timestamp. Hit "Return/Enter" for each timestamp. Enter timestamp here. Hit "Return/Enter" key to add extra timestamps. Suspect offers unsolicited personal information: Frequency: Click here to enter number. Timestamp(s): Enter timestamp here. Hit "Return/Enter" key to add extra timestamps. Suspect uses profanity: Frequency: Click here to enter number. Timestamp(s): Enter timestamp here. Hit "Return/Enter" key to add extra timestamps. **Coercive Strategies** Interrogation lasts more than 6 hours: \square YES \square NO Interviewer deprives the suspect of an essential necessity: **Primary** Interviewer Timestamp(s): Enter frequency here. Enter timestamp here. Hit "Return/Enter" key to add extra timestamps. **Secondary** Interviewer Timestamp(s): Enter frequency here.

Interviewer does not permit suspect to invoke his/her rights:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer gave inevitable consequences:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer promises the suspect leniency in exchange for an admission of guilt:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer threatens the suspect with physical or psychological pain:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer touches suspect in an unfriendly manner:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer's questioning manner is unrelenting, badgering or hostile:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect is in obvious physical pain:

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Suspect is in obvious physical pain:

Frequency: Click here to enter number.

Timestamp(s):

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Inquisition Strategies

Interviewer asks case-relevant question (non-incriminating):

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer?
Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

Interviewer asks suspect to help identify/explain/clarify displayed evidence (non-incriminating):

PRIMARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s)	Does suspect answer?
--------------	----------------------

Enter timestamp here.	Enter "YES" or "NO" here for each corresponding timestamp. Hit
Hit "Return/Enter" key	"Return/Enter" for each instance.
to add extra	
timestamps.	

SECONDARY INTERVIEWER:

Frequency: Click here to enter number.

Timestamp(s) Enter timestamp here. Hit "Return/Enter" key to add extra timestamps. Does suspect answer? Enter "YES" or "NO" here for each corresponding timestamp. Hit "Return/Enter" for each instance.

Interviewer looks through evidence folder:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes affirmative response to case-relevant information:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes case-relevant statement (non-incriminating):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer makes general case-relevant personal statement:

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Interviewer paraphrases/restates case-relevant statement by suspect (non-incriminating):

Primary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Secondary Interviewer Timestamp(s): Enter frequency here.

Enter timestamp here. Hit "Return/Enter" key to add extra timestamps.

Appendix C

Content Dictionary – Interrogations Project

Age (**suspect, victim**): the age of a suspect at the time of the interrogation; most often obtained from the preliminary phase of the interrogation when suspect date of birth is recorded.

Alternative question mentions legal charges: using legal terms during an alternative question is not recommended, especially if it suggests leniency. For example, it is not recommended to say "did you do it by accident, in which case you'd be charged with manslaughter, or was it premeditated and first degree murder?" this suggests if the suspects says it was an accident, they will have a lesser charge and likely more lenient sentence.

Alternative question offers leniency: whether the alternative question offers leniency (i.e. reduced consequences). For example, "did you do it by accident, in which case you'd be charged with less than if you meant to, or did you actually mean to do it?"

Alternative question threatens inevitable consequences: whether the alternative question implies the consequences of committing the crime in question are inevitable.

Attire (**Interviewer**): whether the interviewer was dressed casually (e.g., t-shirt, jeans, sweatshirt) or formally (e.g., dress shirt, dress pants, tie, uniform).

Behavioural pause: whether or not an interviewer makes an intentional period of silence after (within 5 seconds of) indicating his or her certainty in a suspect's guilt. If the interviewer does not make a statement indicating certainty in guilt at the beginning of the

interrogation, this variable is coded as 'no'. Inbau et al. (2004) suggest making such a behavioural pause in order to assess the suspect's reaction to the direct positive confrontation.

Break given at any point during interview: At any point during the interview, the officer provided the suspect with respite – a period in which the suspect is given rest/relief outside of the interrogation room. This break could include a speaking to a lawyer or taking a smoke break outside or the opportunity to go back to the suspect's cell.

*** A break is *no longer* a break, but instead a new interview after 4 hours of the suspect having left the room (with the exception of the suspect talking to a lawyer more than 4 hours – this would still be coded as a break)

Break start date/time: The date and time when the break started (i.e. when the suspect leaves the room), as determined by the times indicated bottom of the screen. If the date given on the tracking and by the interviewer disagree, the date provided by the interviewer is accepted.

Break end date/time: The date and time when the break ended (i.e. when suspect returns to room), as determined by the times indicated bottom of the screen. If the date given on the tracking and by the interviewer disagree, the date provided by the interviewer is accepted.

Caution given by: whether the primary interviewer, secondary interviewer or another individual gives the caution. Inbau et al. (2004, p. 216) suggest that the primary interviewer "be spared this responsibility" so he or she can begin the interrogation immediately. If the caution is not given at all, this variable is not coded.

Caution given: whether or not a suspect is informed of his or her rights (e.g., not under any obligation to say anything, freedom from any threats or promises, right to legal counsel) prior to specific discussion of the offence. A caution is only coded as being given if it is on the interrogation video. If it is implied that the caution was given beforehand (e.g., remember when you were given the caution earlier?), the caution is coded as *not* being given.

Caution warning waived: whether the suspect acknowledges his rights (e.g. suspect says "yes, I understand my rights"), and states that he/she is willing to talk to interviewer(s).

Coder: The name of authorized researcher coding the interview.

Court outcome: This includes an examination of the court files to determine if the suspect pleaded guilty or not guilty at court. If the suspect pleaded not guilty, the court file was examined to determine if there was a conviction, acquittal, withdrawal, or stay of proceedings.

Decorative ornaments in room: if the interrogation room contains decorations such as pillows, flowers, or pictures. Inbau et al. (2004) recommend that the interrogation room not contain any such objects and be as plain as possible.

Detail oriented: question is based on the where, when, or how of an act or event pertinent to the crime. e.g., "did you bring the gun with you or did one of your buddies give it to you?", "did you use a match or a lighter?", "were you with her a long time before it happened or was it only minutes?"

Did the interviewer reiterate guilt belief immediately following behaviour: in the five seconds following a nonverbal behaviour elicited by the suspect, the interviewer reiterated their belief in the suspect's guilt with a verbal statement (e.g. "We know you did it", "There is evidence to show you did this", "I have no doubt in my mind that you did this").

Ethnicity (**Interviewers, Suspect & Victim**): determined as best as possible by video inspection, unless specifically mentioned.

Full confession: this variable is coded if a suspect admits full involvement in the offence and provides details. Each timestamp represents each unique time the suspect admits involvements and subsequently provides detail. For example, if the suspect says "Yes, ok, I did it. But it didn't happen that way" this would be timestamped. Another timestamp would be coded if the conversation topic changed, and then went back an admission of involvement.

Gender (Interviewers, Suspect & Victim): as determined by information provided during the interview (i.e., name, pronouns used); if not discussed within the interrogation, gender is coded as unknown. If there is no specific victim (e.g., robbery of a business), this variable is not coded.

Handshake between suspect and interviewer upon introduction: whether or not the primary (or secondary interviewer) and suspect shake hands upon meeting or at the beginning the interrogation. Inbau et al. (2004) suggest that interviewers not shake hands with suspects in order to maintain social distance.

Highest level of training: the most advanced training the interviewer has obtained regarding interrogating. For example: REID training, PEACE training, etc.

If co-offenders involved, play one against the other: a non-emotional theme proposed by Inbau et al. (2004). The interviewer suggests to a suspect that his or her accomplice has placed blame mostly on the suspect, motivating the suspect to give his or her account of the offence. The interviewer may also tell the suspect that his or her accomplice has already confessed so he or she might as well come clean too. Inbau et al. (2004) acknowledge that this technique involves 'bluffing' and may be most effective with naïve suspects.

If suspect continues to reject theme, interviewer changes theme: whether or not the interviewer proposes a different theme if a suspect is not receptive to the current theme and continues to reject it. For example, an interviewer may propose that a suspect committed a robbery only to support his drug habit rather than for personal gain.

However, if the suspect continues to reject this theme, the interviewer should, according to Inbau et al. (2004), propose a new theme such as the robbery was committed to support the suspect's children. If no theme was proposed for the crime's commission, this variable is coded as no. If a suspect does not reject a theme, this variable is not coded.

If suspect makes a partial admission, interviewer returns to the beginning of the crime: whether or not an interviewer returns to the beginning of the crime in terms of questions once a suspect makes an admission of guilt. If a suspect does not make any such admission, this variable is not coded. Inbau et al. (2004) suggest that an interviewer go back to the beginning of the crime once an admission is made to gather additional information.

Individuals present: The different people present during the interview, other than the suspect, was recorded. The options to be recorded were (a) primary interviewer, (b) secondary interviewer, (c) lawyer, and (d) other (e.g., parent, social worker). The type of other was also coded. In some cases, a commissioner of oaths was present for a brief time period to obtain a swon affidavit from the witness. This individual was not coded as being present during the interview.

Individuals who interrupted: the person(s) who interrupted the isolation period (i.e., the period when a suspect is left alone before the interview starts). The options to be recorded are the interviewer, lawyer, other officer, or other.

Interrogation initiated with direct statement indicating certainty in guilt: whether or not the primary or secondary interviewer indicates his or her certainty in the suspect's guilt at the beginning of the interrogation (i.e., after caution given, if applicable). For example, telling the suspect "I have in this folder the results of our entire investigation...there is no doubt that you started the fire" (Inbau et al., 2004, p. 220) or "I know you are responsible for taking the money". Inbau et al. (2004) recommend beginning the interrogation with such statements in order to assess the suspect's behavioural response and to impress upon the suspect the interviewer's confidence.

Interrogation lasts more than 6 hours: as determined by video inspection.

Interrogation outcome: the end result of the interrogation in terms of the acquirement of confessionary evidence. If a suspect refuses to comment on his or her involvement in the offence, the outcome is coded as 'no comment', if a suspect denies any involvement in the offence he or she is being accused of, outcome is coded as 'denied offence', if a

suspect admits some involvement in the offence but does not provide details or remains elusive when specifically questioned, the outcome is coded as 'partial admission', and if a suspect admits full involvement in the offence and provides details, the outcome is coded as 'full confession'.

Interrogation was evidence based: rated on a 1 to 5 scale, with 1 representing the least evidence-based interrogation and 5 the most. Interrogations rated as 1 do not ever involve the confrontation of suspects with specific pieces of evidence and interviewers always refuse to discuss such evidence. Interrogations rated as 5 involve the confrontation of suspects with many specific pieces of evidence and interviewers engage in discussion with suspects about specific evidence. Interrogations are rated in between these two extremes as deemed appropriate. Inbau et al. (2004) recommend not discussing specific evidence with suspects in order to avoid suspect attempts to refute all evidence and it is not ideal to let suspects know the strength of evidence against them. Instead, theme development should be emphasized.

Interruption end time: The time when the interruption ended (i.e. when interrupter and suspect exit the room closes [as door at the end of interviewing suspect closes]), as determined by the times indicated bottom of the screen. If the date given on the tracking and by the interviewer disagree, the date provided by the interviewer is accepted.

Interruption start time: The time when the interruption began (i.e., when interrupter opens the door to briefly talk to suspect before the interview starts), as determined by the times indicated bottom of the screen. If the date given on the tracking and by the interviewer disagree, the date provided by the interviewer is accepted.

Interview end date/time: The date and time when the interview ended (i.e. when interviewers and suspect exit room or when the video stops before that), as determined by the times indicated bottom of the screen.

Interview start date/time: The date and time when the interview started (i.e., when interrogation room door first opens or the time when the interviewee is already in the room – when the video starts), as determined by the times indicated bottom of the screen. If the date given on the tracking and by the interviewer disagree, the date provided by the interviewer is accepted.

Interviewer accuses suspect of other crimes: whether or not an interviewer accuses the suspect of crimes other than those being currently investigated. The interviewer may accuse the suspect of similar crimes that apparently occurred within a particular area or time frame or accuse the suspect of unrelated crimes. For example, if a suspect is accused of robbery, the interviewer may accuse him or her of committing a number of robberies in the city or may accuse him or her of a recent assault.

Interviewer allows suspect to voice objections: rated on a 1 to 5 scale, with 1 representing the least allowance of objections and 5 the most. An interviewer rated 1, never allows a suspect voice objections by either interrupting him or her, telling him or her to stop, or arguing with the objection (e.g., the suspect says he doesn't even own a gun, the interviewer argues "Yes you do"). An interviewer rated 5, always allows a suspect to voice objections and never interrupts, tells him or her to stop, or argues with objection. An interviewer is rated in between these two extremes as deemed appropriate. If a suspect does not make any objections to the offence, this variable is not coded. Inbau

et al. (2004) recommend that suspects be allowed to voice objections and that they represent a sign of guilt.

Interviewer and suspect seated to directly face each other: whether or not the primary interviewer and suspect are positioned to face each throughout the interrogation. If only the secondary interviewer is directly facing the suspect, this variable is coded as 'no'. Inbau et al. (2004) suggest sitting directly across from a suspect helps an interviewer retain the suspect's attention.

Interviewer appeals to his/her expertise/authority: whether or not an interviewer highlights his or her expertise or authority as an investigator, with the apparent motivation of impressing upon the suspect the futility of lying. For example, "I've been an interviewer for about 20 years, I know instantly when someone is lying to me" and "I've been doing this a long time, there's no fooling me".

Interviewer appeals to the importance of cooperation: whether or not an interviewer suggests to a suspect that cooperating with the investigation is important, for his or her own sake or for some other reason. For example, "I'm not against you, we both just need to get to the bottom of this" and "We need to work together and figure out what really happened that night".

Interviewer appeals to the suspect's conscience: The interrogator may refer to the suspect's feelings of guilt or remorse for having done something wrong, bad, or illegal; it could be discussing the impact of the alleged crime on the victim(s) and/or the victim's family; getting some piece of information "off [the suspect's] chest." The interrogator

may refer to redemption in some fashion as well. (Operationalized definition from Kelly, Russano, Miller, & Redlich, 2019)

Interviewer appeals to the suspect's self-interest: The interrogator here would remind the suspect that there are consequences for not talking to the interrogator or allusions to benefits for "telling their side" of the story. The phrase "help yourself out," "this is serious stuff," or "you could be in big trouble" may be used in this manner. The self-interest often implicitly refers to legal consequences. (Operationalized definition from Kelly, Russano, Miller, & Redlich, 2019)

Interviewer asks behavioural analysis interview questions: whether or not an interviewer asks any of the behavioural analysis questions outlined in chapter 11 of Criminal Interrogation and Confessions (2004). These questions include: purpose (e.g., do you know why I'm here to talk to you?), knowledge (e.g., do you know who did commit this crime?), vouch (e.g., who can you vouch for that did not commit this offence?), credibility (i.e., determines whether or not a suspect is realistic in his or her evaluation of the crime, for example by asking "do you think someone purposefully took the money?), attitude (e.g., how do you feel about being interviewed for this offence?), think (e.g., have you ever even though about doing something like that?), motive (e.g., why do you think someone would do this?), punishment (e.g., what do you think should happen to someone who commits this type of offence?), second chance (e.g., do you think whoever did this deserves a second chance), objection (e.g., tell me why you wouldn't do something like this), results (e.g., what do you think the outcome of this investigation is going show about your involvement), and tell love ones (e.g., what will you tell your family about this interview today?). *History/you* type questions (i.e., tell the suspect what is being investigated and ask if he or she is involved) are not coded as behavioural analysis questions because they represent a standard interrogative procedure.

Interviewer asks case-relevant question (incriminating): the interviewer may ask the suspect a background or general question relating to the case. For example: "weren't you at the crime scene carrying a gun that night?"

Interviewer asks case-relevant question (non-incriminating): the interviewer may ask the suspect a background or general question relating to the case. For example: "were you friends with the victim?"

Interviewer asks face-saving crime specific question: the interviewer may ask the suspect a question relating to the offense that provides the suspect comfort by offering a "reasonable" or "moral" explanation for committing the crime or feelings of resentment (e.g. "do you wish you could take it back, and have your wife still around?").

Interviewer asks personal question: the interviewer may ask the suspect a general question about their self. For example: "what do you do in your spare time?"

Interviewer asks suspect to help identify/explain/clarify displayed evidence: the interviewer may ask the suspect to help identify, clarify, or explain evidence related to the crime in question, such as details regarding the crime scene, weapons, or others involved.

Interviewer asks suspect to tell more incriminating details: the interviewer may ask the suspect to elaborate on details regarding the crime in question alluding to their involvement after suspect has previously provided incriminating details (e.g. "were you alone?").

Interviewer asserts confidence in suspect's guilt: the interviewer may make a statement that asserts confidence in the suspect's guilt. For example: "I am more than 100% positive you did this."

Interviewer claims strong incriminating evidence (generally): the interviewer may claim strong incriminating evidence against the suspect in a general manner, such as "we have evidence that you committed this crime."

Interviewer claims strong incriminating evidence (specifically): the interviewer may claim strong incriminating evidence against the suspect in a specific manner, such as "we have the murder weapon with your fingerprints."

Interviewer comments/interprets evidence against suspect: the interviewer may comment on the evidence against the suspect and/or interpret what the evidence implies about the suspect's culpability. For example: "the fingerprints confirm you were at the crime scene."

Interviewer confronts suspect with existing evidence of guilt: whether or not an interviewer presents the suspect with incriminating evidence at any point during the interrogation; for example, "We have your finger prints at the crime scene".

Interviewer crosses arms on chest: the interviewer folds both arms across his or her chest.

Interviewer deprives the suspect of an essential necessity: whether or not an interviewer prevents the suspect from having access to necessities such as food, water, sleep, or bathroom facilities or uses the access to such necessities as a bargaining tool.

For example, "No, you can't have any food until we're finished" or "You can have some water as soon as you tell the truth".

Interviewer does not permit suspect to invoke his/her rights: whether or not a suspect was permitted to terminate the interrogation or contact legal counsel when requested. If the suspect was not given the Caution, this variable was not coded.

Interviewer exaggerates the moral seriousness of the offence: whether or not an interviewer attempts to overstate the moral seriousness of an offence; for example, "shoplifting is one of the most harmful crimes in society" or "you should feel like a horrible person for trespassing".

Interviewer exaggerates the nature/purpose of questioning: whether or not an interviewer attempts to overstate the purpose of the interrogation; for example, by suggesting that the interrogation solely determines a suspect's legal fate.

Interviewer exaggerates the nature/seriousness of the crime: an emotional theme proposed by Inbau et al. (2004). For this theme, interviewers overstate the seriousness of a particular offence with the reasoning that suspects will want to correct false accounts. For example, an interviewer can state that \$5000 was taken when only \$500 is reported stolen or telling a suspect that loitering is a very serious crime that has severe consequences.

Interviewer gave inevitable consequences: if the primary or secondary interrogation tells the suspect that he or she will face some type of legal consequence regardless of whether or not confessionary evidence is obtained (e.g., it doesn't matter if you confess or not, you're going to jail anyway). To prevent interrogations from being deemed

coercive, Inbau et al. (2004) recommend that inevitable consequences not be given. They also suggest that giving inevitable consequences may remind suspects of the gravity of the situation, making a confession a less likely.

Interviewer gives transition statement: whether or not an interviewer provides a suspect with a reason why it is important to tell the truth. Since suspect guilt is already 'known', a transition statement provides a pre-tense for the interrogation. Transition statements include statements that suggest the only unanswered question is why a suspect committed the offence, there is a need to establish a suspect's extent or frequency of involvement in the offence, and there is a need to determine what kind of person the suspect is. Transition statements imply suspect guilt but provide a reason for the interrogation other than trying to determine guilt. Such statements are encouraged by Inbau et al. (2004).

Interviewer has evidence folder in hand upon entry: if either the primary or secondary interviewer enters the interrogation room with an evidence or case folder in hand. If the video began with the interviewer(s) already in the interrogation room, the variable is coded in terms of whether or not an evidence folder is in hand at the beginning of the interrogation. Inbau et al. (2004) encourage interviewers to prepare a real or simulated evidence folder to bring to the interrogation in order to make suspects believe there is incriminating evidence against them.

Interviewer identifies contradictions in suspect's story: the interviewer may point out flaws or inconsistencies in a suspect's story. For example, "But you said earlier you hadn't even met her. Now you're saying you were just with her for an hour?"

Interviewer indicates confession is only path forward: during the interview, the interviewer implies the only way forward is to confess. For example: "this isn't going away."

Interviewer introduces self: The interviewer introduces him/herself by name and states that s/he is a police officer. For example, the interviewer may say: "Hello, my name is Carol and I am a police officer."

Interviewer invokes metaphors of guilt: the interviewer uses metaphors to describe a suspect's guilt; for example, "lies are like a snowball, they start of small but keep growing and growing overtime" and "guilt is like cancer, it spreads all over until your body just can't take it anymore".

Interviewer laughs at own statement (genuine): whether or not the interviewer appears to laugh, chuckle, giggle, in a genuine manner (i.e. interviewer finds his/her own statement funny; doesn't appear to be fake laughter) at his/her own statement. Laughter is determined by listening to the audio for indication of laughter and observing body movement such as shoulders moving up and down, and facial expressions such as smiling and squinting eyes.

Interviewer laughs at suspect statement (genuine): whether or not the interviewer appears to laugh, chuckle, giggle, in a genuine manner (i.e. interviewer finds his/her own statement funny; doesn't appear to be fake laughter) at suspect's statement. Laughter is determined by listening to the audio for indication of laughter and observing body movement such as shoulders moving up and down, and facial expressions such as smiling and squinting eyes.

Interviewer leans back in seat: the suspect, who was previously leaning forward (see "suspect leans forward in seat") has leans backwards with his/her back now on the chair.

Interviewer looks through evidence folder: whether or not an interviewer pages or fingers through an evidence folder. If an evidence folder is not present during the interrogation, this variable is coded as 'no'. Inbau et al. (2004) suggest briefly fingering through such a folder to create the impression that it contains incriminating information about the suspect.

Interviewer makes a general case-relevant personal statement: the interviews makes a personal statement that is relevant to the case. For example: "If that had been me, I would have taken the back door out."

Interviewer makes affirmative response to case-relevant information: the interviewer makes an affirmative response after reading information from case files, or after stating case-relevant information. For example: "yeah, that sounds about right."

Interviewer makes case-relevant statement (incriminating): the interviewer may make a background or general statement relating to the case. For example: "I see here the victim had filed three complaints against you before this happened."

Interviewer makes case-relevant statement (non-incriminating): the interviewer may ask the suspect a background or general question relating to the case. For example: "I see here you live three blocks away from the victim."

Interviewer makes face-saving crime motive statement: the interviewer may make a statement of what has been discussed in the interview or learned in the investigation. This differs from an opinion which is not based on any fact or corroborating evidence. In this

case, the interviewer may make a statement offering a "reasonable" or "moral" explanation for committing the crime. For example: "I don't think you meant to kill, the evidence suggests this was a spur of the moment thing".

Interviewer makes general minimizing statement/story (incriminating area): the interviewer may make a statement of what has been discussed in the interview or learned in the investigation. In this case, the interviewer may try to reduce the seriousness of crime/outcome while implying the suspect's culpability. For example: "you did this because it had to be done."

Interviewer makes general minimizing, empathetic perspective-taking statement/story (non-incriminating): the interviewer may make a statement of what has been discussed in the interview or learned in the investigation. In this case, the interviewer may make an empathetic statement to try to reduce the seriousness of crime/outcome without implying suspect's culpability. For example: "I understand how this amount of constant pressure can drive people to do something like this."

Interviewer makes honesty statement: the interviewer states that he/she is being honest with the suspect. For example: "I just want you to know, I'm not trying to trick you," or "I'm being honest with you..."

Interviewer makes moral minimizing statement (incriminating area): the interviewer may make a statement of what has been discussed in the interview or learned in the investigation. In this case, the interviewer may use suspect's good morals to try to reduce the seriousness of crime/outcome while still implying the suspect's culpability. For example: "you are a good guy, and it must have been hard to do this."

Interviewer makes specific minimizing, empathetic perspective-taking statement/story (non-incriminating): the interviewer may make a statement or tell a story about the crime based on the information discussed in interview or learned in investigation. In this case, the interviewer expresses empathy while minimizing the seriousness of the offense. For example: "I understand how hard it would be to admit to stealing"

Interviewer makes specific minimizing, normalizing statement/story

(incriminating): the interviewer may make a statement or tell a story about the crime in question to normalize, and minimize the seriousness of the offense. For example: "you're not the only one who steals from this store; it's more common than you think."

Interviewer makes specific minimizing, normalizing statement/story (non-incriminating): the interviewer refer may make a statement or tell a story about the crime in question to normalize, and minimize the seriousness of the offense. For example: "I see that all the time", "It's more common than you think."

Interviewer makes specific moral minimizing statement about strong evidence (incriminating): the interviewer may claim strong incriminating evidence against the suspect in a specific manner, while morally minimizing the offense. For example: "You aren't a bad guy, it is clear you were forced into this from being harassed for years."

Interviewer makes verbal 'go-on' gesture with follow-up question: the interviewer may ask a question to evoke the suspect to continuing talking about a sensitive topic. For example: "yeah...and what happened your brother?"

Interviewer makes verbal 'go-on' gesture without follow-up question: without asking a question, the interviewer make a verbal gesture to evoke the suspect to continuing talking about a sensitive topic (e.g. "yeah...").

Interviewer minimizes the facts/nature of the offence: whether or not an interviewer attempts to down play or diminish the events surrounding an offence or certain characteristics of the offence. For example: "It was simple assault, that's only a summary offence" and "It's your first offence, it's really minor".

Interviewer minimizes the nature/purpose of questioning: whether or not an interviewer attempts to understate or diminish the purpose of the interrogation; for example, by suggesting that the suspect was just brought in for a friendly discussion or to simply help with the investigation.

Interviewer moves closer to the suspect throughout the interrogation: whether or not an interviewer moves his or her chair closer or leans in towards the suspect throughout the interrogation. Inbau et al. (2004) suggest that by moving closer, the interviewer can help retain the suspect's attention and allows the interviewer "to become emotionally closer to the suspect" (p. 341).

Interviewer offers beverage: whether or not the interviewer offers the suspect a drink of some kind during the interview (e.g. water, coffee, tea, juice). This includes the interviewer extending a drink to the suspect or the interviewer asking the suspect if he/she would like a drink.

Interviewer offers cigarette: whether or not the interviewer offers the suspect a cigarette during the interview. This includes the interviewer extending a cigarette to the suspect or the interviewer asking the suspect if he/she would like a smoke, cigarette, etc.

Interviewer offers food: whether or not the interviewer offers the suspect food of some kind during the interview (e.g. sub, sandwich, cookie). This includes the interviewer extending a food item to the suspect or the interviewer asking the suspect if he/she would like food.

Interviewer offers personal information to minimize consequences: the interviewer may provide the suspect general details about himself/herself that might minimize the seriousness of committing the crime (e.g. "It's ok, I like shooting guns too. It makes me feel powerful").

Interviewer offers rationalization: The interrogator states that the suspect did what she or he did because of drug abuse or financial need, the victim deserved harm, that the crime was not that serious, or that the crime or harm it caused was somehow justified or mitigated because of some other factor (i.e., concrete reason; e.g., poverty, specific circumstances). Rationalization excludes vague reasoning such as "it got out of hand." (Operationalized definition based on Kelly et al., 2019)

Interviewer paces room: whether or not the primary or secondary interviewer walks around the interrogation room in a pacing manner. Inbau et al. (2004) suggest that pacing be avoided.

Interviewer paraphrases/restates case-relevant statement by suspect: the interviewer may read a statement the suspect gave from file, or restate statement provided by suspect

earlier during the interview. For example: "you said that you were not home with the victim that night."

Interviewer points out the consequences and futility of continuation of criminal behaviour: an emotional theme proposed by Inbau et al. (2004). For this theme, an interviewer suggests to a suspect that he or she is 'lucky' to have been caught so criminal behaviour can stop before it becomes more serious. Interviewers can also point out the consequences of continuing with such behaviour in the future. For example, an interviewer may tell a suspect accused of shoplifting that he or she is fortunate to have been caught now before criminal behaviour escalated to more serious crimes such as robbery. This theme is recommended particularly for young suspects or suspects with a limited criminal record.

Interviewer points out the futility of resisting telling the truth: a non-emotional theme proposed by Inbau et al. (2004). The interviewer communicates to a suspect that it is pointless to resist telling the truth because his or her guilt is known. Inbau et al (2004) suggest appealing to a suspect's logic by making an argument similar to: "Everyday defendants are found guilty based strictly on evidence presented to twelve members of a jury" (p. 291), or in other words, the suspect might as well tell the truth because he or she may be convicted anyway.

Interviewer points out the possibility of exaggeration on part of the accuser or victim: an emotional theme proposed by Inbau et al. (2004). For this theme, the interviewer suggests to the suspect that the accuser or victim is exaggerating the nature or extent of the offence. For example, in the case of robbery, the interviewer can propose that a business owner is exaggerating about how much money was taken, and in the case

of an assault, the interviewer can propose that the victim's injuries were not as bad as he or she made them seem.

Interviewer presents evidence against suspect: the interviewer shows or goes through the suspect the evidence against him/her, such as photos, statements, other documents.

Interviewer promises the suspect leniency in exchange for an admission of guilt: whether or not an interrogated attempted to bribe the suspect with promises of leniency in return for admitting guilt. For example, if the interviewer says "If you just say you did it now, I can guarantee the charges will be reduced" or "Suspects who confess usually get less jail time".

Interviewer proposes a theme for the crime's commission: whether or not an interviewer suggests some reason why the suspect committed the offence, why the offence is understandable (i.e., a moral excuse), or in the case of non-emotional themes, why the suspect is logically guilty. This variable is coded as 'yes' if at least one of the themes advocated by Reid is used by the interviewer (see coding guide for possible themes). Inbau et al. (2004) stress the importance of proposing a theme for a crime's commission as it can act as a 'crutch' for the suspect as he or she moves toward confessing.

Interviewer proposes non-criminal intent for the offence suggested: a non-emotional theme proposed by Inbau et al. (2004). The interviewer attempts to persuade the suspect to accept physical responsibility for the offence but suggests a non-criminal intent. Inbau et al. (2004) provide self-defence and accidental intents as examples. The reasoning

behind this theme is that once a suspect accepts physical responsibility, the interviewer can later negate the non-criminal intent and secure a complete confession.

Interviewer provided his or her own first name: whether or not a first name is provided by the primary or secondary interviewer upon introduction to the suspect. Inbau et al. (2004) suggest that interviewers not give their first name in order to socially distance themselves from suspects. If an introduction did not occur, this variable was not coded.

Interviewer provides sympathy: whether or not an interviewer provides sympathy to a crying suspect. For example, an interviewer may verbally comfort the suspect, place a hand on his or her shoulder or knee, or offer the suspect tissues. Inbau et al. (2004) suggest that interviewers respond positively to a suspect crying and commiserate with him or her. If a suspect does not cry during the interrogation, this variable is not coded.

Interviewer refers to physical symptoms of guilt: whether or not an interviewer points out a suspect's physical symptoms of guilt; for example, "You're shaking, that means you are lying" and "You can't even look me in the eye because you know you did this".

Interviewer refutes suspect denial of guilt: After a suspect denies his/her guilt, the interviewer makes a statement disproving his/her denial. For example: "we're past that..."

Interviewer reinstates theme after objections: the number of times the primary or secondary interviewer reiterates a proposed theme after suspect objections. For example, if a suspect says "I'd be too scared to a rob a store" and the interviewer replies "Well that just shows how desperate you must have been for the money. You really needed it, didn't

you?". If a suspect does not object to the offence, this variable is not coded. Inbau et al. (2004) suggest that objections be followed by the reiteration of a proposed theme.

Interviewer reiterates moral excuse/theme after denial: the number of times the primary or secondary interviewer restates a proposed theme after a suspect denies the offence or some aspect of the offence. For example, if the suspect says "I didn't take that money" and the interviewer says "Not for yourself but for your family, right?" If a suspect does not deny the offence, this variable is not coded. Inbau et al. (2004) suggest that a proposed theme be reiterated after denials to discourage further denials and to more deeply develop the proposed theme.

Interviewer self-confidence: rated on a 1 to 5 scale, with 1 representing the least confidence and 5 the most. Interviewers rated as a 1 appear nervous, unsure of themselves and their statements, and let the suspect determine the direction of the interrogation. Interviewers rated as a 5 appear completely calm, sure of themselves and their statements, and lead the direction of the interrogation without inference from the suspect. Interviewers are rated in between these two extremes as deemed appropriate.

Inbau et al. (2004) herald self-confidence as one of the most essential characteristics of a successful interviewer.

Interviewer sits down: the interviewer, previously standing, sits down on chair.

Interviewer stands up: the interviewer, previously sitting, stands up.

Interviewer states crime narrative (incriminating): the interviewer narrates the crime in question suggesting the suspect was responsible. For example: "you went to Shirley's for breakfast, then you went to his house, and you took the knife and stabbed him."

Interviewer suggests anyone else under similar circumstances might have done same: an emotional theme proposed by Inbau et al. (2004). This theme suggests that other people, perhaps even the interviewer, might commit the same offence if they were in the suspect's situation. For example, if a suspect is accused of hit and run, the interviewer could suggest that most people get scared and drive away after hitting someone. Inbau et al. (2004, p. 242) suggest the interviewer can even go as far as saying "I probably would have done what you yourself did".

Interviewer sympathized with suspect by condemning others: an emotional theme proposed by Inbau et al. (2004). The interviewer places blame on anyone else but the suspect; for example, the suspect's family for his or her upbringing, the victim, the suspect's accomplices, or even society in general. For example, in the case of a sexual assault, the interviewer may suggest that the victim brought it upon herself by dressing or acting in a particular manner. Although criminal responsibility lies with the suspect, Inbau et al. (2004) suggest that placing moral blame on others can help elicit a confession.

Interviewer threatens the suspect with physical or psychological pain: whether or not an interviewer threatens the suspect with either physical pain (e.g., I'm going to slap you in a second if you don't tell the truth!) or psychological pain (e.g., I can make sure that you never see your family again).

Interviewer touches suspect in friendly manner: whether or not an interviewer touches a suspect in a friendly non-threatening manner; for example, lightly touching a suspect's shoulder, hand or knee as he or she cries.

Interviewer touches suspect in unfriendly manner: whether or not an interviewer touched the suspect in an unfriendly threatening manner; for example, shaking, slapping or pushing the suspect.

Interviewer undermines suspect's confidence in denial of guilt: whether or not an interviewer attempts to weaken a suspect's confidence in his or her denials of guilt by reconfirming belief in the suspect's guilt or by presenting evidence of guilt after denials. For example, "I know you did it, there's no point denying it" and "But your prints are there, so we know you did it".

Interviewer uses praise or flattery: whether or not an interviewer compliments or flatters the suspect in regards to a personal characteristic (e.g., intelligent, moral, caring) or some aspect of the crime (e.g., you didn't hurt anyone during the robbery, that says a lot about you).

Interviewer uses profanity: whether or not an interviewer uses socially offensive language, such as bad, coarse, obscene, foul, vulgar language. For example: an interviewer might say "makes me want to beat the fuck out of him."

Interviewer uses third person theme: an emotional theme proposed by Inbau et al. (2004). The interviewer provides a suspect with the story of a person or situation that is removed from but similar to the suspect. The story must have a 'happy ending' in which the person told the truth and confessed. For example, in the case of theft, an interviewer can tell a suspect about a man who was in a few weeks ago that had a family just like the suspect's, and needed to take money to help support them. However, the man was so overcome with guilt that he confessed his actions and was able to move on with his life.

Interviewer uses visual aids: whether or not an interviewer shows the suspect visual aids such as sketches or physical evidence (e.g., shell casings, plaster cast of footprint). If the interviewer shows the suspect a crime scene picture, this variable is coded as 'no' since Inbau et al. (2004) discourage this. They suggest however that sketches or physical evidence help retain a suspect's attention.

Interviewer yells at suspect: whether or not an interviewer yells at a suspect during the interrogation.

Interviewer's questioning manner is unrelenting, badgering or hostile: whether or not an interviewer questions the suspect in an aggressive and unyielding manner; for example, by asking the same question repeatedly, displaying hostility at the suspect's answers, or 'bullying' the suspect to answer a question in a particular way (e.g., You did this didn't you? Didn't you? Of course you did. Admit it, you assaulted him, didn't you....').

Interviewer(s) demonstrates knowledge of case details: rated on a 1 to 5 scale, with 1 representing the least case knowledge and 5 the most. Interviewers rated as 1 constantly check notes for case details, confuse details (e.g., suspects' or victims' names), and appear to have no prepared questions and exhibits. Interviewers rated as 5 never check their notes for case details, do not confuse case details, and appear to have prepared questions and exhibits. Interviewers are rated in between these two extremes as deemed appropriate. Inbau et al. (2004) suggest that interviewers should demonstrate high knowledge of case details and interrogation preparation.

Interviewers use Good cop/Bad cop routine: whether or not interviewers use a good cop/bad cop routine in which one interviewer is friendly with the suspect and appears to sympathize with him or her while the other interviewer is stern with the suspect and unsympathetic.

Isolation end time: The time when the isolation period ended (i.e., when interviewer enters room to start interview; interruptions by officers are excluded), as determined by the times indicated bottom of the screen.

Isolation number: The isolation period number. For example if there were 3 isolation periods, the first would be number "1", second – "2", and so on.

Isolation period interrupted before interview started: whether the isolation period (i.e., the period when the suspect is left alone before an interview) is interrupted before the actual interview for reasons other than to start the interview (e.g., taking away suspect's hat, providing food).

Isolation start time: The time when the isolation period started (i.e., when suspect enters room alone, or is left alone in room at any point during the interview process), as determined by the times indicated bottom of the screen. Isolation periods are coded if 10 seconds or longer.

Main Crime Type: The main (or most serious) offence that was being investigated by the interviewer (i.e., homicide, assault, sexual assault, robbery, or uttering threats). If the suspect is being questioned for more than one offence, only the most serious is recorded. For example, if a suspect is being interrogated in regards to an armed robbery and wearing a mask in the commission of an offence, only armed robbery is recorded.

Name (Primary Interviewer): the name of interviewer who spoke the most and lead the direction of the interrogation as determined by information provided in the video, or transcripts.

Name (**Secondary Interviewer**): the name of interviewer who played a more passive role in the interrogation by speaking infrequently or by following the lead of the primary interviewer, as determined by information provided in the video, or transcripts.

Nature of previous crime: if a suspect's prior conviction can be classified as a property crime (e.g., break and enter, theft, robbery) or a crime against a person (e.g., assault, sexual assault). If not specifically mentioned, this variable is coded as unknown. If no prior record, this variable is not coded.

Negative supporting statement: a statement indicating the interviewer would be shocked/disturbed if the suspect chose the reprehensible option following the alternative or one-sided alternative question (e.g., "if you maliciously attacked him, I've misread you and I don't know why I'm wasting my time with you today"). Another example of a negative supporting statement includes: "If this was on purpose and you're a cold-blooded killer, I would advise you to say nothing."

Number of alternative questions: the number of alternative questions an interviewer poses throughout an interrogation. See 'Interviewer uses alternative questions'.

Number of denials: the number of times the suspect denies the offence or some aspect of the offence throughout the interrogation. Statements are counted as denials if they relate to the entire offence (e.g., the suspect is accused of homicide but states that he didn't kill anyone), if the suspect initially denies some aspect of the offence but later admits it (e.g.,

the suspect initially denies kicking the victim in the head during an assault but later admits that he did), or if the suspect denies some aspect of the offence that the interviewer continues to indicate occurred (e.g., the suspect denies kicking the victim in the head during an assault but the interviewer indicates that the evidence suggests he did). If the interviewer asks the suspect a specific question about the offence (e.g., did you kick him in the head?) and the suspect refutes it, this statement is not counted as a denial if the interviewer accepts it and moves on. Such interactions were instead considered to be information gathering. Statements were counted as separate denials if they followed the natural pattern of speech; for example, "No, no, no." is one denial while "No, that wasn't me. (pause). I didn't rob anyone" is counted as two. If a suspect does not deny the offence, this variable is not coded.

Number of objections: the number of objections a suspect provides throughout an interrogation. See 'suspect offers objections'.

Number of times suspect accepts a one-sided question: the number of times a suspect verbally agrees to or accepts the one-sided alternative question. For example: the interviewer asks "it was for your family's sake, wasn't it?" and the suspect responds "Yes it was for them".

Number of times suspect accepts one of the choices in the alternative questions: the number of times a suspect verbally agrees to or accepts one of the choices contained within an alternative question. For example: if an interviewer asks "Did you mean to hurt her or was it just in the heat of the moment?", and the suspect responds "Yeah, it was just the heat of the moment". However, if the suspect accepts the less favourable option, this is still counted as accepting one of the choices.

Number of times suspect denies a one-sided alternative question: the number of times a suspect verbally refuses to accept, rejects, or denies the one-sided alternative question. For example: the interviewer asks "it was for your family's sake, wasn't it?" and the suspect responds "No, you're wrong".

Number of times suspect denies both choices in the alternative question: the number of times a suspect verbally refuses to accept, rejects, or denies one of the choices contained within an alternative question. For example: if an interviewer asks "did you mean to hurt her or was it just in the heat of the moment?" and the suspect responds, "No, I don't know what you're talking about".

Number of times suspect has other response to a one-sided alternative question: The number of times a suspect has a response to a one-sided alternative question that is not a verbal acceptance or denial, or remaining silent. For example: the interviewer asks "it was for your family's sake, wasn't it?" and the suspect asks "How long is this interview going to take?" or starts crying.

Number of times suspect has other response to alternative question: The number of times a suspect has a response to an alternative question that is not a verbal acceptance or denial, or remaining silent. For example: if an interviewer asks "did you mean to hurt her or was it just in the heat of the moment?" and the suspect asks "How long is this interview going to take?" or starts crying.

Number of times suspect remains silent in response to a one-sided question: the number of times suspect refuses to answer the one-sided alternative question by

remaining silent. For example: the interviewer asks "it was for your family's sake, wasn't it?" and the suspect remains quiet until the interviewer is forced to speak again.

Number of times suspect remains silent in response to an alternative question: the number of times suspect refuses to answer by remaining silent after an alternative question is asked. For example: if an interviewer asks "did you mean to hurt her or was it just in the heat of the moment?" and the suspect remains quiet until the interviewer is forced to speak again.

Number of unique alternative question: the number of first-time alternative questions used in the specific interrogation; one that has not been used before in the interrogation.

One-sided alternative question: A question (or statement [refer to *]) when the interviewer only presents one of the alternatives, usually the positive alternative, leaving the other to be implied (e.g., "it was for your family's sake, wasn't it?" leaving alternative of lacking remorse to be implied). Allows for acceptance of alternative with a one-word answer or nod.

* One-sided alternative questions may be presented as statements rather than questions. For example, "If you want your family and friends to believe you're a cold-blooded killer, I advise you to say nothing." OR "If you want your family to know you accidentally killed him, you should speak up and tell your side of the story." These statements are not considered a one-sided alternative question if they follow a unique alternative question, instead it should be coded as either negative supporting statement or positive supporting

statement (refer to "negative supporting statement" and "positive supporting statements" for definitions).

Partial admission: this variable is coded for if a suspect admits some involvement in the offence but does not provide details or remains elusive when specifically questioned.

Polygraph offer made to suspect: whether or not the primary or secondary interviewer offers a suspect the opportunity to take a polygraph. Inbau et al. (2004) recommend offering a polygraph to suspects because it provides an opportunity to assess guilt based on the suspect's reaction.

Positive supporting statements: the number of statements that suggests the interviewer could understand if the suspect chose the morally acceptable option of the alternative question (e.g., "I'm sure you were trying to protect your family which is an honourable thing to do"). Another example of a positive supporting statement includes: "If this was an accident you should speak up for yourself."

Preferred name(s) asked: The interviewer established the suspect's preferred name in an open manner. For example, the interviewer may say: "I see your name on the file here as John. What would you prefer that I call you here today?"

Prior record: whether or not a suspect has prior convictions; if not specifically mentioned during the interrogation, this variable is coded as unknown.

Rank: whether the interviewer was a Constable, Sergeant, Staff Sergeant, or Inspector. This was determined by either the interviewer's introduction to the witness during the interview or recorded by the clerical staff atop the first page of the transcript, or personnel files.

Reason given for interruption: can be a verbal statement that the interviewer provides for entering, or a visual cue that the coder observes.

Reason the suspect committed the crime: if the alternative question asks about why the suspect committed the crime in question, or offers a reason in the question.

Relationship to suspect: as determined by information provided in the interrogation video. Victims and suspects are classified as either friends, family, acquaintances, or strangers. If not discussed within the interrogation, the relationship is coded as unknown and if there is no specific victim (e.g., robbery of a business), the variable is not coded.

Research Code: The code assigned by research assistant to anonymize interviews.

Room plain in colour: whether or not the interrogation room (e.g., walls, décor) is plain in colour (i.e., white, beige). Inbau et al. (2004) recommend that the interrogation room be as plain as possible in terms of colour and décor.

Small loose objects within suspect's reach: if the interrogation room contains objects within a suspect's reach that he or she can handle or play with (e.g., pens, pencils, loose papers). Inbau et al. (2004) suggest that such objects should not be within reach because they provide an opportunity for suspects to distract themselves and possibly relieve stress.

Statement: This involves the interviewer making a statement of fact or repeating that which has already been said. The interviewer may make a statement of what has been discussed in the interview or learned in the investigation. This differs from an opinion which is not based on any fact or corroborating evidence.

Statements of reinforcement: the number of times an interviewer reinforces the suspect's acceptance of a choice presented within an alternative question. For example, if a suspect responds to "Did you mean to hurt her or was it just in the heat of the moment?" with "Yeah, it was just in the heat of the moment", and the interviewer says "Good, that's what I thought anyway. I didn't think you'd intend to do something like that". If a suspect does not accept any choices within alternative questions, this variable is not coded. Inbau et al. (2004) suggest that interviewers reinforce a suspect's choice as a way of supporting further admissions.

Straight-back chairs: whether or not the suspect is seated in a typical 'office equipment' straight-back chair. Inbau et al. (2004) suggest that this type of chair is preferable because it prevents slouching or leaning back, which are both "psychologically undesirable" (p. 59) positions.

Suspect adjusts clothing item: the suspect deliberately changes the position of a clothing item on their body (e.g., jeans, sweater, t-shirt, shoes, blanket).

Suspect adjusts jewelry/accessories: the suspect deliberately changes the position of a jewelry item on their body or an accessory they are wearing (e.g., earrings, shoestrings, hat).

Suspect alone in interrogation room prior to entry of interviewer: whether or not the video shows the suspect alone prior to the entry of the interviewer(s). Inbau et al. (2004) suggest that the suspect be alone prior to the interrogation.

Suspect asks personal question: The suspect may ask the interviewer a personal question that may minimize the suspect's perception of the seriousness of committing the crime or its outcome (e.g. "Do you like using your gun?").

Suspect blows nose: the suspect blows or wipes nose using tissue, or sleeve.

Suspect cleans/inspects fingernails: the suspect examines their fingernails and/or appears to pick at or tidy the fingernails.

Suspect clears throat: the suspect makes a slight coughing noise before speaking to clear his/her throat.

Suspect covers ears: the suspect blocks their ability to listen by placing their hand(s) over their ears.

Suspect covers eyes: the suspect blocks their eyesight by placing their hand over their eyes.

Suspect covers head with hood: the suspect pulls hood from jacket or sweater over head, either covering the top of head or whole head.

Suspect cracks knuckles: the suspect intertwines their fingers and then bends them backwards in a way that would crack the knuckles and/or the suspect has their fingers in a fist and appears to press directly against the fist with their opposing hand to crack the knuckles.

Suspect cries during interrogation: whether the suspect produces tears, including, wiping motion with the front or back of their hand below their nose or under their eyes, as determined by video inspection.

Suspect crosses arms on chest: the suspect folds both arms across his or her chest as an attempt to put up a barrier.

Suspect crosses legs: the suspect has one leg crossed over another leg – knee over knee, or foot over knee.

Suspect denies the offence: whether or not the suspect denies the entire offence or specific aspects of the offence (e.g., admits assaulting a victim but denies causing the full extent of the victim's injuries). See 'number of denials'. Inbau et al. (2004) recommend that suspect denials be prevented because they lessen the likelihood that suspects will later confess.

Suspect drinks: the suspect takes a sip or gulp of drink. Each timestamp represents the instance when the suspect's mouth touches the straw or cup.

Suspect drums fingers: the suspect's fingers are extended and dynamic – each finger sequentially touches a table or chair.

Suspect dusts clothing: the suspect makes a sweeping motion with their hand on their clothing (on or off body), appearing to brush off dust or dirt.

Suspect eats: each instance the suspect takes a bite of food.

Suspect faces straight forward in seat: the suspect's body position shifts (from facing to the side) and is now facing forward in their seat, aligned with the direction that the chair is facing.

Suspect fidgets with hands: the suspect's hands/fingers make small, dynamic gestures. This may include rubbing their hands or playing with an object.

Suspect fixes/tidies/adjusts hair/beard/mustache: the suspect touches and/or moves the hair on their head/beard/mustache with their hands.

Suspect fully confesses: if a suspect admits full involvement in the offence and provides details.

Suspect handcuffed/shackled during interrogation: as determined by video inspection. Inbau et al. (2004) suggest that suspects not be restrained during interrogations unless absolutely necessary.

Suspect hangs arms loose on or beside body: the suspect hangs his or her arms loose. The suspect's arms are now relaxed to their sides and/or relaxed on their body. Excluded instances when suspect has hands in pockets. This behaviour may be coded while suspect is laying down.

Suspect hides hands in pockets: the suspect places their hands in the pocket of a clothing item that they are currently wearing.

Suspect is in obvious physical pain: determined by suspect comments or complaints about his or her physical pain.

Suspect is in obvious psychological pain: whether or not the suspect appears to be suffering from some type of anxiety attack, emotional or mental breakdown or some other type of severe psychological anguish. This is determined as best as possible by video inspection, unless specifically mentioned.

Suspect knocks on interview room door: The suspect knocks on the interrogation room door from the inside, trying to get attention from one of the officers – this may be with hand, fist, foot, etc.

Suspect leans forward in seat: the suspect is leaned forward in their seat, with their back away from the back of the chair (approximately 45 degrees or more forward). The suspect may be leaning on their knees with their elbows.

Suspect leans head on hand: the suspect leans the weight of their head onto the open palm of their hand and/or their fist. The suspect is supporting his or her head.

Suspect lies down: the suspect is positioned on the floor in a horizontal position.

Suspect makes an accommodation request: whether or not the suspect asks the interviewer to fit his/her needs or wishes. For example: if the suspect asks "can I have a cigarette?" or "can I get a sweater?"

Suspect makes case-relevant statement (non-incriminating): the suspect makes a statement relating to the case. For example: "You guys have the wrong person."

Suspect makes denial-type interruption: the suspect interrupts the interviewer's statement to deny his/her involvement in the crime or to deny other case-related details given by interviewer.

Suspect offers objections: whether or not the suspect provides reasons why he or she could not or would not have committed the offence. Objections may be emotional (e.g., I'd be too scared to rob a store), factual (e.g., I don't even know him or I don't need money, I have lots of money), or moral (e.g., I wasn't raised that way or I'm not the type

of person who would do that). Objections do not provide specific denials of the offence but are instead more general.

Suspect offers unsolicited personal information: the suspect may provide the interviewer general details about himself/herself voluntarily, that might minimize the seriousness of committing the crime or its outcome. For example: "I had a rough life growing up, this is all I know."

Suspect partially confesses: if a suspect admits some involvement in the offence but does not provide details or remains elusive when specifically questioned.

Suspect picks at clothing: the suspect appears to pick at/pull at threads, crumbs, dirt, or other substances on their clothing.

Suspect pulls on earlobe: the suspect pinches earlobe with their fingers, and pulls.

Suspect pulls on nose: the suspect pinches tip of with their fingers, and pulls.

Suspect rubs hands together: the suspect's hands are touching moving against one another in a repetitive motion.

Suspect scratches body: the suspect touches anywhere on body with their fingers in a scratching, back-and-forth motion. The suspect may also use something besides hands to scratch (e.g., wall, pen, etc.) if it's clear that he/she is trying to relieve an itch.

Suspect sits down: the suspect, previously standing, sits.

Suspect sits on feet: the suspect has their feet tucked under their body and is sitting on their feet.

Suspect sits upright in seat: the suspect changes posture and is now sitting in an upright position in the chair, with their back to the back of the chair.

Suspect slouches: the suspect is positioned slouching (sitting lazily) in chair. The suspect may be sitting with head and shoulders slumped forward or sitting with his or her head and shoulders back with his/her bottom slightly sliding off the chair.

Suspect smokes: each instance when the suspect inhales smoke from a cigarette. This is only coded if the suspect is visibly smoking in the room (not when the suspect goes out for a smoke).

Suspect solely involved: whether or not a suspect is alleged to have acted alone in the commission of the crime he or she is being interrogated for.

Suspect stands up: the suspect, previously sitting or laying down, stands up.

Suspect touches face/head/neck: the suspect touches anywhere above their neck with their hand for a brief moment (less than 5 seconds). This does not include 1) the suspect leaning on face or head; or 2) does it include pulling motions (e.g., pulling on nose or earlobes) – this is coded under suspect pulls nose.

Suspect tucks hands under legs: the suspect tucks their hand(s) under their thigh(s).

Suspect tucks legs under chair: the suspect's legs are tucked backwards directly under the chair the individual is seated in.

Suspect turns to the side in seat: the suspect's body turned away from the direction that the chair is facing.

Suspect uses cell phone or electronic device: the suspect uses an electronic device, such as a cell phone, iPad, watch, or music player.

Suspect uses profanity: the suspect uses socially offensive language, such as bad, coarse, obscene, foul, vulgar language. For example: the suspect might say "she was fuckin' asking for it."

Suspect vomits/dry heaves: as determined by watching the video. The suspect makes motion as if they are going to vomit.

Suspect wipes sweat from eyebrow, forehead, or neck: the suspect makes a wiping motion with the front or back of their hand on their eyebrow/forehead/neck.

Suspect withdraws during interrogation: whether or not a suspect is no longer verbally active during the interrogation (e.g. not responding to the interviewer's questions or prompts).

Suspect's needs are addressed before interview: The interviewer addresses the various potential needs of the suspect. These needs include: a. Water: The interviewer checks to see if the suspect needs a glass of water (or any other beverage, such as coffee or coke) before the substantive phase of the interview begins. For example, the interviewer may say: "Before we begin, I am going to grab a glass/bottle of water for myself. Would you like one too?" b. Bathroom: The interviewer checks to see if the suspect needs to use the washroom before the substantive phase of the interview begins. For example, the interviewer may say: "As I mentioned earlier, I am not sure how long the interview will last. Before we begin, would you like to use the washroom? [If they say no, say]: Ok. Well please let me know at any time if you would like to use the washroom and we can

take a break from the interview." **c. Food:** The interviewer checks to see if the suspect would like something to eat before the substantive phase of the interview begins. For example, the interviewer may say: "Before we begin, we have some snacks in our break room. Would you like something to eat?"

Telephone in room: whether or not there is a telephone present during the interrogation. If a telephone is temporarily brought in for a suspect to use and then removed for the duration of the interrogation, this variable is coded as 'no'. Inbau et al. (2004) recommend that interrogation rooms not be equipped with a telephone in order to enhance privacy and minimize distractions

Threaten inevitable consequences: A suspect must feel they are able to reject both alternatives without fear of facing adverse consequences. An example of an improper question (threatening consequences): "Do you want to cooperate with me and confess, or do you want me to throw you in jail because you wouldn't admit you did it?" Suspect feels no choice but to confess, otherwise s/he will be put in jail immediately.

Time of interruption: the real time and date when the interruption started (i.e. when interrupter enter interrogation room), as determined by the times indicated bottom of the screen.

Total number of alternative questions: The total number of alternative questions asked throughout the interview (i.e., the sum of the frequencies of all unique alternative questions).

Total number of one-sided alternative questions: The total number of one-sided alternative questions asked throughout the interview (i.e., the sum of the frequencies of all one-sided unique alternative questions).

Total word count of suspect: The total number of words spoken by the suspect, as determined from the word count function of Microsoft Word for the substantive portion of the interview.

Training in PEACE: Whether or not the interviewer has received the PEACE Model of Investigative Interview training (Yes/No), and the time since training (months), as determined from documents provided with the files.

Unique alternative questions: whether or not an interviewer proposes a question (or in some cases, statement [refer to example C]) that presents two or more incriminating alternatives (Inbau et al., 2004, p. 353).

Characteristics of alternative questions:

- **A)** Often one is face-saving and one unflattering (e.g., "Did you blow that money on booze, drugs, and women and party with it, or did you need it to help out your family?");
- **B**) In some cases, the question forces an incriminating response, neither of which are more reprehensible than the other (e.g., "Did the crime happen indoor or outdoor?");
- C) Alternative questions may be presented as statements rather than questions.

 For example, "If you want your family and friends to believe you're a cold-

- blooded killer, I advise you to say nothing, but if this was an accident you should speak up for yourself."
- **D**) Alternative questions may focus on some detail of the offence rather than the reason it was committed (e.g., Did you use a match, or did you use a lighter to start the fire?);
- **E**) Alternative questions have an assumption of guilt; by accepting either choice, the suspect makes an admission of guilt.
- **F)** Alternative questions should not make mention of legal charges, threaten inevitable consequences or offer promises of leniency per Inbau et al. (2004); however, these are still coded for.

Use of realistic legal terms to describe the crime: the number of legal terms the primary and secondary interviewer use to describe the crime. For example, accusing the suspect of theft or arson as opposed to accusing him or her of taking something or starting a fire. Realistic legal terms that are used by the interviewer(s) when explaining the charges to the suspect are not included in this measure. Inbau et al. (2004) recommend not using legal terms to describe the crime and suggest referring to the offence in more generic terms (e.g., "where were you when *it* happened?", "you didn't mean to do *it*", "did you *take* the money?"). The use of realistic legal terms is 'psychologically disadvantageous' because it leads suspects to think of the legal consequences of their actions.

Was suspect posture more static or dynamic during the interview: based off previous observations, did the suspect tend to remain in an unmoving position (static) more or did the suspect tend to remain moving (dynamic) during the interview. In other words, was

the subject actively displaying a variety of movements (dynamic) or did he/she tend to be more still, throughout the interview?

Was the posture of the suspect more static or dynamic during the isolation period: based off previous observations, did the suspect tend to remain in an unmoving position (static) more or did the suspect tend to remain moving (dynamic) during the isolation period. In other words, was the subject actively displaying a variety of movements (dynamic) or did he/she tend to be more still, throughout the isolation period?

Years of experience: Years of experience (in days) in the police force of the primary/secondary/other interviewer obtained from interviewer personnel files.

Appendix D

- Officer attempted to read the suspect their rights.
- Reminded the suspect that the room is audio/video recorded.
- Took a phone number for the suspect's preferred lawyer.
- Provided a list of legal aid lawyers.
- Officer removed handcuffs and asked whether the suspect wished to call legal aid.
- Updated the suspect regarding their lawyer.
- Asked the suspect whether they wanted a drink and/or food.
- Forgot to bring food.
- Removed extra chairs and the suspects sweater.
- Opened the door to check on the suspect and saw he had urinated on the floor, told the suspect they would "be right back".
- Came into the room to check for an additional chair.
- Cleaned urine off the floor and used a disinfectant on the floor.
- Brought food and/or water.
- Clarified the suspect did not require their mediation.
- Brought the suspect a pair of shoes/"booties".
- Heard the suspect swear and checked back into the room to ensure they were OK.
- Brought a laptop into the room.
- Checked in to see if the suspect needed the bathroom.
- Brought the suspect a blanket.
- Officer thought he heard a knock at the door and came to see what the suspect needed.
- Checked in to see if the suspect was a smoker and whether they wanted a cigarette.
- Officer was looking for a phone jack to plug in a phone to allow the suspect to call a friend to request clothing be dropped off.
- Went into the wrong room.
- Checked to see if the suspect preferred Subway or McDonalds for a meal.
- Officer told the suspect not to urinate in the corner of the interrogation room.
- Officer provided food and drink and told the suspect to relax and think about what they had discussed.
- Discussed medication and the suspects diabetes.
- Brought the suspect clothing to wear downstairs to the cells.
- Interviewer came into the room to clean up the food/garbage on the floor.
- Officer asked the suspect for their Mother's phone number and wanted to know if there was anything the suspect would like their Mother to be told.
- Clarified the suspect's birthdate.

Appendix E

- Suspect is singing.
- Suspect is asleep.
- Suspect is screaming about being a "nutcase".
- Suspect is claiming to be related to royalty.
- Suspect is claiming to be being held for ransom.
- Suspect says to chop someone's head off.
- Suspect threatens police officers children.
- Suspect claims they dated Paris Hilton.
- Suspect is rapping/beatboxing.
- Suspect is talking to himself and swearing.
- Suspect is humming and singing, clapping his hands, chanting "you can't f*ck with the police".
- Suspect is doing push-ups on the floor.
- Suspect is pretending their shoe is a football and tossing it in the air.
- Suspect urinated on the floor.
- Suspect whispers to themselves "I shouldn't have done that", and "I should have just f*cking stayed home".
- Suspect is pacing the room while seeming to dab blood of an injury.
- Suspect is whistling.
- Suspect paced the room for the entire isolation period.
- Suspect is rocking their body in the seat.
- Suspect was spinning the officer chair around, including placing their feet on the wall and spinning by pushing off.
- Suspect is chanting "1, 2, 3, 4, I love the Marine Core", as well as "1, 2, Freddy's coming for you...".
- Suspect is doing a very thorough, routine-like stretching.
- Suspect is knocking on the wall.
- Suspect is very aggressively and vigorously shaking their head.
- Suspect is making unusual gestures with their arm appears like they are pretending to hit or stab someone.
- Suspect is intensely picking at their skin.
- Suspect seems to be pretend to stab someone. Says "grab a knife, grab him (making a headlock sort of motion), 'sss' (motioning as though stabbing into someone)".
- Suspect is trying to get the chair to move trying to get the screws holding the chair down loose by sitting in the chair and shaking it.
- Suspect is singing "it's the end of the world as we know it".
- Suspect hit their head off the wall multiple times.
- Suspect is trying to open the interview room door to get out.
- Suspect is writing an apology letter to the victim and his family.
- Suspect is touching themselves in a sexual way (happened multiple times during this isolation period).