



**UNIVERSITY OF
PORTSMOUTH**

Indicators of Confirmation Bias in the Investigative Interview with Suspects

Thesis

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This thesis is submitted in partial fulfillment of the requirements for the award of the degree of Doctor of Philosophy of The University of Portsmouth



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Declaration

Whilst registered as a candidate for the above degree, I have not been registered for any other research award. The results and conclusions embodied in this thesis are the work of the named candidate and have not been submitted for any other academic award.

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Table of Transcription Symbols

Symbol	Name	Use
/text /	Back slash	Indicates the start and end points of overlapping speech.
=	Equal Sign	Indicates the next utterance occurs immediately by the next speaker with no pause.
(# of seconds)	Timed Pause	A number in parentheses indicates the time, in seconds, of a pause in speech.
(.)	Micropause	A brief pause, usually less than 0.2 seconds.
-	Hyphen	Indicates an abrupt halt or interruption in utterance.
ALL CAPS	Capitalized text	Indicates shouted speech.
underline	Underlined text	Indicates the speaker is emphasising or stressing the speech.
:::	Colon(s)	Indicates prolongation of a sound
(hhh)		Audible exhalation or sigh
(text)	Parentheses	Speech which is unclear or in doubt in the transcript.
((italic text))	Double Parentheses	Annotation of non-verbal activity.
[text]	Square brackets	Notes and context outside of the utterances that are needed for full comprehension. Also includes words omitted for anonymity.

Note: Most symbols are adapted from Jefferson (1984)

Abbreviations

ANOVA: Analysis of variance
 IRI: Investigation Relevant
 Information

LCM: Linguistic Category Model
 QAP: Question Answer Paradigm

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Abstract of Thesis

The aim of the research conducted for this thesis was to investigate indicators of confirmation bias within the police-suspect investigative interview. Confirmation bias in the investigative interview generally occurs when the interviewer holds a presumption of guilt about the suspect, and then sets out to find evidence of that guilt. The interview then becomes less about information gathering and more about finding support for the suspect's involvement in the crime. In the present thesis, indicators of confirmation bias were explored through a series of experimental and applied studies. The nonverbal effects of assumed guilt expectation on the behaviour of truth-telling interviewees ($N = 52$) were examined in Study 1 (Chapter 2). The influence of guilt presumption on the interviewer's behaviour was investigated in Study 2 ($N = 107$; Chapter 3) and in Study 3 ($n = 33$; Chapter 4). Evidence in the extant literature suggests that pre-existing beliefs are an underlying mechanism of bias. The novel contribution of this research to the discourse on bias and guilt presumption can be found in Studies 4 and 5. In Study 4 (Chapter 5), indicators of biased language were identified in a sampling of police-suspect interviews ($N = 9$). In Study 5 (Chapter 6), a sample of police-suspect interviews in a murder case ($N = 6$) were analysed by question type and the utterances used by interviewers. Linguistic tools (e.g., content and pragmatic analysis) were used to demonstrate the richness of information that could be found when the questions and utterances are evaluated within the context of the interview. The amount of information obtained, and suspect cooperation was measured for any effects of language on those variables. The research findings for the overall thesis suggests that indicators of confirmation bias are detectable through guilt presumptive language. Accusations and insinuations of guilt seem to be the most consistent indicator that an interviewer believes the suspect is guilty and may be attempting to find support

for those beliefs. Incidences of bias are subtle; however, the influence on the interview and the suspect's behaviour is clear (denial, defensiveness, and non-cooperation). Thus, the observable nature of biased behaviour may allow for the development of interventions prior to, and during, the investigative interview to reduce biased behaviour in interviewers.

Chapter 1

Confirmation Bias in the Investigative Interview with Suspects: A Review of the Literature

Overview

Confirmation bias is an extensively researched subject across a variety of disciplines and topics. Although it is not a new subject in the psycho-legal literature, it has been largely neglected as a key factor that may affect the investigative interview with suspects. This chapter contains background information about confirmation bias, guilt presumption, and investigative interviewing. A critical review of the studies that have specifically explored confirmation bias and investigative interviews with suspects is also included. The chapter concludes with the identification of current gaps in the literature, and suggestions for future research as the rationale for the studies contained in this thesis,

The Breda Six

On July 4th, 1993 in Breda (The Netherlands), a woman was found brutally murdered in her son's Chinese restaurant. Over the course of the investigation the police received information that prompted them to focus on three men and three women who later became known as 'The Breda Six'. The men maintained their innocence; however, after many hours of questioning and intense pressure from the police, the women confessed to the crime and implicated the men. Although the three women eventually retracted their confessions, it was too late. This was the break the police needed to close the case. The women's confession evidence was used in court as proof of guilt for all six suspects. The women received sentences between 15 and 18 months whilst the men were each sentenced to 10 years in prison (Havinga et al., 2008).

One of the male suspects was intent on proving his innocence and after serving his prison sentence he solicited the help of the Reasonable Doubt Project (Project Gerede

Twijfel).¹ The subsequent re-evaluation the case found that the women's confessions were inconsistent with evidence found at the scene and contradictory to each other. The project also concluded that the confessions were a product of intense police pressure, coercive interrogation tactics, and a high level of suggestibility in the female suspects. The Reasonable Doubt team were able to provide three plausible alternative scenarios to the murder (Havinga et al., 2008). Eventually the Advocate-General to the Dutch Supreme Court conducted a new forensic investigation of all crime scene evidence. The results of the new investigation found that crucial witness evidence had been omitted from the original trial. In 2012, the Supreme Court decided to reopen the case. In 2013, a new official investigation was conducted, and numerous new witnesses were interviewed.

Despite the collection of new and potentially exonerating evidence, in September 2015 the Dutch Court of Appeals in The Hague upheld the original convictions of the Breda Six. In their reasoning, the judges posited that the confession evidence was admissible and reliable. They also stated that the absence of any incriminating forensic evidence connecting the accused to the scene of the crime, was not proof that the suspects had not been at the scene. Although the Appeals Court upheld the ruling, the suspect's lawyer filed another appeal at the Dutch Supreme Court (Breda Six, 2015). In December 2017, the Dutch Supreme court made the final ruling that maintained the previous convictions (De Rechtspraak, 2017).

The case of the Breda Six is known in The Netherlands as the "worst miscarriage of justice in Dutch history" (The Amsterdam Herald, 2012). It is a prime example of how biased interviewing of suspects during a criminal investigation can produce questionable

¹ Gerede Twijfel is a project founded by Professor P. J. van Koppen. At the request of the convicted, their lawyer, or any other person, cases and the evidence are re-evaluated by a team of academics and lawyers. The findings are often published in a report booklet (in Dutch) that may be used in appeals and exoneration trials and are also available to the public (<http://www.projectgeredetwijfel.nl>).

confession evidence. That evidence can then lead to miscarriages of justice, or at least the perception of unjust legal decisions. It remains unknown if the Breda Six were guilty of murder, or just simply presumed guilty. What is known through the reanalysis of the case, and resulting new criminal investigation, is that the Dutch police used interrogation techniques that are known to increase the likelihood of false confessions (i.e., guilt presumptive questioning and confession-seeking interview tactics; Kassin & Gudjonsson, 2004). The police could have treated The Breda Six as potential witnesses to the crime and used the investigative interview to gather valuable information from them. Instead, the police immediately accused the six people and set out to prove their guilt by interviewing them as suspects with the single objective of obtaining a confession. Thus, the interrogative pressure applied to the female suspects in the Breda Six case most likely contributed to the alleged false confessions.

Once a confession is given, it can be difficult to change the thinking and the theories of those who obtained it, as confessions are the most influential type of evidence in a criminal trial (Davis & Leo, 2012). The guilt presumption towards the suspects, paired with the subsequent confessions, were then used to influence the views of important judicial players (e.g., judges, juries, prosecutors) and all available evidence was then viewed through a guilt-biased filter (Kassin, Bogart & Kerner, 2012). In sum, the police believed in the suspect's guilt and sought a confession to prove that guilt, and then that confession was used as evidence of the suspects' guilt. It was tautological reasoning born out of confirmatory thinking.

The focus of this dissertation is to explore the influence of confirmation bias and guilt-presumption on the investigative interview. This is an important topic for interviewing research and practice. Guidelines, frameworks, and training have been introduced to improve the interview process and to assist police officers in gathering

information ethically, objectively, and professionally. Despite these efforts, suspects continue to be interrogated to elicit a confession as opposed to being interviewed to seek information about potential involvement in a crime. Whilst it is difficult to detect confirmation bias, examining guilt-presumptive language as a potential indicator of confirmatory thinking may provide the insight needed to further develop investigative interviewing practice.

Confirmation Bias Under Different Names and Guises

When a person forms a theory or belief and then seeks out information that supports that belief, whilst ignoring information that discredits it, they have entered a state of irrational thinking called *confirmation bias* (cf. Gigerenzer, 2008). That type of bias is one of several fallacies common in human cognition (Klayman, 1995; Nickerson, 1998). Confirmation bias (also known as confirmatory thinking or myside bias) is a type of deviation from rational thinking and judgement (Nickerson, 1998). It occurs when a person constructs his or her own reality by favourably evaluating information that confirms preconceptions whilst ignoring or discrediting information that challenges notions or hypotheses (Kunda, 1990; Nickerson, 1998).

There is a natural human tendency to seek out hypothesis confirming information as opposed to disconfirming information (Klayman, 1995; Wason, 1968) because people enjoy being correct about their beliefs (Snyder & Swann, 1978). However, that tendency becomes problematic when decisions are made based on biased beliefs, and alternative explanations or solutions are not explored. Furthermore, confirmation bias is not a deliberate attempt to be close-minded or prejudicial; however, it can pose problems in situations where objectivity and open communication are crucial to success. It is also important to note that confirmation bias does not include explicit or deliberate case building behaviour used to sway an audience or make a point (e.g., arguments by legal

counsel or framing used in the media). Confirmation bias generally occurs as an implicit and less conscious way of building a case, or in the evaluation of evidence, so not to cause dissonance with one's beliefs (Nickerson, 1998).

Investigator bias. Confirmation bias has been extensively researched across many disciplines and topics; therefore, it is sometimes discussed under different names as an expression of the context in which it is observed (see Klayman, 1995; Nickerson, 1998). For example, when speaking about confirmation bias in terms of hypotheses or investigative findings (experimental or forensic sciences) it is known as investigator bias. Investigator bias occurs when a scientist unconsciously influences the results of a study toward a specific outcome or interprets the results in a way that confirms his or her hypotheses (e.g., Rosenthal, 1966). In forensic contexts, investigator bias can also occur when law enforcement officers have presumptions about a case, and thus, influences the criminal investigation (e.g., evaluation of evidence, information-gathering, scenario construction) toward confirming their presumptions (Edmond, Tangen, Searston, & Dror, 2015; Rossmo, 2009).

Tunnel vision. Another manifestation of confirmation bias is tunnel vision, which presents as confirmatory thinking that occurs within an attentional bias. Tunnel vision is used to describe the behaviour of an individual who is intently focused on a particular person, thing, or outcome. Within the psycho-legal literature, the meaning of tunnel vision has been expanded to include confirmatory behaviours within that intent focus (Findley, 2012). Tunnel vision and investigator bias overlap in many areas; however, tunnel vision is often used to describe behaviour directed towards a prime suspect (O'Brien, 2007) and only information that seems to incriminate that suspect is gathered. Moreover, any information gathered prior to identifying a prime suspect is also interpreted in a manner that implicates the suspect as the perpetrator of the crime.

Researchers have demonstrated that tunnel vision influences the decision-making process by limiting the amount of information an individual may naturally attempt to gather to make a decision (Rassin, Muris, Booster, & Kolsloot, 2008), and the type of information sought (Ferrari & Dovidio, 2001). Tunnel vision is also more likely to occur when the decision is of great importance or consequence, or when there is an overload of information that needs to be considered (Rassin, 2007).

Expectancy effects. Confirmation bias is also referred to as *expectancy* within the interpersonal interaction literature (see Burns & Le Poire, 1993; Darley & Fazio, 1980). The term ‘expectancy’ is most often used when the biased belief is rooted in preconceived ideas about an individual on a personal level, and is generally based on demographic information (e.g., race, stereotypes, socio-economic status, criminal background, etc.; Darley & Fazio, 1980; Darley & Gross, 1983; Miller & Turnbull, 1986). Thus, expectancies are also prejudicial ideas about how a person will behave, or how an interaction will end, based on beliefs about that person or their group membership. Confirmation bias is exhibited as expectancy when behaviour or information encountered by the Perceiver (person holding the expectancy) during the interaction is evaluated as confirming the presumptions they have about the Target (person the expectancy is about). Any expectancy disconfirming information is ignored or explained away (Darley & Fazio, 1980).

Expectancy is not often used within the psycho-legal literature to describe confirmation bias because of its interpersonal roots. However, a strong argument can be made that expectancy is the best term to describe confirmatory behaviours within investigative interview settings. For example, when an interviewer enters an investigative interview with a suspect and has a presumption of guilt, he or she has formed an expectancy regarding culpability. There may also be an expectation that the suspect will

deny guilt and engage in deceptive behaviour. The interviewer may also hold an expectation of resistance to the “truth” by the suspect (i.e., self-deception to avoid responsibility). These expectations not only influence the interviewer’s behaviour (e.g., question types, verbal and nonverbal behaviour, interview preparation, and objectivity) but can also influence the suspect’s behaviour and the interview outcomes (e.g., cooperation, amount and quality of information, and confession; Kassin, Goldstein, & Savitsky; Meissner & Kassin, 2002; Narchet, Meissner, & Russano, 2011)

The Expectancy Confirmation Cycle

Expectancy primarily influences other people through a *self-fulfilling prophecy*, also known as the *expectancy confirmation effect* (Madon, Willard, Guyll, & Scherr, 2011). In a seminal paper on self-fulfilling prophecies, Merton (1948) described the phenomenon as “... a false definition of the situation evoking a new behaviour which makes the originally false conception come true” (p. 195). Darley and Fazio (1980) later demonstrated Merton’s statement by presenting a six-step model of expectancy confirmation. The researchers posited that expectancy and expectancy confirmation have a cyclical relationship where a Perceiver’s confirmatory behaviour towards a Target prompts the Target to behave in a way that both confirms and strengthens the Perceiver’s preconceptions.

In the Expectancy Confirmation Model (see Figure 1.1), the Perceiver forms an expectancy and exhibits behaviours congruent with that expectancy (steps 1 and 2). The Target then interprets that behaviour and responds (steps 3 and 4). The Perceiver then interprets the Target’s behaviour through the filter of their confirmation bias (step 5). Next, the Target interprets his or her own behaviours (step 6) and responds or withdraws. As seen in the model, there is potential for an interaction sequence loop starting at step 2. Here, the Perceiver can also interpret any response of the Target at step 6 as

confirmation of his or her expectancy and either start the process again or leave with their biases and expectancies intact. The Expectancy Confirmation Model demonstrates how expectancy as confirmation bias can elicit the very behaviour that would make the biased and false conception true. Although the model allows for the role of the Perceiver and the Target to be interchangeable, when there is a power imbalance between the Perceiver and the target (such as during an investigative interview), the individual with the most power is generally referred to as the Perceiver.

Darley and Fazio (1980) also acknowledged how a power imbalance further complicates the interaction for the Target. Perceivers who hold authority over the Target, are less likely to change his or her expectations, which starts an additional sequence of fallacies that linger and possibly worsen as the cycle continues. The power imbalance may also influence the Target to exhibit behaviour congruent with the Perceiver's presumptions as either an undeliberate response to the expectancy, or as a conscious decision of the Target. When the latter occurs, the Target may have decided that it would be more beneficial to his or her situation to conform to the expectancy. Then the Target will begin to exhibit the predicted behaviours as a type of coping mechanism. Consciously conforming to the expected behaviour generally occurs for two reasons: i) the costs of attempting to disconfirm the expectancy require more cognitive resources than the Target has available given the situation (Kaiser & Miller, 2001), and ii) the Target assumes the outcome will be negative (e.g., cause conflict or retaliation), and is reluctant to attempt to challenge the expectancy (Fazio, Effrein, & Falender, 1981; Zanna & Pack, 1975).

An expectancy confirmation cycle that contains a power imbalance where the Perceiver is an authority, and controls the interaction, is especially pertinent for the investigative interview. A custodial interview with a suspect contains a clear power

imbalance. The suspect is detained, isolated in an interview room, and subjected to questions about a negative event they may or may not have information about. Furthermore, the interview is not a normal mode of communication and is generally perceived as a question and answer session. To that end, a police officer who seeks to confirm a belief about a suspect can easily phrase questions in a manner that implicitly or explicitly sends a message to the suspect about the types of responses the interviewing officer expects to receive. Whilst guilt presumptive questioning may not elicit false confessions in every case, it can subject innocent suspects to needless interrogative pressure and psychological distress (Gudjonsson, 2003). Thus, every effort should be made to ensure investigative interviews are conducted in an objective and information-gathering manner and any guilt judgements are left to the courts.

Disrupting Confirmatory Thinking

Disrupting confirmatory thinking is a difficult and multi-step process that starts only when the person holding the bias has acknowledged that his or her presumption could be incorrect. That first step is not an intuitive human behaviour due to belief perseverance (Ross, Lepper, & Hubbard, 1975) as well as a natural predisposition to avoid cognitive dissonance (Frey, 1982). In fact, belief perseverance and dissonance are more likely to strengthen confirmatory thinking as people are more inclined to challenge and question new information that opposes pre-existing beliefs (Ross et al., 1975), particularly if there is a strong commitment to those beliefs (see Arkes, 1991).

Disrupting confirmatory thinking is further complicated when it involves the cyclical relationship between expectancy and expectancy confirmation effects (Darley & Fazio, 1980). If the Perceiver does manage to discard his biased belief, alternative theories must be: i) identified, ii) accepted or rejected based on an unbiased evaluation of the available information, and iii) applied to the Target's behaviour (Merton, 1948).

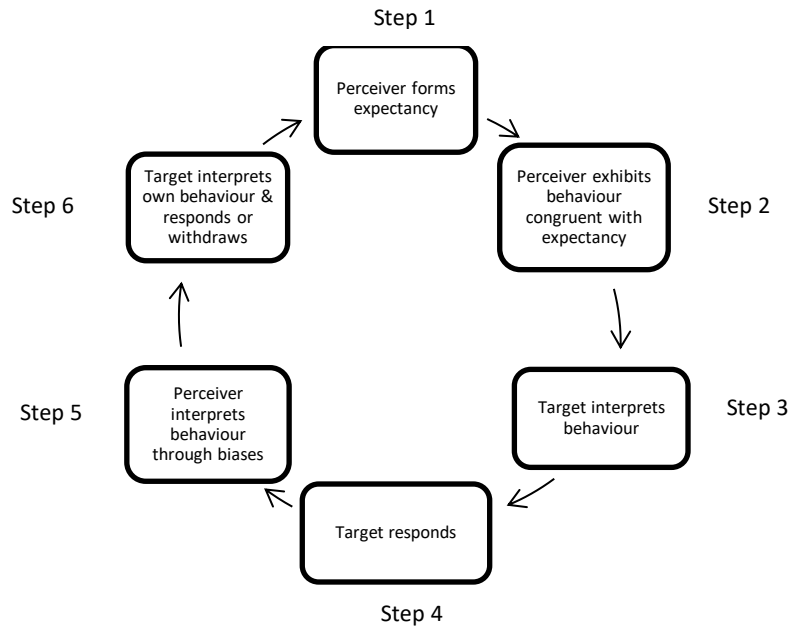


Figure 1.1. Author's pictorial interpretation of the expectancy confirmation model proposed by Darley and Fazio (1980). The model demonstrates the cycle of expectancies and confirmation bias in a six-step process.

Moreover, expectancy confirmation effects are difficult to disrupt because they are difficult to identify. Perceivers are unlikely to recognise their bias or to attribute outcomes as being influenced by their behaviour. This occurs because the Perceiver has entered a state of irrational and delusional thinking (Miller & Turnbull, 1986). Regardless of what is actually occurring during the interaction, the Perceiver will interpret the Target's behaviour as confirming expectations. In the Perceiver's constructed reality, the Target will always be fulfilling the Perceiver's expectancies and this in turn encourages the confirmation bias (Darley & Fazio, 1980).

Another way to potentially disrupt the expectancy confirmation cycle requires intervention by third-party observers; however, that is also difficult to accomplish for many reasons. As previously discussed, encouraging a Perceiver to modify his or her

biased thinking can be a difficult endeavour. An additional difficulty occurs if the Perceiver and third-party observer are members of the same demographic group (e.g., religious, racial, occupational). In that situation, the observer may hold the same expectancies and eventually conclude that the Perceiver's theories are correct based on their own biased observations (Brewer & Nakamura, 1984; Chatman & Von Hippel, 2001). Researchers have also demonstrated that even when the third-party observer is neutral (i.e., does not hold the same beliefs as the Perceiver), they may judge Targets as exhibiting negative or stereotypical behaviour due to the self-fulfilling prophecy (Akehurst & Vrij, 1999; Narchet et al., 2011). Thus, neutral observers can be influenced by the Target to confirm the Perceiver's belief. Finally, a desire to avoid conflict with the Perceiver could influence a third-party to acquiesce to the biased beliefs (Zanna & Pack, 1975).

Confirmation Bias and Criminal Investigations

Police officers often have the arduous and stressful tasks of collecting information from various sources (e.g., crime scene, witnesses, victims, suspects), then putting those accounts into context of potential evidence collected at the scene, as well as following up on leads to gather and verify more information. When making decisions in high stress/high cognitive load situations, individuals are more likely to come to their conclusions quickly and use very little of the information available to them (see Findley, 2012; Findley & Scott, 2006; Keinan, 1987; Wastell, Weeks, Wearing, & Duncan, 2012). If the police investigator is under a lot of pressure to close a case it can also influence his or her decision-making abilities (Eerland & Rassin, 2010). The increased pressure can also interfere with an investigator's attempt to methodically piece evidence together to form a scenario (preferably multiple scenarios) of how a crime was committed, why, and who may have been involved (i.e., creation of a tunnel vision effect; Fahsing & Ask, 2013).

Confirmatory thinking may also be injected into a police investigation via the very nature of trying to solve a case. That is, experience, situational factors, and pre-existing beliefs are often the basis of police decision-making (Alpert, MacDonald, & Dunham, 2005). However, pre-existing beliefs can interfere with objectivity, frame the behaviour of an investigating officer, and guide scenario creation when the belief becomes the most plausible explanation for the crime, despite contradictory information (Ditrich, 2015). Additionally, the procedural aspect of criminal investigations may be another source of confirmatory thinking and biased behaviour. For example, the way police investigators gather information and collect evidence is often posited as a reason for increased susceptibility to confirmatory behaviour (Rassin, Eerland, & Kuijpers, 2010). Police investigators generally collect and receive information about criminal inquiries in a sequential manner. When information is acquired sequentially, confirmation bias increases as there is a stronger preference for information that supports any early theories. Police investigators then evaluate that information and decide who should be questioned, and where to look for additional information and potential evidence. A confirmatory cycle may be initiated when information that is perceived to support a favoured scenario is discovered, which results in an increased commitment to any decisions made based on that information (Jonas, Schultz-Hardt, Frey, & Thelen, 2001).

Researchers have also demonstrated that obtaining prior information about a case can influence the way individuals assess a crime scene and evaluate the evidence (Van den Eeden, De Poot, & Van Koppen, 2016). The way those first pieces of information are assessed (objectively versus biased), and the scenario(s) that are formulated as a result, may be crucial to how subsequent information is treated. Moreover, psycho-legal researchers have also demonstrated that officers who form theories early in an

investigation are more likely to deem theory-disconfirming information as less reliable (Ask, Rebelius, & Granhag, 2008; O'Brien, 2007). However, other researchers have found that officers may be more inclined to discredit the competing information altogether (Rassin, 2010).

Police officers are also more likely to engage in confirmatory thinking about a suspect's guilt because identifying a prime suspect requires a belief that the suspect is involved in the crime (O'Brien, 2007). However, requiring a condition of guilt presumption before the interview has taken place is a dangerous one. Any scenario or hypothesis that is treated as truth (i.e., the suspect is involved with the crime) is more likely to be considered factual, and creates increased confidence in that belief (Koehler, 1991). For that reason, during the suspect's interview, officers may be more inclined to seek information or a confession to support that belief.

Police Questioning of Suspects

How police officers elicit information from suspects, witnesses and victims has received a lot of attention from academics, policy-makers, and law enforcement organisations over the last 40 years (Kelly, Miller, & Redlich, 2015). Much of that attention is due to highly publicised cases where police misconduct or questionable interview practises have contributed to false confessions and the conviction of innocent suspects (Kassin et al., 2009). As a result of those cases, some European countries started in the early 1990s to reform how the police question citizens – particularly suspects. There was a shift away from applying accusatory and confession driven interview techniques (i.e., interrogation), and the objective became one of information-gathering (i.e., interviewing) to facilitate case closure (Clarke & Milne, 2001). It has only been in the last ten years that various law enforcement agencies in Canada, and even more

recently in the United States, have started to make similar changes (see Snook et al., 2010).

Findings from empirical research. Kassin, Goldstein and Savitsky (2003) were the first to investigate expectancy and expectancy confirmation effects in the context of the investigative interview. The researchers approached expectancy as interviewer guilt presumptions and examined how confirmatory behaviours influenced the interview outcomes with both guilty and innocent suspects. Kassin and colleagues appeared to have started the endeavour with the intent of establishing a tested link between bias, unethical interview tactics, and false confessions. Based on evidence in the interpersonal interaction literature, the researchers hypothesised that guilt presumption would lead to the use of more coercive interviewing techniques (e.g., accusations, increased interrogative pressure). They sought to extrapolate those findings into the area of criminal justice and forensics. The researchers began their investigation with the thesis statement, “We believe that police interrogations are persuasive [...], in part because they are theory-driven social interactions founded upon a presumption of guilt” (p. 188).

Across two laboratory experiments, Kassin et al. (2003) explored how preconceived guilt judgements could influence the interviewers’ tactics and questioning style. In the first study, the researchers manipulated guilt and innocence in participants who acted as suspects, as well as the guilt expectations of the participants who acted as interviewers. They found that interviewers who were primed to have a guilt bias asked more accusatory questions and applied more interrogative pressure to elicit a confession from the suspect. This effect was even more pronounced when biased interviewers were paired with innocent suspects. Furthermore, participants in the innocent suspect condition reported that their interviewers seemed to apply more pressure on them and worked harder for a confession. The findings suggested the potential for a process of

behavioural confirmation to occur (i.e., expectancy and expectancy confirmation). Kassin and colleagues, however, did not explicitly measure confession behaviour in the study.

In the second study, Kassin et al. (2003) wanted to determine whether the outcomes of guilt expectancy found in the first study influenced the suspect's behaviour in a way that could be observed by neutral third-parties. The researchers found that third-party observers who listened to only the suspect's responses to the interviewer's questions were able to discriminate between replies to interviewers who held a guilt bias and those who did not hold that bias. Based on the responses alone, the observers also reported that suspects in the guilty expectation condition seemed more defensive and guiltier, regardless of actual guilt or innocence. Kassin and colleagues interpreted that finding as evidence of expectancy confirmation effects. That is, there was an observable difference in the behaviour of suspects exposed to interviewers primed for a guilt judgement and those who were not.

The findings of Kassin et al. (2003) presented empirical evidence for guilt presumption as an influential factor on behaviour (interviewer and suspect), behavioural perception, and potential negative outcomes for the investigative interview. It is important to note, however, that the researchers employed a similar experimental method as Snyder, Tanke, and Berscheid (1977) in that the interviewers and interviewees never interacted within the same physical space. Participants (interviewers and suspects) were placed in separate cubicles, and the interview was conducted via headset and microphone. Using that method, Kassin and colleagues (2003) were able to demonstrate the effects of guilt presumption via verbal communication alone, and without the influence of judgements made on nonverbal behaviour. That design, however, left unanswered questions regarding the interface between the interviewer and interviewee. The

influences of nonverbal behaviour cannot be ignored in communication as it affects the subsequent behaviour of those engaged in the interaction (e.g., mirroring and mimicry; Akehurst & Vrij, 1999). For example, officers still report using body language to assess guilt and deception despite substantial evidence that has warned police interviewers against making judgements based on nonverbal behaviour (see Vrij & Granhag, 2012).

The next researchers to explore the effects of confirmation bias on the investigative interview were Hill, Memon, and McGeorge (2008). Over three studies the researchers examined the phenomenon in the context of the non-adversarial (information-gathering) interview. In the first study, they elicited confirmation bias through guilt presumption and explored its effects on question type. Despite the authors' claims they were undertaking a systematic investigation of conformation bias, in Studies 2 and 3 the researchers only investigated the effects of question type on confession rates and observer perception. In Study 2, the researchers did not invoke or manipulate bias in the interviewer, but instead used research staff to create and ask participants interview questions. In Study 3, the responses to the questions created by the researchers in Study 2 were used as the stimulus materials. That design subsequently affected the focus of the overall paper as the intention of each study was to build on the findings of the previous. Because the researchers did not use the questions formulated by the biased interviewers from the first study, they essentially cannot claim to have evaluated the effects of confirmation bias in the subsequent studies, as there was no bias present.

If the findings of the first study conducted by Hill et al. (2008) are considered as an investigation into confirmation bias, the key findings demonstrated by Kassin et al. (2003) were replicated in the less adversarial conditions of an information-gathering interview. Hill and colleagues found that interviewers who were primed to form a guilt bias created more accusatory questions, rated the suspect as guiltier, and were more

confident in their guilt judgements than interviewers in the innocent condition. Since the research conducted by Hill et al. (2008; Study 1) did not require the interviewers to ask the questions they formulated to suspects, there remained unanswered questions about interviewer- suspect interactions. That is, how the nonverbal behaviour of both participants may have influenced the expectancy confirmation cycle and interview outcomes (e.g., confession rates).

The next study in this area was conducted by Narchet, Meissner, and Russano (2011). That was an experimental study where the reserachers explored perceptions of guilt bias on interview tactics, suspect perception of the interview, and measured the likelihood of a confession in suspects. The study also included a face-to-face interview between interviewer and mock-suspect. The researchers found that guilt bias increased the interviewer's use of minimisation tactics for the interviewees in the innocent condition (i.e., gain the suspect's trust and trivialise the seriousness of the offence; Kassin & McNall, 1991), but they also found that guilty participants were more likely to confess than innocent participants. This latter finding was contrary to their hypotheses.

The predominant consensus in the false confession literature at the time of Narchet et al. (2011) posited that heavy-handed interview tactics were more likely to produce false confessions through a process of confirmation bias with Kassin et al. (2003) cited as evidence. It is unclear how the Kassin et al. (2003) study became empirical evidence for that hypothesis throughout the literature. As previously discussed, Kassin and colleagues did find evidence that a guilt bias initiated the expectancy confirmation effect. They also found that expectancy confirmation altered interviewers' questioning tactics and suspects' response behaviour. However, Kassin et al. (2003) did not measure confession rates. Therefore, the relationship between guilt presumptions (expectancy), question type, interview tactics, and confessions were not established. Narchet et al.

(2011) did measure confession rates and found no evidence for the confirmation bias-false confession relationship.

At this point in the literature, explicit investigations into the influence of confirmation bias on suspect confession behaviour appear to end. The three aforementioned papers continue to be cited as evidence for the expectancy – false confession relationship; however, it is clear from the extant literature that a connection has not been sufficiently demonstrated.

The next study that examined the effects of guilt presumption in the police-suspect interview explored its relationship to interviewer judgements of alibi believability. Olson (2013) hypothesised that simply labelling a suspect's explanation of their whereabouts as an alibi could be enough to create a presumption of guilt in the interviewers. Olson then hypothesised that any presumptions of guilt could influence an interviewer to recall less alibi information. Guilt presumption was manipulated by telling participants the suspect was guilty, innocent or no information was given. However, providing the interviewers with ground truth about suspect guilt may have led to the evaluation of prior information on investigator recall as opposed to the study of bias. That is, guilt did not have to be presumed as it was established, and the participants did not need to form beliefs about guilt that required confirmation. Therefore, it is possible that the prior information regarding guilt may have been what influenced the interviewers to attend to, retain, and recall certain information about the alibi statements they evaluated in that study.

It should also be noted that a measure has been developed to identify indicators of prejudicial stereotyping within the police suspect interview (Minhas, Walsh, & Bull, 2016). That tool was designed to identify biases based on the race and ethnicity of the suspect. As part of the development of the tool, the researchers included five assumptions

they posited were indicators that an interviewer held a guilt presumption: i) asking guilt presumptive questions, ii) asking emotionally provocative questions, iii) use of bluffing tactics, iv) inflexible stance in light of potentially exonerating information, and v) interviewer reacted to or commented on the suspect's nonverbal behaviour.

Those five behaviours have been mentioned independently, or in some combination, within the literature as conduct that was observed when interviewers were suspected of having a guilt bias. Only one behaviour, however, has been consistently mentioned in all prior studies on this topic - accusatory questioning. The rest of the behaviours have not been consistently noted within the aforementioned studies in this chapter, or in studies that have examined confirmation bias in other aspects of criminal investigations (e.g., Ask & Granhag, 2005; Leo, 2009). If those behaviours listed in Minhas et al. (2016) are accepted as reliable indicators of guilt presumption and bias, is it enough to say that only one of the behaviours needs to be present? If so, does one of those behaviours hold more weight than the others for determining the presence of confirmatory beliefs? Perhaps it is some combination of those behaviours that solidifies the presence of guilt presumption and confirmatory thinking, but if so, which ones? It could even be the case that there are interviewer behaviours that are potentially indicative of confirmation bias that are missing from that list. All these questions are the reason why more research is needed to determine if the behaviours noted by Minhas et al. (2016) consistently emerge when confirmation bias is present.

Investigative interview versus interrogation. An interrogation is a high-pressure interaction used to obtain and confirm information that the interrogator believes to be true. It is generally used when the interrogator believes the suspect is lying or is likely to lie (Inbau, Reid, Buckley, & Jayne, 2011). The goal of an interrogation is to persuade the suspect to tell the truth or to confess through confrontation, psychological

manipulation, and rejection of denials (Meissner, Redlich, & Bhatt, 2012). Conversely, an interview is a non-accusatory interaction centred around information gathering and credibility assessment. Interviewers will often use techniques such as rapport-building, active listening, and appropriately challenging conflicting information to seek the truth (College of Policing, 2016; Meissner, et al., 2012).

Investigative interview frameworks. Police officers are generally trained to use specific types of interviewing frameworks or models when questioning suspects. These consist of an outline of the questioning processes and suggested tactics the interviewer can use. Some frameworks are associated more with either interrogations (e.g., Behavioural Analysis Interview or Reid Technique) or information-gathering interviews (e.g., PEACE model) based on how the interviewer is advised to handle suspect denials, deception, and uncooperative behaviour. However, most interviews contain elements of interrogative strategies as well as information-gathering techniques (e.g., General Interview Strategy). The following is a description of the interviews referred to throughout this book.

Behavioural Analysis Interview (BAI). The BAI, most commonly known as the Reid Technique (Inbau et al., 2011), is popular in the United States and parts of Canada. The objective of the BAI is to break down the suspect's resistance and increase the chance of obtaining a confession (Hartwig, Granhag, & Vrij, 2005). The BAI begins with a non-accusatory interview in a custodial or non-custodial setting. If the interviewer believes the suspect is being deceitful or evasive, guilt is assumed, and an interrogation begins.

The BAI has received intense scrutiny by academics and practitioners for its increased likelihood to elicit false confessions from suspects, claims that guilty and innocent suspects can be differentiated, and innocent people are immune to the tactics outlined in the Reid Technique. Despite those claims by Inbau and colleagues,

researchers have repeatedly demonstrated that innocent suspects are more susceptible to the tactics used in the BAI (Kassin et al. 2009). The nine steps to a confession as outlined in Inbau et al., (2011) are as follows:

1. Engage in positive confrontation
2. Develop a theme for questioning
3. Handle denials
4. Overcome objections
5. Procure and retain the suspect's attention
6. Handle the suspect's passive mood
7. Present alternative questions
8. Have the suspect verbally relate various details of the offense
9. Convert the oral confession to a written confession

PEACE Model. In the mid-1980s, England and Wales underwent a justice reform as a result of many high-profile miscarriages of justice, and frequent reports of police misconduct. From that reform, the Police and Criminal Evidence Act (PACE; 1984) emerged and the PEACE model was created. PEACE is not an interview technique, but the essence of the information-gathering objective is clearly defined within the seven guiding principles (see Appendix A).

Officers trained in PEACE predominantly use two types of questioning techniques: the cognitive interview (Geiselman et al., 1984) and conversation management (Shepherd, 1993). PEACE is the acronym for the steps that interviewers are expected to employ (College of Policing, 2016):

P – Planning and Preparation

E – Engage and Explain

A – Account clarification and challenge

C – Closure

E – Evaluation of information, investigation, and interviewer

General Interview Strategy (GIS). The Dutch police have four interview strategies they can apply in various situations; however, the GIS is the most commonly used with suspects of serious crimes. The GIS was created by the Dutch police academy and is applied to any interview that meets three criteria: i) sufficient evidence, ii) the suspect has a normal tolerance for interrogative pressure, and iii) the suspect must be willing to talk (Van Amelsvoort, Rispens, & Grolman, 2010).

The Dutch police conduct the GIS in three phases. The first phase is the Opening where the suspect has his rights and the process of the interview and any legalities explained. The second phase is the Person Oriented Interview. In this phase, the interviewers collect relevant personal information, attempt to build rapport, and determine whether the suspect is willing to talk about the case. The third and final phase is the Case Oriented interview. This is where most of the relevant information concerning the case is obtained and the following guiding principles of the GIS are applied (see Hoekendijk & Van Beek, 2015):

1. Make use of internal pressure
2. Try to minimise eventual reluctance to provide an account
3. Rule out alternatives
4. Challenge the account

Earlier versions of the GIS also included the instructions to confront the suspect with evidence using circumventing questioning and to reward the suspect if the statement is adjusted to reflect the truth (Van Amelsvoort, et al., 2007). Based on the listed principles, the GIS has elements of both information gathering and interrogative strategies.

The human variable in interviewing. BAI and PEACE are the most well-known types of interview frameworks across North America, much of Europe, the UK and Australia (Meissner et al., 2012). However, each type of investigative interviewing framework is only as effective as the interviewer that uses it. Research has shown that interviews can quickly turn into interrogations, regardless of the type of framework used (Kassin et al., 2003; Hill et al., 2008). What differentiates an interview and an interrogation is not the frameworks used but the intent and the objectives of the interviewer. An interviewer could follow the process outlined in PEACE and still ask accusatory questions, reject denials, and employ manipulative tactics to elicit information from a suspect. Thus, it is the presumption of guilt that usually facilitates movement from interview to interrogation.

Can Confirmatory Thinking be Beneficial to the Investigative Interview?

The most prevalent position throughout the literature is one that posits the negative effects of confirmatory thinking in relation to police work. However, some researchers and law enforcement practitioners have argued that focusing on specific information and using previous experience can be beneficial in police investigations (see Snook & Cullen, 2008). As a police officer gains experience, he or she will begin to develop a type of cognition specific to their line of work (i.e., heuristics and schema). Having cognitions specific to the task helps with fast and efficient decision-making and execution. For example, police officers must make quick, and sometimes life and death decisions. They do not always have time to engage in reasoning, to evaluate cost-benefit rationalisations, or to entertain alternative scenarios. Thus, an automatic and intuitive decision-making technique is often beneficial in those types of situations (see Gigerenzer, 2006; Kahneman, 2003).

There are also researchers who have argued that confirmation bias is an adaptive cognitive strategy (Cosmides & Toby, 1992; Friedrich, 1993), and that tunnel vision could be necessary for the successful completion of tasks that require focus and dedication under high-pressure (see Gigerenzer, 2008; Tversky & Kahneman, 1974). As previously mentioned, tunnel vision is described as a type of confirmatory thinking within police investigations where the police officer is so intently focused on a suspect, he or she fails to acknowledge the possibility of alternative scenarios, or even the possibility of suspect innocence (O'Brien, 2007; Rossmo, 2009). To this end, researchers have suggested that tunnel vision can be employed as a cognitive strategy to reduce potentially costly errors (e.g., wasted time and resources), maintain focus, and help keep superfluous information to a minimum (Snook & Cullen, 2008).

Conversely, it can be argued that there is a difference between focused attention to do one's job and a bias that could potentially bias a criminal investigation. Although the nature of police work may influence officers to rely heavily on their schema and heuristics (Maguire, 2003), a police officer's instincts, beliefs, and prior experiences do not apply to every case he or she encounters. An alternative argument to the beneficial use of intuition based on schema and tunnel vision is that those behaviours can become ingrained in the officer's cognitive process and are then applied inappropriately (Holmberg, 2004; Williamson, 1993). Furthermore, reliance on instinct and an intense focus is not appropriate for the investigative interview because that is the part of the job where skills such as empathy and objectivity are more likely to assist with the task of information-gathering (Oxburgh, Ost, Morris, & Cherryman, 2014)².

² It should be noted that the opposing arguments in the literature regarding the benefits and detriment of confirmation bias highlights the necessity to ensure validity when measuring and drawing assumptions about interviewer behaviour within the context of this topic. That is, researchers must ensure they are measuring actual instances of confirmatory behaviour and not the focused behaviour that interviewers may be using to solve a case or evaluate a problem.

Although focused thinking and reliance on heuristics may have a place in police work, the general consensus in the literature is that they should not be applied to the investigative interview. Researchers have found that interviewers who are engaged in focused and confirmatory thinking are more apt to use more coercive tactics (Narchet et al., 2011), ask more accusatory questions (Kassin et al., 2003), and rely more heavily on nonverbal behaviour for veracity assessment (Vrij, 1993). There is also a risk that the interview (focused on gathering information) will quickly become an interrogation (focused on obtaining a confession; see Kassin, 2005; Meissner & Kassin, 2004).

Interrogations can be particularly detrimental to the innocent suspect, as they are more likely to waive their rights to silence and answer questions in an initial attempt to be helpful (Kassin, 2008). However, those who waive their rights are also more likely to falsely confess during a police-suspect interview (Kassin, 1997). Innocent interviewees also tend to underestimate the potential consequences of talking to an investigator who holds a guilt bias (Guyl et al., 2013). That is, an interviewee who is trying to be helpful or cooperative can also be worried or tense and may perceive their response as normal and understandable given the circumstances. However, increased nervousness and cognitive load can also influence an innocent suspect's nonverbal behaviour and facilitate inconsistent verbal responses (Akehurst & Vrij, 1999). Furthermore, an interviewer who is more inclined to use the suspect's behaviour as a measure of trustworthiness, veracity, or guilt, is also more likely to be mistaken when interpreting the observed behaviour (Vrij, 1993), which can lead to an expectancy confirmation effect that results in increased interrogative pressure. In sum, none of the findings to date indicate that focused, intuitive, or confirmatory behaviour in the interview room could be of any benefit to the outcome of an investigation or to the police-suspect interview.

Directions for Future Research

When taken together, those studies that explicitly examined confirmation bias in police-suspect interviews have provided important insights³. There is some empirical evidence to suggest an influence of confirmation bias and guilt presumption on the interviewer's questioning behaviour, the use of minimisation tactics, the perceptions of third-party observers to the interaction, and on the judgements of suspect believability. However, there are still many unanswered questions beyond those previously discussed in this chapter. The following is a list of topics directly pertinent to the scope of this thesis that warrant further investigation.

Observable behaviours of confirmation bias. There is still the question of what confirmation bias looks and sounds like. Although there is currently no theoretical reason to suspect that people can detect confirmation bias by simply observing others, further research in that area would help eliminate this as a question relevant to that area of study. Based on research in deception detection and individual differences, it is unlikely that reliable nonverbal cues to the presence of confirmatory thinking could be observed in guilt presumptive interviewers (Riggio & Friedman, 1983). As evidenced by the consistent appearance of accusatory questioning in guilt presumptive interviewers, the reliable indicators of confirmatory thinking are most likely contained in the verbal interactions between interviewer and suspect. This notion is supported in the linguistic literature through the relationship between bias and verbalising stereotypes (see Beukeboom, 2012; Semin, 2011). For that reason, it may be best to

³ There is also an extensive literature on the effects of confirmation bias and deception detection within suspect interrogations (see Meissner & Kassin, 2002). Deception detection and veracity assessment is a phenomenon in itself and comes with a host of factors that can also influence the course of the investigative interview. For that reason, the deception detection literature has not been included as it is outside the scope of this thesis, which is to identify reliable indicators of confirmation bias exhibited by interviewers.

concentrate on the language used by interviewers and their verbal behaviour as opposed to nonverbal behaviour that could vary significantly.

Expectancy and expectancy effects. Stereotypes are expectancies that originate from heuristics and schema and applied to all members of a demographic group regardless of individual differences. Linguists have demonstrated that a person's stereotypic expectancies are reflected in their language by using negations (Beukeboom, Finkenauer, & Wigboldus, 2010) and word abstraction (i.e., the verb can become removed from its concrete meaning through interpretation; Wigboldus, Semin, & Spears, 2006). In fact, verb abstraction as a method of detecting expectancy is well documented in the linguistic literature (for a review see Beukeboom, 2012). There are also linguistic models to identify and measure the level of abstraction in utterances and text (Semin & Fiedler, 1991).

Given the established relationship between stereotyping and expectancies, it also stands to reason that the effects of expectancy confirmation on the suspect may look like the effects of stereotype threat as demonstrated in the interpersonal interaction literature (e.g., reduced performance, defensiveness, and behavioural changes; Bargh, Chen, & Burrows, 1996; Wheeler & Petty, 2001). Najdowski (2012) provided some support for this possibility when she demonstrated behavioural changes in racial minorities who were asked information-gathering questions by a security guard. That study, however, was conducted in a country with well documented racial tensions between the target demographic and the police. Therefore, whether the effects of (non-racially motivated) expectancy effects can be observed as stereotype threat in suspects who do not themselves hold stereotypic expectancies about the interviewer remains to be tested.

Testing confirmation bias. Confirmation bias is the action of attempting to confirm pre-existing beliefs. The challenge for researchers is to ensure participants have a belief they are seeking to confirm. In the previous studies, guilt presumption was manipulated by leading the participants to believe the suspect was either guilty or innocent. When researchers implied that the suspect was guilty, or innocent, they may have created a situation where the participant was simply attempting to confirm what they had been told was ground truth by a person in authority (the researcher running the study). That in turn also creates a generalisability issue because a police investigator would not have ground truth about a suspect's guilt or innocence, and any guilt expectancies would be created by an investigator's own evaluation of the information that was available.

One possible solution to the challenge of creating expectancies and beliefs without too much interference may be found in the studies by Narchet et al. (2011) and Olsen (2013). Those studies included a control condition where the participant was not given any information about the suspect's guilt. There is a possibility that the interviewers who did not have their expectations of guilt primed (or outright told) may have developed an expectancy on their own (i.e., an actual guilt bias). If a bias was naturally formed in that group, they are no longer a control group but have become the actual experimental group. The natural formation of guilt judgements could be achieved by manipulating information (e.g., case facts) and then asking the potential interviewer whether he or she has an opinion about the suspect's guilt. There should also be an option for the interviewer to indicate if he or she has no opinion. Understandably, this approach would significantly reduce the control the researcher has over the experiment. But, that may be a necessary trade-off to ensure what is being investigated is actually guilt presumption and any subsequent confirmatory behaviours.

Understanding interviewer behaviour. Another avenue for future research is determining why the interviewer behaved in a certain manner. Understanding the motivations behind the interviewer's behaviour is important to fully comprehend, and eventually develop measures to change that behaviour. For example, simply asking interviewers to justify the questions they choose to ask could be an opportunity to confirm the presence of confirmatory questioning. When taken with other findings in a study, the interviewer's justifications of their behaviour could help identify how those biases influenced behaviour toward the suspect. Interviewers could also be asked to identify and rank information they used to make their guilt judgement as this has not been done when examining bias in police-suspect interviews, but it has been examined in the context of investigator decision-making (e.g., O'Brien, 2007; Rassin, Eerland, & Kuijpers, 2010).

The Current Thesis

The extant criminal justice literature is focused mainly on *investigator bias* and *tunnel vision* within criminal investigations. Inside that literature, researchers have examined how bias can influence evidence evaluation, perceptions of witness credibility, and judicial decisions (e.g., Ask & Granhag, 2005). There is also a pervasive theme in the literature that suggests confirmation bias has a negative influence on interview outcomes with suspects. Specifically, confirmation bias has been linked to accusatory and coercive interviews, with false confessions as a potential outcome (e.g., Meissner & Kassin, 2004). However, the existing findings do not provide enough support for confirmation bias as a problem for interview outcomes using information-gathering interview frameworks. Nor have researchers tested for reliable indicators that confirmation bias is present. This dissertation is an analysis of information-gathering type of investigative interviews, which aims to answer two overarching questions i) can

indicators of confirmatory thinking be identified in investigative interviews, and ii) if present, how does confirmation bias influence the behaviour of the interviewer and the interviewee? To answer these questions, a mixed-methodological approach will be taken to identify evidence of biased behaviour and confirmatory thinking.

This thesis is divided into three parts. Part I (Chapters 2, 3, and 4) examines potential indicators of confirmation bias and confirmation expectancy effects within the controlled environment of experimental studies. Part II (Chapters 5 and 6) examines transcripts of police-suspect interviews for indicators of confirmation bias. Part III (Chapter 7) contains a discussion of the overall research findings contained in this thesis, suggestions for researchers to approach the analyses of interviews in future studies, and implications of this research for future studies and police practice.

Study rationales. The following section outlines the studies contained in this dissertation and the rationale for conducting each in context of research question:

Study 1: Chapter 2. The first gap in the extant literature involved the presentation of expectancy confirmation effects in truth-telling suspects. Expectancy effects are known to influence behaviour so that what is expected appears to be true (Darley & Fazio, 1980). However, little attention has been afforded to the interviewee's verbal and nonverbal behaviour. In previous studies, the effects of expectancy have been measured primarily with confessions as the outcome variable. Additionally, there have been few studies that examined the effects of expectancy in non-adversarial settings with non-accusatory questions.

Using structured behavioural observation techniques, verbal and nonverbal behaviour will be assessed between a group of control interviewees and interviewees primed to experience an expectancy confirmation effect. Expectancy is induced using (fabricated) information about honesty and specific group membership. Targets in a non-

accusatory interview environment are tested using neutral and information-gathering type questions. It is hypothesised that persons exposed to the negative information (the expectancy) will demonstrate behaviour consistent with increased cognitive load. Due to the investigative nature of the information gathering questions, Targets exposed to the expectancy are predicted to exhibit more of these behaviours in the investigative portion of the interview. If the hypotheses are supported, the findings in this study will provide a better understanding of how interviewee behaviour can be altered when the interviewee thinks they are being accused of wrong-doing.

Study 2: Chapter 3. One consistent finding throughout the extant literature regarding confession driven interviews is that presumptions of guilt about a suspect can influence an interviewer to ask more accusatory questions (Kassin, 2014). That type of questioning strategy has also been demonstrated in one study that used information-gathering techniques (see Hill, Memon, & McGeorge, 2008). Additionally, findings in the linguistic literature have demonstrated that the verbs used in utterances can be indicative of biased beliefs about another person, and subtle hints of bias can be found when the main verbs of a question are closely examined (Semin & Fiedler, 1991). This study is an experimental examination of guilt presumption and its influence on the words used by interviewers when preparing questions. The questions formulated by participants will be examined for accusatory language, as well as the use of word abstraction. Abstraction is a linguistic phenomenon that occurs when speakers hold biased or stereotypical beliefs about the topic or person being discussed.

All participants will be given details of a fabricated case that involved suspected academic dishonesty. The participants will naturally form their own guilt judgements (i.e., guilty, not guilty, need more information) based on details of the case, and will be asked to create 10 questions they would ask the suspect. The participants will also be

divided into two groups. Half the participants will be given detailed instructions for conducting an information-gathering interview within the guidelines of the PEACE framework. The other half are given basic instructions for conducting an information-gathering interview. The two groups were created to determine whether participants exposed to the detailed PEACE instruction will form a guilt judgement or remain objective (need more information) as instructed within the PEACE guiding principles. Those participants exposed to PEACE are also expected to form less accusatory questions as they would have remained objective and would have no reason to make accusations. However, participants who make a guilt judgement (regardless of interview instructions) are expected to form accusatory questions and use more negative abstract words.

If the hypotheses of this study are supported, the findings will determine whether an instruction to remain objective and detailed instruction are effective tools to prevent guilt-judgements from forming. Although previous researchers have suggested that instruction to remain objective is not enough to thwart prejudicial thinking, it is prudent to test those findings in the interview context. The novel contribution of this study involves the linguistic analysis of the word abstraction. Although word abstraction has been examined in interviewing settings, it has not been tested where potential interviewers could formulate their own guilt judgements and their own questions. The findings will provide some insight to how word abstraction relates to guilt-presumption under those conditions.

Study 3: Chapter 4. This study expands on the findings of Study 2 by extending the investigation into the linguistics of the questions formulated by the interviewer. The design of the study mirrored that of Study 2; however, in this case there are interviewees who will be questioned by the interviewer. It is expected that interviewers who make an initial judgement of guilt will create more accusatory questions containing more negative

abstract language. However, previous researchers have suggested that using more concrete words can influence who or what becomes the focus of the response (De Poot & Semin, 1995; Semin, Rubini, & Fiedler, 1995). It is predicted that interviewees will comply with this linguistic pattern, and ultimately focus on themselves, even if the question does not focus on them. Understanding how language contained within a question can influence the response is pertinent to the investigative interview as an interviewee's responses can be manipulated by the interviewer's word choices. Although word choices are not a conscious decision when it comes to word abstraction (Semin, 2011), if an interviewer holds a presumption of guilt, the interviewee's responses could be perceived as confirmation of that belief.

An exploration of interviewer motivations for creating each question, and well as changing guilt-judgements will also be conducted in this study. No hypotheses have been created for those variables as changing guilt judgements and motivations will rely on a host of factors contained within the interview and the interviewer. Both the motivations for question creation and the reasoning for making a particular guilt judgement will be captured via free-text responses from the interviewer. Those responses will then be analysed for any themes that could provide insight into the interviewers' decision-making over the course of the interview.

Study 4: Chapter 5. The fourth study in this dissertation is an applied examination of the language used during investigative interviews with suspects. The experimental studies contained in this dissertation aim to replicate previous findings in the literature and test linguistic analysis techniques for feasibility in interview settings. However, experimental constraints will not allow for full generalizations of the findings into police practice. Mainly, university students do not behave like police officers and suspects. Although the experimental studies will answer some questions about the influence of

guilt-presumptive language on interviewee behaviour, the only way to fully understand the behaviour of police officers and suspects is to analyse actual interviews.

The investigative interview is a unique interaction that is influenced by many factors. One important factor in the interview is the dialectical exchanges between interviewer and interviewee and the context in which they occur (Haworth, 2017). Previous findings in the have suggested that the language used in a police-suspect interview can provide clues to the underlying guilt beliefs of the interviewer (Hill et al., 2009; Kassin et al., 2003; Narchet et al., 2011). This explorative study is an analysis of the discursive indicators of guilt presumption presented as instances of covert speech (i.e., insinuation of guilt), the utterances (locutions) that lead to the insinuation, and the influence of insinuation on the suspect's behaviour (perlocutionary force). The aim of this study is to determine how police interviewers use covert speech and how that language influences suspect behaviour.

Study 5: Chapter 6. The final study presented in this dissertation examines a sample of interviews from a Dutch murder case. In this study, six interviews from a single murder investigation are examined for guilt-presumptive language (accusations and insinuations of guilt) and question appropriateness. The suspect's behaviours immediately before and after incidence of guilt-presumptive language will also be analysed. The aim of this study is to determine how guilt-presumptive language may negatively influence suspect behaviour and impede the ability for interviewers to gain investigation relevant information (IRI).

Conventional methods for analysing interviews have primarily focused on the appropriateness of questions asked to gather information or to elicit a confession (see Oxburgh, Myklebust, & Grant, 2010). Within the various question categorisations used by researchers, guilt-presumption is not featured as a questioning strategy; therefore,

those types of utterances are not recorded. Instead, guilt-presumptive utterances are aggregated with other types of inappropriate opinion statements (e.g., Shepherd & Griffith, 2013). Further to this, there is often more happening within an interview than is immediately identifiable by simply focusing on question types and opinions. Examining the interactivity and behaviours that lead to accusations can reveal subtleties that have a profound influence on the flow and outcome of the interviews. More applied research on guilt-presumptive language is needed in the investigative interviewing literature, particularly in the context of interviewer beliefs about suspect guilt as well as biased decision-making regarding questioning strategies.

Conclusion

Despite the potential problems that confirmation bias can cause within a criminal investigation, this review has demonstrated the topic has been largely neglected in the context of investigative interviews with suspects. There are many unanswered questions, and the breadth and depth of the information yet to be discovered about this phenomenon leaves a range of opportunities for researchers. The questions that remain around this topic will require diverse methods and techniques to elicit and investigate the influence of confirmation bias in interviews with criminal suspects. The most promising research avenue seems to involve exploring interviewer questioning techniques and language use. The extant literature has provided a base for future research; however, much work is left to be done before the effects of confirmation bias, in all its forms, are fully understood in the context of the police-suspect investigative interview.

Part I: Detecting Confirmation Bias in Investigative Interviews

Chapter 2

Interview Expectancies: Awareness of Potential Biases Influences behaviour in Interviewees

Overview

Expectancy effects are known to influence behaviour so that what is expected appears to be true. In this study, expectancy was induced using (fabricated) information about honesty and specific group membership. Targets were tested in a non-accusatory interview environment using neutral and information-gathering type questions. It was hypothesised that those exposed to the negative information (the expectancy) would demonstrate behaviour consistent with increased cognitive load, and evidence was found to support this prediction. Due to the investigative nature of the information gathering questions, it was also expected that the Targets exposed to the expectancy would exhibit more of these behaviours in the investigative portion of the interview. Some behaviour was to support this prediction (i.e., shorter responses and increased speech disturbances); however, indicators of performance altering load were not observed during this phase of the interview. These findings support the hypothesis that expectancy effects can noticeably alter interviewee behaviour.

Introduction

Investigative interviews are wrought with factors that can directly affect the outcome (Gudjonsson, 2003), as well as influence the behaviour of the interviewer and interviewee (Kassin et al., 2009; Leo, 2009). Given the prevalence of expectancy effects within most human interactions, this topic has started to receive more attention in forensic contexts such as criminal investigations (Hill, Memon, & McGeorge, 2008), decision-making in judicial professionals (Porter & Ten Brinke, 2009), and accusatory

investigative interviews (Kassin, 2005; Kassin, Goldstein, & Savitsky, 2003). Within the framework of the investigative interview, expectancy effects are often studied as a by-product of confirmation bias held by police officers or other judicial players (e.g., police officers, legal counsel, and judges; Narchet, Meissner, & Russano, 2011; Powell, Hughes-Scholes, & Sharman, 2012; Rassin, Eerland, & Kuijpers, 2010). However, little research has been conducted in the area of the investigative interview to examine how expectancy effects may arise internally in the interviewee based on the interviewee's perception of the situation.

The present study is an attempt to apply aspects of social psychological theory on expectancy effects to the study of interviewee behaviour. To investigate the effects of expectancy, the focus is placed on the verbal and non-verbal behaviour of truth-telling interviewees. Of specific interest are behaviours that are conventionally associated with cognitive load but that are also (erroneously) cited as signs of suspicion or evasiveness. The implications of the impact of expectancy effects on investigative interviews are then discussed in the context of the existing literature.

Expectancy Effects as Stereotype Activation

When expectancy effects occur within a dyadic or polyadic interaction, it has been repeatedly demonstrated that the behaviour of the perceiver (the one who holds the expectation or false belief) can influence the behaviour of the target (the one whose behaviour is being perceived).⁴ In turn, the target's behaviour ultimately confirms the expectation of the perceiver, thus giving the perceiver evidence that his or her false belief is true (Merton, 1948; Snyder & Haugen, 1994; Snyder & Stukas, 1999). Darley and Fazio's (1980) model of the expectancy confirmation process illustrates how expectancy

⁴ Within an interaction, the target and perceiver roles frequently alternate. For the purpose of this paper, the perceiver is always the interviewer and the target is always the interviewee. Additionally, perceiver/interviewer and target/interviewee are used interchangeably throughout the paper, depending on the context.

effects can be introduced into a normal sequence of social interaction (see Figure 1.1). In the larger expectancy confirmation process model, an internally derived expectancy effect occurs at the phase described as the target interpreting the perceiver's behaviour (Darley & Fazio, 1980). In this case, the expectancy effect occurs in the absence of any behavioural cues from the perceiver; instead, the expectancy arises from the target's knowledge about beliefs that may be held by the perceiver. This phenomenon is most commonly seen in the presence of self-perceptions (Fazio, Effrein, & Falender, 1981) or because of an activated group stereotype (Wheeler & Petty, 2001).

When an expectancy is activated based on a group stereotype, the target is in a situational predicament where he or she is at risk of conforming to negative beliefs about a group to which he or she belongs, regardless of whether he or she believes the stereotype or not (Bargh, Chen, & Burrows, 1996; Steele & Aronson, 1995). Subsequent research has identified three main conditions necessary for this type of expectancy to occur. The first condition, stereotype awareness, requires that the target is aware of the negative belief (Schmader, Major, & Gramzow, 2001). The second condition, domain identification, requires that the target cares about doing well in the specific situation (Rosenthal, Crisp, & Suen, 2007). The third condition, task difficulty, requires that the task has some level of difficulty for the target (Keller, 2007). When all three of these conditions are present, the effects of the stereotype have been shown to impede a target's performance (Schmader & Johns, 2003), carry over into unrelated situations (Fazio et al., 1981) and inhibit working memory (Schmader, Johns, & Forbes, 2008).

Although stereotyping as an expectancy effect is well documented in social psychological and educational research (see Pennington, Heim, Levy, & Larkin, 2016), only recently has it been investigated within the legal context. Najdowski (2012) investigated racially motivated stereotypes to demonstrate that persons of African

American heritage are significantly more likely to report feeling the effects of stereotyping than persons of White European heritage when in contact with law-enforcement officers. Moreover, these effects increase when questions are asked regarding a recent crime in the area. Najdowski's hypothesized that the effects of stereotyping in these encounters could influence African Americans to behave in ways that may indicate suspicion to a law-enforcement officer (e.g. increased nervousness, odd body language and decreased eye contact). In such cases, the target's awareness of the stereotypes concerning his or her group and criminal activity becomes activated when he or she is approached by a law-enforcement officer.

The effects of stereotyping in relation to expectancy are not solely limited to group membership based on race; research has demonstrated that these effects also occur based on age (Lamont, Swift, & Abrams, 2015), sex (Leslie, Cimpian, Meyer, & Freeland, 2015) and disability (Silverman & Cohen, 2014). Therefore, it may be possible to induce this effect using negative beliefs about a variety of group membership types. For example, an expectancy response could be activated when a false belief concerns an individual's likelihood to commit a crime based on low socioeconomic status, low education level, gang membership, substance use and/or criminal history. However, reducing stereotype activation for these groups would be extremely challenging in a law-enforcement context. For example, a police officer may encounter many people who belong to one or more of these criminally stereotyped groups and may have formed an expectancy about the suspect based on past experiences with that group. Additionally, a false belief does not have to be explicitly stated to create the expectancy effect and alter the target's behaviour (Bargh et al., 1996). That is, if the false beliefs are implicitly present within the interaction, or unknowingly primed in the interviewee, stereotype activation may occur despite the officer's best efforts to put the interviewee at ease.

Expectancy Effects and Behaviour

Comprehending behaviour in the context of the situation is important. The target's behaviour is what the perceiver observes and uses to confirm her or his beliefs and inform her or his consequent conduct towards the target. Once the beliefs have been confirmed, the perceiver may then use this information when encountering other members of the target's group, thus perpetuating the stereotype and the expectancy. Most investigations of expectancy effects rely on self-report measures completed by the target to determine their potential presence. Other studies also use measures such as heart rate, skin conductance and EEG outputs to understand the physiological symptoms involved (Pennington, Heim, Levy, & Larkin, 2016). However, few studies use observational methods to investigate the verbal and non-verbal behaviours of targets who are experiencing expectancy effects.

Najdowski (2012) examined how expectancy effects in the form of a stereotype may translate into non-verbal behaviour by videotaping the interactions between targets and a law-enforcement officer. Najdowski investigated nine types of non-verbal conduct and found that two behaviours differentiated the targets by racial groups: African Americans appeared significantly more nervous during the interaction and used fewer manipulations (self-touching) and illustrators (gestures). The appearance of nervousness in Najdowski's study could be deemed a subjective measure that varies by perceiver; however, the reduced amount of movement is consistent with the findings of Vrij and Mann (2001). While observing videotaped interview sessions between a murder suspect and a police interviewer, the researchers noted that the suspect did not fidget much during the interview and remained unnaturally still when asked difficult or case-specific questions. The researchers concluded that the suspect may have exhibited a high level of control over his body movements to mask when he was being deceptive. However, these

conclusions cannot explain why similar behaviour was seen in non-criminal, truth-telling targets during Najdowski's (2012) study.

In a subsequent study, Mann, Vrij, and Bull (2002) examined the videotaped behaviour of 16 police suspects during investigative interviews. They coded both verbal and nonverbal behaviours: gaze aversion, blink frequency, head movements, hand/arm movements, pauses in speech and speech disturbances (stutters, trips and verbal crutches). They found that the suspects blinked less and paused more often during speech when lying, and concluded that these behaviours are consistent with increased cognitive load in the suspect – that is, the act of lying, elements of the environment and the interrogative situation combined to tax the mental resources of the suspects in such a way that it affected their verbal and non-verbal behaviour (Gombos, 2006). This means that as the suspects experienced increased demands on their working memory, they had less control over their verbal and non-verbal behaviour (Engle, 2002). The combined findings of Najdowski (2012) and Mann et al. (2002) suggest that during an investigative interview there are increased cognitive demands that can be observed through interviewee behaviour, regardless of statement veracity.

Implications of Expectancy Effects in the Interview Room

The aforementioned research findings demonstrate the impact of expectancy effects on cognition, inhibited learning, motivation and performance using various types of group membership (e.g. age, sex, race, socio-economic status, etc.). In summary, expectancy effects tax the cognitive resources of the person experiencing it in a way that impairs performance. Thus, an interviewee experiencing an expectancy effect, and the resulting increased cognitive load, may have fewer mental resources available to adequately identify and deal with the demands of the interview.

There is also evidence that the impacts of expectancy effects can linger and negatively influence performance in a broad range of situations that are unrelated to the nature of the expectancy (Inzlicht, Tullett, & Legault, 2011). Croizet et al. (2004) demonstrated that individuals experiencing expectancy as stereotype show a decrease in performance due to increased mental load. This finding is especially significant in relation to investigative interviewing conditions, wherein the interviewee's cognitive resources may already be undermined by the perceived severity of the situation. Thus, if expectancy effects are also present, a suspect's behaviour may be affected. This meaning that the suspect's ability to fully comprehend the interviewer's questions and appreciate the implications of his or her responses to those questions may be impaired (Berggren, Richards, Taylor, & Derakshan, 2013). Understanding expectancy effects as an inducer of cognitive load during investigative interviews is important for two reasons: i) increased load can undermine performance such as memory recall (Barrouillet, Bernardin, Portrat, Vergauwe, & Camos, 2007) and question comprehension (Wallen, Plass, & Brunken, 2005), and ii) some of the behaviour indicative of increased load can be misinterpreted by police interviewers as suspicious behaviour. For example, a suspect who appears nervous to an interviewer and who also has difficulty remembering timelines, details and events could be deemed to be uncooperative and evasive.

A suspect who appears distracted, avoids eye contact, exhibits increased speech disturbances and seems overtly nervous may also be considered shifty or guilty. Mann, Vrij, and Bull (2004) demonstrated that police officers most often use decreased eye gaze (78%) and increased body movements (31%) to determine veracity in a suspect. Judging deception in this manner is problematic, however, because these behaviours are faint and unreliable (De Paulo et al., 2003), even though they are often used as signs of deception across many cultures and countries (Global Research Deception Team, 2006). Mann,

Vrij, Fisher, and Robinson (2008) suggest that attending to non-verbal behaviour may also strengthen the tendency for police officers to see deception.

If a police officer is accustomed to using non-verbal behaviour to determine deception and evasiveness, it may be enough to prompt him or her to believe that a suspect is lying or guilty. When this occurs, previous research has demonstrated that in a confession-driven investigative interview scenario, the interviewing officer may then increase interrogative pressure and engage in more coercive tactics (Kassin et al., 2003, 2007, 2009). Although the extant literature has encouraged law-enforcement agencies to move away from coercive interview tactics (Kassin et al., 2009), the application of interrogative pressure to obtain a confession is still common practice in many countries (e.g., US, Japan, and parts of Europe; Areh, Walsh, & Bull, 2016; Kassin et al., 2007).

Given the high-pressure, high-stakes nature of investigative interviews, it is easy to imagine how cognitive load can have an adverse effect on interviewees' performance. Some countries have abandoned confession-driven interviews in favour of information-gathering interviews (e.g. the PEACE model; see Clarke & Milne, 2011). The goal of information-gathering interviews is to obtain as much information as possible from all interviewees (including suspects) without using intimidation, bluffs or promises. Although this type of interview is only used in a few countries – e.g. the United Kingdom (UK), Norway, Australia, and parts of Canada – it is widely regarded as an effective and more ethical type of investigative interviewing technique (Shawyer, Milne, & Bull, 2009). However, many of the factors identified as problematic in the confession-driven interview have not been tested with the information-gathering interview; this means it is still unknown as to which phenomena are specific to one type of interview and which occur as an outcome of all types of investigative interview.

The Present Study

The effects of feeling as though you are being targeted or judged based on group membership is relevant to all human interactions, including encounters with law-enforcement officers. The aim of the present study is to investigate expectancy effects on behaviour when expectancies have only been implied through information about the participant's group membership. Given that most research on investigative interviews uses accusatory or confession-driven interview techniques to study interviewee behaviour (see Kassin et al., 2009; Meissner, Redlich, Bhatt, & Brandon, 2012), little is known about expectancy confirmation effects in non-accusatory environments while using information-gathering techniques. Additionally, inducing expectancy effects as a stereotype has not been investigated in a forensic setting using non-rationally motivated false beliefs. To address these gaps in the literature, negative information about group membership and honesty was used to induce an expectancy effect because of its performance-impairing properties, as well as its ability to generalize to a variety of situations.

In line with previous research on expectancy effects and stereotype activation, it was expected that awareness of negative beliefs about group membership would influence the target's performance during the interview – that is, targets exposed to the expectancy would exhibit behaviour indicative of increased cognitive demands (decreased body movements, decreased blink rate, increased eye closure, increased gaze aversion, shorter response length and increased speech disturbances) during both types of interview questions. Additionally, it was predicted that targets exposed to the expectancy would exhibit more of these behaviours in the information-gathering phase of the interview due to the activation of the stereotype prime just prior to the beginning

of the information-gathering questions, and the more investigative nature during this phase of the interview.

Method

Participants. A total of 52 targets (37 females and 15 males) were recruited from a university in The Netherlands based on a current grade point average (GPA) of less than 7.9. The targets were all recruited based on GPA to ensure that the negative information was specific to the domain of the academic environment. The targets volunteered to complete the study under the pretence that the researchers were investigating the relationship between GPA and sensory perception (i.e. a taste-testing task). Negative information about their grade range was fabricated and introduced to the targets as a belief through a series of fictitious scientific studies. The targets in the expectancy group were given information that people with a GPA of lower than 8 are more likely to lie and cheat on tasks to be successful. All targets were tested individually and were naive to the true purpose of the study.

One female participant was excluded from the analysis because she reported that her GPA improved in the time between recruitment and participation ($N = 51$; $M_{Age} = 21.14$, $SD = 1.84$). Most Targets were undergraduate students (72.6%) in their first (21.9%), or third year of study (23.5%). Targets recruited via the faculty participant pool received one research participation credit as an incentive. No incentive was offered to those recruited outside of the faculty participant pool.

Measures and materials. A blind taste-testing task was used to provide a task that would not betray the true nature of the study. The task also allowed for a situation wherein the participant would be left alone and could choose to complete the task honestly or just lift the covers on the juice bottles to obtain the answers. To set up the task, six different brands of apple juice were purchased at a local supermarket. The juice

was poured into six identical 500-ml plastic bottles with paper labels showing the brand name. For the blind portion of the test, opaque paper covers were slid over each bottle so that the brand name was no longer visible.

The study took place in a small room equipped with a table for the tasting task, a computer to record the questionnaire responses and present the stimulus material and an HD video camcorder to film the participant and record the interview. The digital video was saved on a data card and transferred to an encrypted external hard drive after every two or three testing sessions for later editing and analysis. Pre-interview, the targets completed a demographic questionnaire that captured their gender, age, year of study, GPA, current employment status and job title. As a manipulation check, targets provided self-report ratings of mood and self-confidence on a scale from 1 (extremely negative mood, extremely low self-confidence) to 10 (extremely positive mood, extremely high self-confidence). This step was included to determine whether purposeful behaviours (countermeasures) or nervous behaviours could account for, or had an influence on, any of the outcome behaviours. The behaviours coded in this study were specifically chosen because they are reliable indicators of increased cognitive load. Other behaviours (i.e. smiling, laughing and serious affect) were coded as indicators of demeanour during questioning (see Table 3.1 for a complete list of behaviours).

Post-interview, the targets were asked to indicate from a checklist any symptoms of anxiety they may have experienced during the interview (see Appendix B). They were also asked to select any behavioural countermeasures that they may have purposefully employed during the interview in order to appear honest and truthful to the interviewer (Appendix B). They then rated their mood and self-confidence again on scales from 1 to 10. Finally, the targets rated each of the interview questions on a scale from 1 (extremely non-accusatory) to 10 (extremely accusatory).

Stimulus and Procedure. The study was conducted by a research assistant who was blind to the condition and the main hypotheses. All participants were tested individually, and the research assistant used a script to ensure consistency for each participant. The research assistant was instructed to act in a friendly but professional manner throughout the course of the study. A review of the video recordings by the primary investigator showed that the research assistant was consistent with each participant and that there were no deviations from the study script.

Prior to taking part the participants provided partial informed consent, as the true nature of the study was concealed. Exactly what portions of participation would be videotaped was vaguely worded to obscure the fact the participants would be secretly videotaped the entire time. Once they had been equally and randomly assigned to either the expectancy group ($n = 26$) or the control group ($n = 25$), they completed the demographics survey and rated their self-confidence and current mood. Next, the participants in the expectancy condition received a fabricated report about people with a GPA of less than 8 being more likely to lie and cheat to succeed at tasks. There was also fabricated information about the extremely low probability of someone with a GPA of less than 8 scoring 100% on any sensory perception task. This information was used to prime the participants in the expectancy group for an expectancy effect during the information-gathering stage of the study. The participants in the control group read general information about advertising and blind taste-testing.

The cover stories were presented in sections, and after each section there were multiple choice questions designed to ensure that the participant attended to, and understood, the information. Participants in both groups then received verbal instructions about the taste-test task. This task used six different brands of apple juice. The containers were uncovered, and the participant was asked to taste each and memorize the brand. The

research assistant then asked the participant to turn away, putting covers over the juice containers and shuffling their order. The participant was then asked to taste the juice again and identify each brand by taste alone. Each participant made her or his choice by marking the letter on the covering to the corresponding brand on an answer sheet. During this part, the research assistant left the room under the pretence of needing to retrieve the study materials. Meanwhile, the camcorder was recording the participant to verify later whether she or he lifted the covers to get a good score or not. A review of all tapes revealed that 100% of the participants self-elected into an honest condition, as no one cheated on the task.

After three minutes, the research assistant returned and prepared the room for the interview by positioning the participant in front of the camera and pretending to turn the video camera on (it was already recording). Each participant was asked five neutral questions about the task (Table 2.1) in order to establish baseline behaviour in the interview environment. The research assistant then pretended to score the participants' taste-test results. Regardless of group, each participant was told that she or he had scored perfectly, which should be impossible based on her or his GPA (in fact, no one scored perfectly on the task). The research assistant then claimed that she needed to ask some additional questions to make sure that the participant's data could be used. Five information-gathering questions were then asked (Table 2.1). The order of neutral and information-gathering questions was not counterbalanced to mimic the natural flow of an investigative interview, which generally moves from person-oriented questions to case-oriented questions.

Once the interview was completed, the video camera was turned off and the self-report questionnaires were administered to capture the participants' ratings of nervousness and interview behaviours during the second set of questions (information-

gathering), their perception of all the interview questions, a second self-confidence and current mood rating and their thoughts on the true nature of the study. In the final step, the participants received full written and verbal disclosure about the study. They were informed that they had been secretly taped during the taste-testing task, and consent for the use of their video in the study was obtained. The participants were also assured that their GPA did not indicate their inability to perform sensory tasks nor their likelihood to cheat or lie. They then watched a short humorous video to lift and possibly improve their mood in the event it worsened during the study.

Table 2.1

The neutral and information-gathering questions asked during the interview

Neutral Questions

1. What did you like about the juice taste-testing task?
 2. What did you think about the flavour of the juices we chose?
 3. What brand did you like the most?
 4. What brand was easiest for you to recognize?
 5. How often do you usually drink apple juice?
-

Information-gathering Questions

6. Describe to me in detail what you did while I was out of the room?
7. How long did it take you to complete the task?
8. How many times did you sample each juice?
9. Did you think about lifting to coverings to look at the labels while I was out of the room?

10. Have you spoken with other students who have already completed this task?

Coding and Intercoder Agreement. Each participant's video was edited into 10 clips that only included the participant's response to each question (51 participants 10 clips for each video = 510 video clips). Each clip was edited to start exactly when the interviewer finished talking and end just before the interviewer asked the next question. An event sampling technique was used to code the videos, with the duration of the video clip determining a single event. To control for variations in the duration of each video clip, all behavioural frequencies were standardized by dividing the counts by the duration of the video clip.

Three student interns, who were blind to condition and hypotheses, coded the video clips. These coders were first given training for one month that was designed to help them identify the target behaviours (see Table 2.2), and they were not permitted to analyse the study materials until they had achieved a preliminary interrater agreement of 80% on practice materials. The behaviours were recorded by counting the frequency of occurrences within the clip. Intercoder agreement was determined by having at least two coders score 30% of the same video clips, which were randomly selected from the sample. Krippendorff's alpha (α , Hayes & Krippendorff, 2007) was calculated for each of the behaviours, which generated an individual behaviour agreement (see Table 2.2). Overall agreement was also calculated, $\alpha = 0.986$, $CI = [.978, .990]$, which indicated an extremely high level of reliability. Acceptable K-alpha parameters were set at a minimum of $\alpha = .85$ for all behaviours. This could be interpreted as a conservative limit; however, an $\alpha = .80$ is regarded as "good reliability"

Results

Preliminary analyses. During the end-of-study questionnaire, the participants were asked if they had figured out the true nature of the study to determine whether or not this may have influenced their behaviours. No participant reported knowing what the study was about, and all data are therefore usable. Analyses were first conducted to determine if there are differences between groups for self-reported mood. Differences were tested for between the expectancy group and the control group on self-confidence, anxiety and purposeful interview behaviours. A 2 (group) x 2 (time) mixed-design analysis of variance (ANOVA) was conducted which demonstrates that the mood ratings do not differ between the first self-report at Time 1 and the second rating at Time 2 ($M_1 = 7.49, SD = 1.06$ and $M_2 = 7.49, SD = 0.96$), $F(1,49) = .35, p = .556, \eta^2 = .01$. Furthermore, the expectancy group ($M_{Expectancy} = 7.65, SD = 0.89$) did not differ from the control group ($M_{Control} = 7.32, SD = 1.22$) for overall rating of mood, $F(1,49) = 2.68, p = .11, \eta^2 = .05$. The analysis also demonstrated that ratings of self-confidence remained stable from time one to time two ($M_1 = 7.08, SD = 1.14$ and $M_2 = 7.17, SD = 1.01$; $F(1,49) = .40, p = .531, \eta^2 = .01$). Moreover, the expectancy group ($M_{Expectancy} = 7.34, SD = 1.29$) did not differ from the control group for overall reports of self-confidence ($M_{Control} = 6.90, SD = 0.79$; $F(1,49) = 2.40, p = .128, \eta^2 = .05$).

When participants were asked if they purposefully tried to appear more truthful by using any specific behaviour during the interview, 70% of the sample indicated that they used at least one of the listed tactics (Appendix B), with the most common tactics reported as pausing to collect their thoughts (31.4%) and maintaining open body language (31.4%). The targets did not report having purposefully employed the behaviours of focus in the present study; therefore, the results in the main analysis were not influenced by the target's interview countermeasures. Furthermore, the most

common symptoms of nervousness reported were stuttering or tripping over words (23.5%), difficulty thinking (17.6%) and feelings of defensiveness (17.6%). An independent samples t-test shows that the targets in the control group ($M_{Control} = 1.52$, $SD = 1.36$) reported more symptoms of nervousness than Targets in the expectancy group ($M_{Expectancy} = 0.58$, $SD = 0.94$; $t(49) = 2.87$, $p = .006$, $d = .80$, 95% CI[0.28, 1.59]). However, control Targets reported only one symptom on average, which was not indicative of experiencing enough anxiety to influence the behaviours of interest.

The participants were also asked to rate the interview questions on a scale of 1 (not accusatory) to 10 (extremely accusatory) for both the neutral and the information-gathering phases of the interview. Although there is a difference in the ratings for the two types of question (neutral versus information-gathering), no single question is rated as overtly accusatory. A t-test revealed that participants rated the information gathering questions as more accusatory than the neutral questions ($t(50) = -9.75$, $p = .001$, $d = 1.46$, 95% CI[-3.43, -2.26]); however, the mean score for both types of questions did not exceed the mid-point on the rating scale ($M_{Neutral} = 1.80$, $SD = 1.50$; $M_{Info-gathering} = 4.65$, $SD = 2.36$). Question ratings were also examined to determine whether they differed by target group. There were no significant difference in scoring the neutral questions between groups ($t(49) = -0.018$, $p = .99$; $M_{Control} = 1.80$, $SD = 1.38$; $M_{Expectancy} = 1.81$, $SD = 1.62$). There were also no differences between groups when scoring the information-gathering questions ($t(49) = -0.372$, $p = .71$; $M_{Control} = 4.52$, $SD = 2.20$; $M_{Expectancy} = 4.77$, $SD = 2.54$).

Main analysis. There was some deviation from normality in many of the dependent variables when assessed by Shapiro-Wilk's test ($p < .05$); however, an inspection of the Q-Q plots revealed only a slight positive skew in the data. Due to the robustness of the parametric test used, the analysis proceeded without the need to

transform the data. The subsequent analyses revealed there was homogeneity of variances, as assessed by Levene's test ($p > .05$) and homogeneity of covariance, as assessed by Box's test ($p > .05$) for all dependent variables. Any outliers in the data were dealt with using winsorization (Field, 2009).

The 10 observed behaviours of interest were analysed using a 2 (expectancy v. control) x 2 (neutral questions v. information-gathering questions) mixed design ANOVA, where expectancy was the between-subjects factor, and question type was the within-subjects factor⁵. The analysis demonstrated that there were main effects of expectancy on blink frequency $F(1, 49) = 6.55, p = .01, \eta^2 = 0.12$ with the targets in the expectancy group ($M = 1.25, SD = 0.48$) blinking less frequently than targets in the control group ($M = 1.64, SD = 0.72$). There was also a main effect of expectancy on response length, $F(1, 49) = 12.47, p = .001, \eta^2 = .20$ as the targets in the expectancy group ($M = 39.56, SD = 19.50$) gave shorter answers than targets in the control group ($M = 57.35, SD = 23.0$).

There was also a main effect of expectancy on smiling behaviour, $F(1, 49) = 4.96, p = .03, \eta^2 = 0.09$ as the targets in the expectancy group ($M = 0.36, SD = 0.19$) smiled less than Targets in the control group ($M = 0.27, SD = 0.17$). Main effects of expectancy were also found for serious affect, $F(1, 49) = 4.76, p = .03, \eta^2 = 0.09$, with targets in the expectancy group exhibiting more instances of serious expression ($M = 0.99, SD = 0.12$) than targets in the control group ($M = 0.99, SD = 0.12$). Furthermore, a main effect of question type was found for gesturing behaviour (illustrators), $F(1, 49) = 4.53, p = .04, \eta^2 = 0.09$ with targets in both groups using less illustrators (gestures) in the information-

⁵ The research question investigates individual behaviours that may indicate the presence of expectancy effects. For that reason, individual ANOVA were conducted to test each dependant variable and answer the univariate research question (see Huberty & Morris, 1989; Mitchell & Jolley, 2012).

gathering phase ($M = 0.94$, $SD = 0.47$) than in the neutral questioning phase ($M = 1.06$, $SD = 0.37$).

There was a small interaction effect of expectancy and question type on speech disturbances $F(1, 49) = 4.86$, $p = .03$, $\eta^2 = .09$; however, it was not in the hypothesised direction. targets in the control group uttered more speech disturbances in the information-gathering phase of the interview ($M = 1.11$, $SD = 0.44$) than during the neutral questioning phase ($M = 0.77$, $SD = 0.37$). It was suspected that this interaction effect might be an artefact of the differences in response length – that is, the control group spoke more, and thus had the opportunity to use more filler words and pauses. To test this, speech disturbances were reanalysed as a proportion of response duration. The interaction effect of question type and expectancy disappeared; however, main effects of expectancy emerged in the hypothesized direction, $F(1, 49) = 5.08$, $p = .03$, $\eta^2 = .10$, with the expectancy targets ($M = 0.24$, $SD = 0.01$) demonstrating more speech disturbances than the control targets ($M = 0.14$, $SD = 0.01$).

No significant main effects of expectancy were found for laughter, $F(1, 49) = 1.91$, $p = .173$, $\eta^2 = .04$; however, a small interaction effect was found between groups and question type $F(1, 49) = 4.37$, $p = .04$, $\eta^2 = 0.08$. This was due to targets exhibiting more laughter in the information gathering phase of the interview ($M = 0.10$, $SD = 0.11$) than during the neutral phase ($M = 0.14$, $SD = 0.14$; $p = .03$, $\eta^2 = .09$). However, control targets drove this difference as they displayed more laughter ($M = 0.18$, $SD = 0.20$) in the information-gathering phase than expectancy targets ($M = 0.10$, $SD = 0.19$; $p = .05$, $\eta^2 = 0.08$). For the remaining behaviours of interest, no significant main effects were found for eye closures $F(1, 49) = 0.61$, $p = .44$; gaze aversion, $F(1, 49) = 1.58$, $p = .22$; or manipulations $F(1, 49) = 0.22$, $p = .64$.

Table 2.2

Definitions of verbal and nonverbal behaviours coded in the study, the corresponding Krippendorff's alpha (α) for interrater reliability, and the predicted direction of differences in behaviour for targets exposed to the expectancy.

Behaviour	Operational Definition	α	Predicted Direction of change
Response Length	Duration the Target speaks during the video clip	.99	<
Blink frequency	Brief closure of both eyes lasting less than one second. Includes blink flurries and rapid blinking	.92	<
Eye Closure	Lids completely drawn together for more than 1 second. No sclera, iris or pupils are visible.	.92	>
Manipulations	Scratching, rubbing, tapping, grooming, or touching the self. Includes crossed arms and clasped hands.	.94	<
Illustrators	Gestures used to accentuate speech. Includes shoulder shrugs, head nods and shakes while speaking.	.97	<
Smile	Corners of the mouth turned up to form a pleased, friendly or kind facial expression. Can be open or closed mouth with teeth exposed or not.	.89	<
Laugh	Spontaneous sounds associated with amusement or nervousness	.99	<
Gaze aversion	Frequency that Target breaks eye contact with Interviewer	.97	>
Serious facial expression	Intense or semi-flat affect. Code only if occurs for duration of the video clip.	.99	>
Speech Disturbances	Inarticulate sounds made throughout a statement that include aahs, umm, etc., or elongation of vowels. Includes periods of silence lasting 2 seconds or more. Can occur at the end of a statement or mid-statement.	.93	>

Discussion

The current study manipulated an expectancy effect in two groups of targets (those exposed to an expectancy and a control group) to examine how their behaviour might differ and change over the course of a non-accusatory interview that used information-gathering questions. The key findings in this study provide evidence that information-gathering questions do not seem to exacerbate expectancy effects; however, the presence of expectancy effects can be observed in certain interviewee behaviour over the course of the interview.

The effects of information-gathering questions. Information-gathering questions were tested against the effects of expectancy by inducing stereotype activation in half of the targets. It was predicted that the resulting expectancy effect, paired with the more investigative style of the questions, would amplify the behaviours indicative of increased cognitive load. Contrary to the hypothesis, the present study suggests that information-gathering questions do not significantly increase the cognitive load that accompanies an existing expectancy effect. That is, unlike guilt-presumptive interview questions, information-gathering questions do not seem to create an expectancy effect on their own and in the absence of other interview tactics (Hill et al., 2008). Although both groups gestured less in the information-gathering phase of the interview, this reduced movement was likely due to only a slight increase in load. That is, the increased cognitive demands were not great enough to influence the other behaviours of interest. While this finding is promising, further research investigating cognitive load in a more high-stakes interview setting needs to be conducted. There is also some evidence that the prime activation may have caused feelings of nervousness in the targets (i.e. once the targets had been told that their results were anomalous and that they needed to answer some additional questions).

Nervousness and cognitive load can be present at the same time; however, they often have opposite effects on behaviour. For example, nervous people tend to fidget more and use more manipulators (self-touch), whereas people who are cognitively taxed generally become more still. Therefore, only the effects that are having the greatest influence on behaviour are generally seen (Vytal, Cornwell, Arkin, & Grillon, 2012). In the present study, it is possible that since the levels of nervousness and cognitive load were not extremely high, some behaviours for both increased mental load and nervousness were observable. For example, the control targets reported more symptoms of nervousness after the interview and exhibited more laughter during the information-gathering phase of the interview (Kasl & Mahl, 1965). Because the targets who laughed were not conveying humorous information, it was determined that this laughter was used to relieve tension and appear non-threatening (Nelson, 2008).

The effects of expectancy. The findings in the present study demonstrate the ease with which an expectancy effect can be induced in a target. There are observable differences in the behaviour of the targets who experienced the expectancy effects compared to those in the control group. This finding lends support to the literature that cautions law-enforcement officers, and other legal personnel, against making important decisions based on their visual perceptions of a suspect or interviewee (Vrij, 2008). In the present study there are significant differences between the two groups for blinking, response length, speech disturbances, smiling and serious expression. When behaviour generally associated with increased cognitive load was examined, it was found that the frequency of blinking was decreased for the targets in the expectancy group, which is indicative of the increased mental load that accompanies an expectancy effect (Holland & Tarlow, 1972; Rosenfield, Jahan, Nunez, & Chan, 2015). This finding shows that

merely planting the negative information was enough to increase the cognitive load and subsequently influence behaviour.

Similar findings are reported in other studies, supporting the notion that suggested expectancy effects can be primed and activated automatically with contextual cues (Bargh et al., 1996; Chen & Bargh, 1997; Leslie et al., 2015). Contrary to expectations, increased eye closure and gaze aversion were not observed in the targets who were exposed to the expectancy. Closing one's eyes and breaking eye contact are tactics used by persons experiencing high amounts of mental load to reduce external visual stimulus (Doherty-Sneddon & Phelps, 2005; Vredeveltdt, Hitch, & Baddeley, 2011).

The targets who experienced the expectancy also gave significantly shorter responses across both phases of the interview and demonstrated increased speech disturbances. Short and vague responses are often viewed as an indicator of being uncooperative and evasive (Mann et al., 2008). The targets in the present study had no reason to be ambiguous or unhelpful in their replies. It is possible that these targets did not want to say too much in fear of being perceived as dishonest and thus fulfilling the expectancy about their honesty. It is also reasonable to assume that the increased mental load experienced with the expectancy effect simply made shorter responses easier to deliver. It was anticipated that the targets in the expectancy group would exhibit more speech disturbances ('ums', 'ahhs', etc.) and pauses in their speech. It was assumed that the increased mental load associated with the expectancy effect would cause the targets in the expectancy group to use pauses and speech disturbances to collect their thoughts before responding, which was shown to be the case.

Three behaviours were also coded that could potentially provide some insight into demeanour (i.e. smiling, laughing and serious facial expression). Significant behavioural differences between groups and across question types were observed for these variables.

The targets in the expectancy group smiled less and maintained more serious facial expressions throughout the questioning, despite reporting a positive mood that was consistent with the targets in the control group. It is likely that the change in demeanour during the information-gathering questions was due to the increased mental load experienced when the targets were informed that there was a potential problem with their task results. This suggests that when the targets were told of the improbability of their results, the situation was perceived as more serious. Note that the targets in both groups reported the information-gathering questions as more accusatory than the neutral questions. The scores for the information-gathering questions do not exceed the midpoint for the rating scale and thus the questions were not scored as overtly accusatory. However, this finding may be an indication of the targets' nervousness during this phase of the interview.

Limitations and future research. The targets in the present study were all persons telling the truth in a safe and non-threatening environment with a friendly interviewer. However, the presence of an expectancy effect about group membership and honesty was enough to significantly decrease the length of response, eye blinks and smiling while increasing speech disturbances and serious affect. There are clearly some limitations in the present study that need to be addressed to fully understand the implications of expectancy effects on investigative interviews. The findings presented herein have been tested in an academic setting in an attempt to extrapolate to a legal context. However, it cannot be concluded that the phenomenon of expectancy effects is a frequent occurrence during investigative interviews, nor can it be concluded that this finding will transfer to real-world situations. However, it has been demonstrated that expectancy effects are potentially another avenue to increased cognitive load in an already cognitively taxing situation. Further research is needed to determine how a non-

racially-motivated stereotype may affect targets in a higher-pressure, high-stakes interview setting.

Another limitation is that the information-gathering phase of the interview does not realistically reflect a real-world investigative interview using information-gathering techniques. The aim was to choose questions that would incorporate free recall (see Question 6 in Table 2) and encourage more details about what went on in the room. The remaining questions are specific and focused on information that could be helpful in a real investigation. Because it was necessary to control for consistency with each target, the interviewer was directed to stick to a script; therefore, prompts, clarifying questions and follow-up questions were not used as they would be in a real investigation. Future research is needed to explore how the altered behaviour of targets, due to increased mental load and expectancy effects, may influence subsequent behaviours in perceivers during investigative interviews in real-world settings.

Conclusion

The present study illustrated the erroneous nature of such judgements and highlights why legal decision-makers need to be cognisant of how expectations may influence some of the behaviour they observe. When the findings of this study are applied to the investigative interview, important insights emerge. Previous research has demonstrated the effects of cognitive load during mentally taxing tasks and high-stakes investigative interviews. In the present study, similar effects were elicited during a non-accusatory, low-stakes interview about a non-criminal event by using exposure to a false belief about group membership. Identifying how these effects translate into verbal and non-verbal behaviour during an investigative interview can help with understanding how this behaviour can potentially influence the outcome of the interview.

Not all expectancies originate internally, and a suspect's behaviour can be altered based on the types of questions asked (e.g., Narchet et al., 2011). Questions perceived as accusatory and guilt presumptive have been shown to influence interviewee behaviour during interrogations (Kassin et al., 2003); however, this outcome has not been reliably demonstrated in non-accusatory interviews. Therefore, the influence of question types and potentially guilt presumptive question phrasing needs to be examined in the context of investigative interviews.

Chapter 3

Identifying Guilt Presumption through Question Phrasing and Word Abstraction

Overview

Research has repeatedly shown that accusatory questions posed during an investigative interview are indicative of biased beliefs about suspect guilt. Linguistic research has shown that the verbs used in utterances can be indicative of biased beliefs about another person. In the present study, question type and the verbs used in question formulation were examined using non-police participants to explore the influence of guilt presumption on interview questions. The Linguistic Category Model (Semin & Fiedler, 1991) was used to analyse verb abstraction and positive/ negative valence of the formulated interview questions. The findings revealed that interviewers who presumed guilt were more likely to formulate accusatory questions and use a higher verb abstraction with negative valence. The findings are in line with previous research in both guilt presumptive interviewing and linguistically biased language. However, this study expanded on previous research by allowing participants to come to their own conclusions regarding guilt, and to formulate their own questions for the suspect. The influence of detailed instruction for conducting an information-gathering interview using the foundation principles for PEACE was also examined. In line with previous findings, exposure to PEACE and its principles had no influence over the creation of accusatory questions or reducing guilt bias.

Identifying Guilt Presumption through Question Phrasing and Word Abstraction

The investigative interview is one of the most important information gathering tools used by the police when trying to solve a crime (Walsh, 1994), and is especially helpful for obtaining statements that can be used as evidence in court. Thus, it is imperative that the interview is conducted in a way that will not call the validity or

reliability of the statements into question. For that reason, fact-finding or information-gathering type interviews are regarded as preferable to accusatory or confession driven interviews. Researchers and practitioners have made considerable efforts over the last two decades to improve information-gathering techniques for use in the investigative interview (see Meissner et al., 2012). However, more work is needed to understand the factors that may be detrimental to the interview outcomes, such as the guilt presumption and confirmation bias of the interviewing investigator. The aim of this study was to determine whether the language used in question formulation can help detect interviewer bias. In addition to question type, the specific words used by interviewers were evaluated together with interviewer guilt judgements.

Examining Biases in Information-gathering Interviews with Suspects

Police investigators must evaluate existing evidence and develop crime scenarios to determine who to question as a person of interest, or as a suspect in a case (Maguire, 2003). This part of the process can also be the source of problems in an investigation. Hypothesis construction can often lead to tunnel vision or investigator bias (Ditrich, 2015) where the investigating officer becomes so focused on confirming assumptions, they attend only to hypothesis confirming information (Eerland & Rassin, 2010; Nickerson, 1998). Confirmation bias occurs in any type of interview. Even information-gathering and non-confession driven interviews can be influenced by the interviewer's preconceived ideas about interviewee involvement in the case, witness reliability, veracity judgements, and suspect guilt or innocence (Hill et al., 2008; Olson, 2013).

Preconceived judgements of suspect guilt are particularly problematic for the investigative interview because the interviewer can base decisions on biased beliefs or judgements (Ask & Granhag, 2005; Smalarz, Madon, Yang, Gyll, & Buck, 2016). Behavioural indicators of confirmation bias during the investigative interview may take

the form of coercive interview tactics or guilt presumptive questioning (Kassin et al., 2003; Kassin et al., 2009; Meissner & Kassin, 2004), which in turn perpetuates a biased chain of events (Darley & Fazio, 1980). Moreover, third party observers who witness these interactions are also more likely to believe the interviewee is guilty (Hill, et al., 2008; Kassin et al., 2003; Narchet et al., 2011). There is also evidence that innocent interviewees who are asked more accusatory questions are more likely to falsely confess (see Kassin, 2005, 2014). However, research in this area has mainly been conducted on accusatory and confession driven interviews. There are very few studies that have examined the effects of biased interviewer judgements within an investigative interview where the objective was to gather information.

Police interviewers in England and Wales who are trained to conduct information-gathering interviews are instructed to: i) approach every interview without prejudice, ii) be prepared to believe any account they are given while exercising common sense, and iii) to set objectives to help them corroborate or disprove information (see College of Policing, 2016). These three items are part of seven principles that guide police interviewers and investigators. These principles are meant to facilitate an objective mindset for creating non-accusatory and information-gathering questions. The instruction to avoid prejudice intuitively seems as if it should safe guard against confirmation bias occurring; however, that is not the case. Researchers have revealed that notwithstanding previous training, interviewers who are questioning suspects often revert to inappropriate questions and opinion or statement utterances (Griffith & Milne, 2006; Heydon, 2012; Powell, Wright, & Clark, 2010). Current training practices and reduced supervision are often cited as the source of these errors (Scott, Tudor-Owen, Pedretti, & Bull, 2014; Walsh & Bull, 2010).

The Linguistic Category Model (LCM) as a Tool to Detect Biased Language

Linguistic bias is a systematic asymmetry in word choice used to transmit essential beliefs and expectancies about a person or social category (Beukeboom, 2012; Douglas & Sutton, 2003). Researchers have shown that linguistic biases can be detected in the use of abstract language where a Perceiver judges and describes the actions of a Target as being indicative of stable characteristics (for a review see Wigboldus & Douglas, 2007). Semin and Fiedler (1988, 1991) took an approach to language as a product of socio-cognitive actions and an influencer of socio-cognitive processes. To measure the level of bias conveyed through linguistic abstraction, Semin and Fiedler (1988) created a four-level classification model that differentiated verbs and adjectives within the interpersonal domain. The researchers eventually expanded this classification system to create the Linguistic Category Model (LCM; Semin & Fiedler, 1991).

The LCM is a tool used to investigate the interplay between language and social cognition and is founded on three basic assumptions. First, language is considered a structure comprised of rules that are recognised by speakers who understand the language. Second, language is a complex skill; however, the speaker is not necessarily aware of the implications of his or her utterances for others (see Searle & Vanderveken, 1985). Third, language is a medium for practical activity to enable communicative intent in a variety of social contexts. It is based on these assumptions that Semin and Fiedler posit - that the LCM transcends the semantics of a language. That is, the properties of the LCM apply across all aspects of language and are beyond consciousness (Douglas & Sutton, 2008; Semin, 2011; Von Hippel, Sekaquaptewa, & Vargas, 1997).

The LCM measures biased language through abstraction in terms of verbs and adjectives. Verbs can be used to describe actions (e.g., cheat, hurt, talk) or psychological states (e.g., like, hate, feel). Adjectives are used to describe the properties of a person's

traits or perceived characteristics (e.g., aggressive, helpful, honest). Within the LCM categories, descriptive action verbs (DAV) are the first category. These verbs are the most concrete (i.e., kick, push, hug), refer to a single event, and are highly context bound. This means that the positive or negative perception of the action is completely circumstantial. Moving from most concrete to most abstract words, interpretive action verbs (IAV) are the next category. IAVs also refer to a single event, but they have a clear positive or negative valence and are perceived to be indicative of a person's internal motivations (e.g., cheat, influence, prepare). State verbs (SV) are the third category and do not refer to a single event, but instead refer to emotional or mental states with clear positive or negative connotations (e.g., hate, love, disagree). The final and most abstract category is adjectives (ADJ), which are used to describe a person using words that have positive or negative meanings and convey traits specific to that person (honest, pessimistic, reliable; see Semin & Fiedler, 1988, 1991; Wigboldus & Douglas, 2007).

As word abstraction increases, the likelihood of biased language also increases. More abstract words are seen to be more generalisable and indicative of the Target's stable traits (Brown & Fish, 1983; Semin & Fiedler, 1991). For example, the phrase *John punched Ted* is a more concrete term than *John hurt Ted*. Although punching seems to be a negative action, it is assessed within the context of the event, and thus the focus is on the specific situation. If John and Ted are boxing, this action is acceptable within the confines of the boxing match. However, if the punch was an act of physicality towards Ted in a business meeting, it becomes highly unacceptable. Nonetheless, the DAV 'to punch' is perceived as an action that occurred in an isolated event and not indicative of who John is as a person. Conversely, the IAV of John hurting Ted implies a negative connotation regardless of the situation (Semin, 2011; Semin & Fiedler, 1991; Wigboldus & Douglas, 2007). This event is further abstracted with the phrase *John hates Ted*. The

SV ‘hate’ is understood within the confines of an individual’s comprehension of what it means to hate (Semin, 2011); however, it also implies that hatred is a negative and stable trait of John, and thus, he is perceived as likely to be hateful towards others (Au, 1986, Brown & Fish, 1983, Semin & Fiedler, 1988). This assumption about John becomes more salient if he is explicitly described with the ADJ of ‘hateful’.

Bias through verb abstraction has been demonstrated in research on person descriptions, stereotypic expectancies, and interpersonal interactions (for a review see Beukeboom, 2012; Wigboldus & Douglas, 2007). Evidence in the literature suggests that linguistic choices when posing a question can convey whether the person posing the question has preconceived beliefs or ideas about the topic or the subject of the question (De Poot & Semin, 1995; Douglas & Sutton, 2006; Wigboldus, Spears, & Semin, 2005); however, there has been little research of abstraction in investigative or forensic settings.

Because it is an interpersonal interaction, verb abstraction is relevant to the investigative interview as a possible indicator of interviewer bias. For example, the phrases, “*Explain to me why you killed Ted*” and “*Explain to me why you murdered Ted*” both ask the respondent to provide details about why he or she ended Ted’s life. However, the verb *kill* (DAV) is more concrete about the deed and implies nothing about motivation or the traits of the person who performed the action. Whereas the word *murder* (IAV) implies an unlawful action, with possibly some level of premeditation and motive. This last example is demonstrative of an epistemological bias called entailments (Recasens, Danescu-Niculescu-Mizil, & Jurafsky, 2013). Although the word *murder* entails killing, by choosing the word *murder* the speaker is revealing an implicit assumption that the interviewee engaged in, and is capable of, the activities the word implies.

Current Gaps in the Literature

Within judicial contexts, the LCM has been used to detect specific language use in conscious case building endeavours (i.e., coding the Nuremburg Nazi Trials and Prosecution versus Defence closing statements; Schmid & Fiedler, 1996, 1998). In those studies, it was found that defence attorneys elevated positive attributions to a higher level of abstraction, avoided direct references to their clients when making or recounting negative statements, projected any unavoidable negative references towards the Prosecution, and avoided any reference (if possible) to their client's group membership (e.g., criminal or Nazi). The LCM has also been used to show bias in simulated police-witness interview settings (Semin & De Poot, 1997a); however, the LCM has not been previously utilised within police-suspect interviews to detect biased language.

In previous studies where the effects of guilt presumption in the investigative interview were examined, the interviewers did not generally formulate their own questions (e.g., Kassin et al., 2003). Additionally, researchers who have previously examined bias in questioning, have tightly controlled the types of questions that could be chosen by participants, in addition to the level of verb abstraction (e.g., Semin & De Poot, 1997b). Whilst it is understandable why experimental controls were applied in those studies, there is little research to date that has investigated natural question formulation and guilt presumption within an interview context. Previous studies that examined guilt presumption have also manipulated the participant's perception of an event so that judgement biases were formed (e.g., Hill et al., 2008; Semin & De Poot, 1997b). However, this approach does not answer questions about whether interviewers will naturally form biased guilt expectancies. Nor is it clear how a guilt bias may influence question formulation. Because bias is based in pre-existing beliefs, and confirmation bias is a subconscious confirmatory behaviour, there is a benefit to investigating whether

participants will form their own biases. This will allow for an examination of whether those naturally formed biases influence language in the interview context.

The Present Study

The present study aimed to answer two research questions. The first was to determine if detailed instruction on performing an information-gathering interview would influence guilt judgements and question formulation (training question). The second examined how guilt assumption influenced question type and verb usage when non-police participants formulated questions (linguistic question). To investigate the training question the level of detail for creating information-gathering questions between groups was manipulated. This would show whether exposure to the principles of PEACE would influence question type and guilt judgements. Two hypotheses were formulated to test the question:

1. The group exposed to PEACE principles would create less accusatory questions than the control group.
2. The group exposed to PEACE principles would attempt to remain objective and less likely than the control group to form a judgement of guilt or innocence.

These hypotheses are based on specific language included within the guiding principles of PEACE (College of Policing, 2016), and the participants were expected to conduct the interview in accordance with the instructions they received (i.e., to ‘not approach any interview with prejudice’ and to ‘elicit reliable accounts from the interviewee’). Findings from Hill et al. (2008) suggested that exposure to PEACE training did not influence the amount of accusatory questions created by participants. However, the training was administered a bit differently in the present study, which may produce different findings.

To test this question, exposure to the PEACE principles is the independent variable (IV), and question type and guilt judgements are the dependent variables (DV).

To examine the linguistic question, steps were taken to replicate previous research that demonstrated guilt presumption leads to more accusatory question choices in interviewers (see Hill et al., 2008; Kassin et al., 2003; Narchet et al., 2011). In the present study, that research was expanded upon to determine whether those findings held true when participants were left to formulate their own guilt assumptions. To establish whether interviewers who developed a guilt presumption used more biased language, the LCM was employed to assess abstraction levels and positive or negative valence of the words used by interviewers. For this question, guilt presumption was the IV, whereas question types and word abstraction were the dependent variables (DV). An additional three hypotheses were proposed:

3. Participants with a guilt presumption will create more accusatory questions than participants without guilt presumptions.
4. Participants who made judgements of guilt would use more abstract words in their questions than participants who did not make guilt judgements. This will be demonstrated by higher abstraction scores.
5. Participants who made judgements of guilt would use more negative words in their questions than participants who did not make guilt judgements.

For hypothesis #4, whether the abstract words would be state verbs (SV) or adjectives (ADJ) was left purposefully unspecified. Each type of word serves a different purpose. If the participants used predominantly SVs, the focus shifts to the subject's behaviour, whereas the use of ADJ would create a focus on the subject's characteristics. Because the LCM has not been previously used to detect bias in investigative type settings with

suspects, it can only be proposed that bias will be evident through abstraction scores.

An exploratory analysis of the type of words used will also be conducted.

Method

Participants. Participants were invited to take part in an on-line study that would examine decision-making and the formulation of interview questions. Individuals were recruited using an on-line survey platform ($N=117$). Participants completed the study wherever they chose to access the survey, which took approximately 30 minutes to complete. Prior to analysis, 10 participants' data were removed from the sample for not fully completing the study ($N=107$; 69 females and 38 males; $M_{age} = 33.39$, $SD = 14.50$). Participants were randomly assigned to either an experimental group ($n = 54$) or a control group ($n = 53$) by the survey software. Those who signed up for the study through the psychology faculty participant pool ($n = 25$) were allotted one research participation credit. No incentive was offered to persons who signed up outside of the participant pool ($n = 92$). The Ethical Committee for Psychology at the participating university approved this study.

Procedure. Participants first provided informed consent and some demographic information (sex, age, and profession). Participants were informed that the researchers required their assistance to help formulate questions that could be asked to a person suspected of cheating on an academic task. Participants were then directed to a brief training to assist them with their question formulation.

To answer the training question, the experimental group was provided with detailed instructions on how to conduct an ethical interview. These instructions were based on the seven principles of investigative interviewing as outlined by the UK College of Policing. These principles were chosen because they provided expected conduct for interviewers who are using the PEACE framework (College of Policing, 2016). For

simplicity, this is called the PEACE group. Exposing the control group to any accusatory or confession driven strategies was intentionally avoided. This step was taken to prevent confounding question type creation with an inflated number of accusatory questions. Instead, the control group was provided with six broad objectives for an information-gathering interview that were also gleaned from information found at the College of Policing website (see Appendix A). Participants in both groups were asked to complete a short quiz to ensure they understood the information presented to them.

Participants were then consecutively given five typical pieces of information regarding the case and asked to formulate two questions after each presentation of information (Appendix C), for a total of 10 questions. In the final step of the study, each participant indicated whether they felt the person of interest was guilty, innocent, or if they needed more information to decide. They also provided a confidence rating for their decision. Confidence ratings were reported on a scale of 1 to 5 with anchors at 1 (unconfident), 3 (neither unconfident or confident), and 5 (confident).

Coding procedure and reliability

This study yielded 1070 questions for coding on question type and word abstraction. In the case where there was more than one question present, only the first question was coded. For example, if the question read, "*Why did you cheat? Were you feeling pressure?*" the question was coded as accusatory (why did you cheat?), the verb "cheat" was coded as an IAV, and 'cheat' was assigned a negative valence. Auxiliary verbs were not coded.

Question type. To determine question type, the formulated questions were coded as neutral (non-accusatory), other (defined as pleasantries or rapport-building), or accusatory questions. Accusatory questions were defined as overt accusations with the use of words that stated or implied cheating or dishonesty in questions or opinion

statements. Twenty-nine percent ($n = 310$) of the questions were randomly selected and coded by three independent raters on the variable of question type. An overall Krippendorff's alpha for question type agreement indicated an $\alpha = 0.876$, $CI = [.86, .88]$, which is considered moderately high reliability.

LCM coding. Word abstraction was coded from least to most abstract: Descriptive action verb (DAV = 1), Interpretive action verb (IAV = 2), State verb (SV = 3), and Adjectives (ADJ = 4) as outlined in Semin and Fiedler (1991). Word valence was left to coder perception of the negative or positive connotations of the word. Questions and statements containing negative words were coded as -1 and positive words were coded as 1. DAVs were excluded from this analysis as they have no negative or positive valence. To determine intercoder agreement, 58% ($n = 610$) of the questions were randomly selected and coded by two independent raters on the verb abstraction variable, with an overall $\alpha = 0.962$, $CI = [.95 .97]$ and valence level $\alpha = 0.986$, $CI = [.97 .99]$. Both variables indicated a high level of reliability.

Results

Only one participant considered the person of interest 'not guilty'; therefore, this data point was removed from further analysis involving guilt judgements, and guilt judgements became a binary variable (guilty vs. need more information).

Influence of Question Formulation Guidance. The PEACE group was predicted to create less accusatory questions than the control group to remain unbiased and objective as outlined in the guiding principles. A Mann Whitney test on question type categories revealed that the PEACE group did not create more neutral questions, and thus hypothesis #1 was not supported: Accusatory ($U = 1154.50$, $p = .082$, $\delta = .18$), Neutral ($U = 1333.00$, $p = .534$, $\delta = .07$), and Other ($U = 1191.00$, $p = .125$, $\delta = .17$).

It was also predicted that the PEACE group would form less guilt judgements in an attempt to remain objective. A Chi-squared test to examine the difference between groups (control vs PEACE) on judgements (guilty vs need more information) indicated no overall difference between groups for guilt judgement $\chi^2(1, N = 105) = .02, p = .881, V = .02$, as both groups were evenly split between guilty (Control = 44%, PEACE = 46%) and needing more information (Control = 56% and PEACE = 55%). Thus, hypothesis #2 was not supported. Additionally, both the PEACE group ($M = 2.78, SD = .81$) and the control group ($M = 2.94, SD = .81$) reported moderate levels of confidence in their judgements on a 5-point scale that did not significantly differ, $t(105) = .934, p = .352$.

Influence of Guilt Judgements on Question Formulation. It was expected that regardless of level of detail in the interview instructions, guilt judgements would have an influence on question type, the level of verb abstraction, and the presence of negative words used in question formulation. Participants formulated their own guilt judgements, and this resulted in 44.3% ($n = 47$) of the participants indicating that the person of interest was guilty, and 55.7% ($n = 59$) reporting that they needed more information. Mann-Whitney U tests revealed that accusatory questions were more present in guilty (Median = 5.00, Mean Rank = 62.66) than in need more information judgments (Median = 3.00, Mean Rank = 45.17); $U = 909.00, p = .003, \delta = .41$ and thus, hypothesis #3 was supported.

Hypothesis #4 was not supported as both the guilt presumptive group ($M = 2.23, SD = .27$) and the need more information group ($M = 2.27, SD = .30$) had similar abstraction scores, $t(104) = .687, p = .49$. However, in an exploratory analysis to determine what types of words were predominantly used, a Mann-Whitney test revealed the number of state verbs varied between guilt judgements ($U = 1037.50, p = .013, \delta = .28$), with the participants who judged guilt using more state verbs (Median = 4.50, Mean Rank = 60.54) than the need more information group (Median = 3.00, Mean Rank =

45.62). There was no difference in the types of questions created using DAVs ($U = 1230.50, p = .199, \delta = .14$), ADJs ($U = 1298.00, p = .301, \delta = .09$), or IAVs ($U = 1182.00, p = .112, \delta = .17$).

When the number of positive and negative words used in question formation was analysed, no significant differences emerged. Participants who reported that they believed the person of interest was guilty used just as many negative words ($M = -3.12, SD = -2.33$) as participants who reported needing more information to make a judgement ($M = 2.90, SD = 2.73$), $t(104) = 0.415, p = .68$. Therefore, hypothesis #5 was not supported.

Discussion

The aim of the present study was to examine the influence of interview instructions and the presence of guilt presumption on question formulation. The questions formulated by participants who formed their own judgements of guilt were analysed for type of question (accusatory, neutral, or other), as well as indicators of bias and negative valence using the LCM (Semin & Feidler, 1988, 1991). A review of the extant literature suggests that this is the first study that has investigated confirmation bias using naturally occurring guilt judgements in an experimental investigative interview setting with the LCM.

In the present study, interviewers who formed a presumption of guilt were more likely to create accusatory questions (Hill et al., 2008; Kassin et al., 2003, Narchet et al., 2011) despite being instructed to conduct information gathering interviews and being exposed to the guiding principles of the PEACE framework. These findings are in line with Hill et al. (2008) who also found that interviewers trained in information-gathering techniques still created accusatory questions when a guilt bias was present. When the types of words used by the participants was explored, those who presumed guilt most

commonly chose abstract state verbs when formulating their questions. Although there were no differences between guilt judgements and abstraction scores, there was a difference in the type of words used. Participants who judged the person of interest guilty used more state verbs in their questions. State verbs are known to focus on behaviour and disambiguate to the sentence object, which removes the focus from the sentence subject (see Beukeboom, 2012; Douglas & Sutton, 2006; Semin, 2011).

Some theories on linguistic abstraction posit that language choices are generally produced unconsciously (see Semin & Fiedler, 1991; Von Hippel et al., 1997), there is also literature that suggests language choices can be intentionally used to influence beliefs in others when speakers are consciously choosing their words. In two experiments, Douglas and Sutton (2008) demonstrated that communicators could inhibit biased word choices when they were aware of their bias and given the opportunity to choose their words carefully (Study 1 and 2). Therefore, it is possible that the participants in the present study may have also employed a similar strategy. That is, participants were told they needed to formulate questions to determine whether the person of interest completed the task honestly or not, and they were given as much time as needed to create their questions. It is possible that participants may have deliberately phrased their questions to appear objective and non-accusatory. However, when taken together with their guilt judgements the participant's underlying motivations may have been revealed. Although choosing the abstract words would have been an unconscious behaviour, the basic theory of linguistic bias proposes that it is this unconscious behaviour that reveals the speaker's true beliefs (see Beukeboom, 2012; Semin, 2011). However, further examination into the relationship between abstraction and confirmatory motivations is warranted.

Methodological considerations. A shortcoming in the present study may be the use of non-police interviewers, who were not fully trained in information-gathering strategies. Before requesting the time and resources of law enforcement personnel, it was prudent to test the phenomena and the bias detection tools (LCM) in a controlled environment. Another limitation of the present study is the forced question preparation and lack of interview interaction. In practice, police interviewers would not generally prepare questions in such a manner (College of Policing, 2016). A few key questions and themes would be identified, and subsequent questions would depend on responses to previous questions and the ongoing dialogue. This means that most utterances produced during the interview are spontaneous and may be influenced by factors such as the immediate situation, suspect behaviour, and previous questions and responses. Each of those factors may influence the words used by the interviewer, and thus, findings may differ in an applied setting. Further research is needed to determine whether the findings in the present study hold true in interactive environments and real police-suspect interviews.

Finally, an interviewer's guilt presumptions may change over the course of the interview, which could also change the language used by interviewers. Therefore, further investigation is needed to determine whether interviewers adjust their judgements over the course of the interaction, and what information they use during the interview to inform their perceptions of guilt and any related judgements.

Conclusion

Accusatory questions remain the most significant indicator of guilt bias; however, language abstraction may also be a good indication of guilt presumptive judgements when specific word usage is examined. If the language chosen in questions is not a conscious decision made by interviewers, subtle language cues can provide

insight to the underlying beliefs about suspect guilt. However, the findings in the present study prompt questions about whether biases detected in language are indicative of underlying confirmatory motives, and how word choices influence suspect responses. It also remains unclear whether high levels of verb abstraction (SV and ADJ) are consciously used to effectively soften or mask an accusatory, yet information-gathering question. Therefore, word abstraction and question types must be examined within an interactive interview setting.

Chapter 4

Articulating Guilt? The Influence of Guilt Presumption on Interviewer and Interviewee Behaviour

Overview

Evidence in the literature suggests that accusatory questions posed during an investigative interview is an indicator of guilt presumption. However, there may be more to a question than just the accusatory nature. Linguistic research has demonstrated that the use of abstract words in questions can indicate bias on the part of the speaker through increasingly abstract language. This study expands on the findings presented in Chapter 4 by using the Question-Answer Paradigm (QAP; Semin, Rubini, & Fiedler, 1995) to determine if guilt presumption and word abstraction influenced interviewee responses. The QAP theory suggests that more abstract language in the question will shift the focus of the response to be interviewee focused. This creates the illusion that the interviewee is more involved with or is central to the events in question. The present study examined guilt presumption and word abstraction in a mock investigative interview. Changing guilt presumptions over the course of the interview and motivations for question choices were also explored. The findings suggest that interviewers who presumed guilt were more likely to formulate accusatory questions and to use higher linguistic abstraction (ADJ). Questions were also phrased in a manner that prompted the suspect to respond with themselves as the focus – regardless of context. Over the course of the interview, interviewers who presumed guilt were less likely to change their views and were more likely to report using behavioural cues to solidify their guilt presumptions.

Introduction

In the countries that use information-gathering techniques to conduct investigative interviews with suspects, interviewers are encouraged to obtain investigation relevant information (IRI; Oxbrugh et al., 2012), and to ‘discover the truth’

as opposed to seeking a confession (see Baldwin, 1993; College of Policing, 2016; Hoekendijk & Van Beek, 2015). However, even in information-gathering frameworks, the methods used by interviewers to achieve those objectives are subjective and can be influenced by the interviewer's guilt beliefs (Hill, Memon, & McGeorge, 2008). This can result in a situation where the interview becomes less about fact or truth finding and more about proving the interviewer's beliefs to be true (Kassin, Goldstein, & Savitsky, 2003). When an interviewer exhibits belief confirming behaviours (i.e., confirmation bias), researchers have demonstrated that the types of questions posed become more accusatory (Kassin et al., 2003; Olson, 2013), the tactics become more coercive (Narchet, Meissner, & Russano, 2011., 2011), and the obtained information is framed to justify the guilt belief (see Ditrich, 2015; Eerland & Rassin, 2010). However, little is known about how guilt presumption may influence the language used by interviewers when questioning suspects, how it may influence suspect responses, and whether an interviewer's guilt presumption changes over the course of the interview. The current experimental study examined all these factors, as well as any influence on the mock suspect's responses and perceptions of the interview.

Investigative Interview: Interviewer Judgement and Suspect Behaviour

Police interviewers have the difficult job of extracting IRI from people who are suspected of committing a crime. For obvious reasons, those suspects may not be eager to share their intimate knowledge of the event so not to incriminate themselves. Conversely, the suspect may not have been involved in the event, and thus, genuinely has no information to offer. It is the latter type of suspect that has the most to lose should they not be able to convince an interviewer of their innocence during an interrogation. Unfortunately for this type of suspect, the fact they are being questioned indicates that the police have strong reason to believe they are involved (O'Brien, 2007). That puts the

innocent suspect at a disadvantage as now they must try to change the interviewer's beliefs, which is a difficult task (Arkes, 1991; Frey, 1982; Ross, Lepper, & Hubbard, 1975).

Police officers who use information gathering frameworks (e.g., PEACE and GIS: General Interview Strategy; Van Amelsvoort, Rispens, & Grolman, 2010), are trained to obtain a free narrative from the suspect and then to ask questions designed to elicit needed IRI (College of Policing, 2016; Van der Sleen, 2009). Although officers are also trained to remain objective when gathering information, there is evidence in the literature that officers allow their beliefs to influence the interview (e.g., Chaplin & Shaw, 2016; Lilienfeld & Landfield, 2008). That is, an interviewing officer who strongly believes in the suspect's guilt may inadvertently conduct the interview in a way to prove guilt as opposed to gathering case relevant information.

Guilt presumption can influence interviewer's assessments of statement veracity (e.g., Mann, Vrij, & Bull, 2004) and alibi believability (Olson, 2013). In this situation, the interviewer's belief in the suspect's guilt renders all information provided by the suspect that is contrary to that belief as attempts at deception (Meissner & Kassin, 2002). The interviewer who believes the suspect is lying may become more adversarial and frustrated (Walton, 2003) and apt to increase interrogative pressure or apply more coercive interview tactics to elicit the responses and information he or she seeks (Kassin & Gudjonsson, 2004). Over various studies, guilt presumption has been shown to increase the number of accusatory questions asked during an investigative interview with a suspect (see Hill et al., 2008; Kassin et al., 2003; Narchet et al., 2011). Thus, accusatory questions seem to be the most consistent indicator of interviewers' beliefs that a suspect is guilty.

The type of question an interviewer uses to gather information is also crucial to the investigative interview. For example, if the question is accusatory (e.g., Why did you assault your partner?), a suspect may simply use the opportunity to deny involvement. If the questions are phrased in a way that the suspect constantly feels the need to defend him or herself then gathering IRI halts and the interviewer is left collecting a number of denials. Moreover, easily influenced, or vulnerable suspects may be inclined to respond in a way they believe is desired by the interviewer, which can lead to eventual false confessions (see Kassin, 2005, 2015). Using an information-gathering type of question (e.g., Describe the events that lead to the altercation with your partner) is likely to get the suspect talking. The description of events may also give the interviewer more information to work with for further questioning. Conversely, if the interviewer believes in the suspect's guilt, the suspect's elaborated answer could provide the interviewer with more support for his or her guilt presumption. For those reasons, further examination of the influence of question type on interviewee responses is warranted

Question Type and Language Abstraction as Possible Indicators of Bias

The types of words used when describing others (Beukeboom, 2012; Wigboldus & Douglas, 2007) can identify a speaker's bias. The most common tool used to identify linguistic bias is the Linguistic Category Model (LCM; Semin & Fiedler, 1988, 1991). The LCM measures biased language through the linguistic abstraction of verbs and adjectives. Verbs are used to describe actions (e.g., cheat, hurt, talk) or psychological states (e.g., like, hate, feel), whilst adjectives are used to describe the properties of a person's traits or perceived characteristics (e.g., aggressive, helpful, honest). As the word abstraction increases, the likelihood of biased language also increases as more abstract words are seen to be more generalisable and suggestive of the Target's stable traits (Brown & Fish, 1983; Semin & Fiedler, 1991).

The LCM has also allowed researchers to examine the influence of language abstraction on the responses to questions. Over several independent studies, researchers have found verb abstraction in questions can influence the subject focus in responses (see De Poot & Semin, 1995; Semin, Rubini, & Fiedler, 1995). For example, when posing interview questions to a person suspected of wrong-doing, the subject of the sentence is predominantly the interviewee, indicated by the personal pronoun 'you'. However, the use of state verbs can remove the focus from the interviewee (you) to the thing or person in the sentence that is being acted upon. For example: 'Did you *cheat* on the test?' contains an action verb with focus on subject, whereas 'Did you *dislike* the test?' contains a state verb and a focus on an object. Whilst both example questions are posed to the interviewee and contain the word 'you' to indicate the subject who took the actions of cheating or disliking, the question containing the state verb clearly put the focus on the test as opposed to the interviewee. Semin and colleagues (1995) have coined this phenomenon the Question-Answer Paradigm (QAP).

Although the QAP response pattern is not a deliberate linguistic tactic used by interviewers (see Searle & Vanderveken, 1985; Semin, 2011), it can become problematic in the context of confirmation bias during the investigative interview. For example, Semin and De Poot (1997b) investigated the effects of verb abstraction on the perceptions of response focus in an experimental interview setting using the QAP. They extracted details from police sexual assault interview transcripts and formulated a fictitious case, along with pre-fabricated questions for the study. They also manipulated participants' perception of the complainant in the case (i.e., trusted, did not trust, or neutrality towards the victim). Participants who were primed to distrust the victim consistently chose questions where the response was more likely to put the victim as the subject of focus in the answer. Conversely, participants who were primed to trust the victim chose questions

that were more likely to put the suspect as the focus in the reply. In sum, participants were found to choose investigative questions that were congruent with their expectancies of the victim (i.e., either a blameless person who was assaulted or a person whose behaviour somehow provoked the assault).

If the findings of Semin and De Poot (1997b) are applied to the police-suspect interview, we may see that a guilt bias prompts questions that elicit certain responses. That is, replies that place the suspect as the focus and the instigator of any action. Those types of responses can create the perception that the suspect was more involved in the events than they were. That type of responding could also be viewed by a biased interviewer as evidence to support the interviewer's guilt presumption. This type of outcome would be problematic for innocent suspects or suspects that perhaps played only a minor role in the crime.

Outstanding Questions in the Literature

At first glance the underlying theories of the LCM and QAP may seem counterintuitive to those familiar with interviewing tactics and accusations. First, accusatory questions are often associated with direct assertions that use concrete language. But, this may not be the case in interview environments where the officers are generally trained to employ ethical tactics and engage the suspect with professionalism. In those situations, accusations may be phrased using linguistic hedging that softens the accusation and masks the bias (see Recasens, Danescu-Niculescu-Mizil, & Jurafsky, 2013). Douglas and Sutton (2008) found that when people were given time to consider their language choices, speakers could inhibit biased language. When speakers were not given the opportunity to consider additional information, however, they were unable to inhibit biased language. Douglas and Sutton concluded that when speakers do not intend

to be biased, language abstraction could work against them in exposing their underlying beliefs. Those conclusions also need to be tested in an interactive interview setting.

A second counterintuitive aspect of the QAP concerns phrasing questions in a manner that prompts the suspect to put themselves as the focus of the answer. This may seem like the entire purpose of a police-suspect interview. However, if formulating questions in this manner is motivated by an underlying guilt bias, the interviewer could be unconsciously manipulating the suspect's responses to confirm his or her beliefs that the suspect was involved. Even if every question and response does not implicate the suspect in the commission of the crime, it is possible that increased focus on the suspect will give the perception of increased involvement (Semin & De Poot, 1997a).

Other gaps in the extant literature involve the underlying motivations of interviewers to create specific questions. Although interviewers may be unaware of their guilt bias and resulting behaviour, they may be able to provide some insight to their cognitions by explaining what they hope to achieve by posing certain questions to a suspect. For example, whether the question was intended to confirm or falsify a pre-existing guilt presumption. Changing perceptions of guilt over the course of the interview is yet another area where there have been no previous investigations. Measuring guilt presumption at different time intervals throughout the interview may allow insight to any behavioural factors that influence subsequent guilt judgements.

The Present Study

The present study had four aims. The first aim was to replicate and expand on previous research findings that have demonstrated an increased use of accusatory questions in interviewers who held a presumption of guilt. In the present study, interviewers will be asked to justify what they hoped to achieve with each question. Taking this exploratory step may provide some insight into the interviewer's motivations

(i.e., confirm or falsify guilt beliefs; Jonas, Schultz-Hardt, Frey, & Thelen, 2001). In the second aim, the LCM and the QAP will be used to analyse the questions and responses in an investigative interview context. The third aim was to explore whether interviewers changed their guilt presumptions over the course of the interview. The final aim was to explore the interviewees' perceptions of the questions asked and their desire to cooperate with the interviewer.

To achieve these research aims, four hypotheses were tested, and three exploratory analyses were conducted:

1. Interviewers with an initial guilt presumption would create more accusatory questions than interviewers who presumed innocence or needed more information.
2. Interviewers who held an initial presumption of guilt would formulate questions with more abstract language than interviewers who did not hold an initial presumption of guilt.
3. Regardless of interviewer guilt presumptions, questions that contained action verbs where the suspect is the subject, or that contained a state verb where the suspect is the object, will produce more suspect focused responses in line with the QAP response pattern.
4. Interviewees would perceive the control questions to be more accusatory in their wording and meaning than the interviewer formulated questions. It is suspected this may be due to the more direct (although non-accusatory) nature of those questions.

For the exploratory analysis, the interviewer's justifications for creating his or her questions, changing guilt judgements, and the factors that may have influenced those changes were examined.

Method

Participants. Non-police participants were recruited for a study that investigated decision-making during an investigative interview setting. Partial deception was employed so not to prime the participants to prepare in advance, and to avoid introducing experimental expectancy effects. The participants were only informed that they would each take on a separate role for the study and in the final phase they would come together for a video recorded interview. Thirty-three participant pairs ($N=66$) were recruited from a university in the UK through the faculty on-line recruitment system and faculty wide advertisement ($M_{age} = 20.32$, $SD = 3.41$; Males = 13, Females = 53). Individuals who signed up for the study through the psychology faculty participant pool ($n = 58$) were allotted one research participation credit and a £5 gift card to a local grocery. People who signed up outside of the participant pool ($n = 8$) received the £5 gift card. The gift card was not mentioned in the advertisement as it was needed to motivate the participants during the study. Participants were randomly assigned to an interviewer or an interviewee role by a coin flip.

Materials. Tasks and environment. A blind taste-testing task was used to allow for a situation where the interviewee would be left alone and could choose to complete the task honestly, or to cheat (see Appendix D for a complete taste-testing procedure). The taste test and the interview portion of the study took place in an interview suite equipped with a table for the tasting task, and a computer to record questionnaire responses and to present the stimulus material. To record the interaction, an HD video camcorder was used to film the interview from the interviewer's point of view, and there were multiple surveillance cameras and a sound recording system to capture the interview from multiple angles. The interviewers completed their tasks in a separate research cubicle that contained a table and computer to record their responses.

Control questions. Three control questions were created for the second round of interviewing. These questions were neutral information-gathering questions categorised as action verb sentences:

1. Can you tell me in detail what you did while the researcher was out of the room?
2. Did you think about lifting the covers to look at the brand names?
3. Have you spoken to anyone who has already completed this study?

Procedure. Both participants were met by two research assistants and taken to a research cubicle to sign consent forms. A coin flip decided tasks, and only one participant pair's tasks were decided due to an aversion to apple juice. One participant stayed in the cubicle with a research assistant and became the interviewer. The other participant was taken to the interview suite with the other researcher and became the interviewee. Questionnaires, ratings, tasks, and judgements were completed independently. However, the participants came together for the two interview portions during the study.

Interviewer procedure. The interviewer was informed of their role and told that the other participant (the interviewee) was taking part in a task where they could choose to complete it honestly or cheat. The interviewer was told that their job would be to review some details about what the interviewee had done, and to formulate five interview questions to find out whether the task was completed honestly or not. They were told that if their questions prompted the interviewee to give a lot of information, they would be rewarded with a £5 gift card.

After completing demographic questions, interviewers were all exposed to the same detailed ethical principles of investigative interviewing (see Appendix A). They were then given case facts under the guise that those were direct observations of the interviewee's performance. This was a falsehood told to make the interviewer believe they were receiving unique case information. All facts of the case were adapted from the

vignette used in the study presented in Chapter 4 to ensure consistent information upon which guilt judgements and question formulation were made. The interviewer then formulated five questions and justified what they hoped to achieve with each one. They then indicated whether they thought the interviewee was guilty, not guilty, or if they needed more information (Judgement 1), along with a confidence rating on a 5-point scale (1= not confident, 5 = Extremely confident). Finally, the interviewer was asked to choose their best three of the five questions to ask the interviewee.

The interviewer was then taken to the interview suite to conduct the interview. Once completed, the interviewers returned to the research cubicle, and provided a second guilt judgement (Judgement 2) and a confidence rating. Interviewers were then told they should seek additional information from the interviewee using three questions the researchers had formulated for them (control questions). The interviewer was taken back to the suite for the second round of interviewing. After the interview was complete, they returned to the cubicle and provided the final guilt judgement (Judgement 3) and confidence ratings.

Interviewee procedure. Upon arriving at the interview room, the research assistant took the interviewee to a table set up seemingly outside the range of the surveillance cameras (there is one discreet camera that captures the entire room). The interviewee was informed that they would be questioned by the other participant about the tasks they were about to do. The interviewee then performed a taste test of apple juice and was asked to note the distinctions between the different juices and to try to memorise the brand (Appendix D). The researcher told the interviewee if they could match at least five out of the six juices to the brands, they would receive a £5 gift card.

Interviewees then repeated the test, but with the juice bottles covered and randomised. During this time the researcher left the room under the pretence of checking

on the progress of the other participant. Leaving the interviewee alone provided him or her with an opportunity to cheat or complete the task honestly. It also aligned with the information given to the interviewer that the interviewee was left alone for 3-minutes and may or may not have cheated. The surveillance camera footage indicated that all participants completed the task honestly, and thus, were considered innocent interviewees.

The interviewee was informed that the other participant had some questions to ask them about the task, and there was a possibility of more than one interview. The interviewee was then questioned twice by the other participant (interviewer). After each round of questioning, the interviewee provided a 5-point rating of the questions from Strongly Disagree (1) to Strongly Agree (5): (i) These questions were worded in an accusatory manner, (ii) I found these questions shocking, (iii) The question made me want to cooperate with the interviewer, (iv) The questions made me feel like I was being accused of something, and (v) The questions were clear in their meaning.

End of study and debriefing. Once both participants were finished with the final questionnaires, they were brought together in the research cubicle and given full disclosure about the true nature of the study. The interviewee was informed that they were secretly videotaped the entire time and were asked to sign an additional consent form acknowledging this and giving permission to use their data. All participants consented.

Coding Procedure

Question type and linguistic coding. To determine question type, the formulated questions were coded as neutral (non-accusatory), other (defined as pleasantries or rapport-building), or accusatory questions. Verb abstraction was coded in accordance to the classification outlined by Semin and Fielder (1988, 1991; see *Linguistic coding* in

Chapter 3). The video-taped interviews were transcribed verbatim and the questions were coded using the LCM for verb category. The interviewee responses were coded for locus of causality (self or other) using the QAP. That is, when the question was phrased with an action verb and the interviewee referred to themselves as the subject it was coded as self-focused. The same held true when the question was phrased with a state verb and the response has the interview as the object of the response (see Semin & De Poot, 1997a).

Identifying justification themes. The interviewers were asked to justify why they chose to create each question and what they hoped to learn with the responses. Interviewers were also asked to justify their guilt judgements at time two (judgement 2) and time three (judgement 3). These justifications were grouped into main themes and subthemes for each (Braun & Clarke, 2006).

Inter-coder reliability. This study yielded 165 formulated questions and 99 questions that were chosen by interviewers for presentation to the interviewees. Forty percent of the formulated questions were randomly selected ($n= 66$) and coded by two independent raters on the variables of question type and verb abstraction. Krippendorff's alpha indicated an overall agreement of $\alpha = 0.95$, $CI = [.92, .98]$ and $\alpha = 0.91$, $CI = [.89, .93]$ respectively. Both variables indicated high levels of agreement.

Results

Influence of judgements on question formulation. In the initial judgement, only one interviewer considered the interviewee 'not guilty'; therefore, this data point was removed and judgement 1 became a binary variable (guilty vs. need more information). A logistic regression analysis was completed to predict the initial interviewer bias using abstraction scores and question types (accusatory and neutral) as predictors. Our first hypothesis was supported as the predictors significantly explained the variance in interviewer bias, $\chi^2(3, N=30) = 10.653, p = .014$, Nagelkerke's $R^2 = .428$.

The model accurately predicted bias at 78.8% (88.5% for unbiased and 42.9% for biased). Only the accusatory questions made a significant contribution to the prediction $W(33) = 5.218, p = .02, 95\% \text{ CI} [1.27, 24.37]$. Abstraction scores and neutral questions were not significant predictors of bias (see Table 4.1).

Influence of verb abstraction on questions and responses. When the frequency of the verbs used were evaluated, a Mann Whitney test revealed that biased interviewers (Mean Rank = 23.50) were likely to use more adjectives (highest level of abstraction) in their questions than unbiased interviewers (Mean Rank = 14.88; $U = 36.0, p = .007, \delta = .53$) and these findings support our second hypothesis. A test of equality of proportions showed that interviewers constructed questions using more action verbs (67%) than state verbs (33%) overall, $\chi^2(1, N = 107) = 23.56, p < .001, 95\% \text{ CI} = [.21, .48]$, and the responses followed the predicted QAP pattern, which supports our third hypothesis. In action verb questions where interviewees were placed in the grammatical subject position (83%) as opposed to the object position (20%), they replied with themselves as the response focus, $\chi^2(1, N = 107) = 78.84, p < .001, 95\% \text{ CI} = [.51, .74]$. When the question was phrased with a state verb and the interviewee was implicated in the grammatical object position (37%) as opposed to the subject position (13%), they also focused the response on themselves, $\chi^2(1, N = 107) = 14.93, p < .001, 95\% \text{ CI} = [.12, .36]$.

Interviewee perceptions of questioning. Partial support was found for the fourth hypothesis. That is, interviewees would find the control questions both accusatory in wording and overall theme. There was no significant difference between the interviewer questions ($M = 3.75, SD = 1.99$) and the control questions ($M = 4.12, SD = 0.59$) for how accusatory the interviewee found the question wording $t(32) = -1.55, p = .129, 95\% \text{ CI} = [-.83, .11]$; however, a t-test revealed that there was a statistically significant difference between the questions in whether the interviewee felt like they were being accused of

something. Interviewees felt less accused during the interviewer questions ($M = 1.81$, $SD = 1.04$) than during the control questions ($M = 2.84$, $SD = 1.07$), $t(32) = -3.97$, $p < .001$, $d = .98$, 95% CI = [-2.08, -0.32]. Additionally, interviewees reported that they wanted to cooperate more during the interviewer questions ($M = 4.03$, $SD = .88$) than during the control questions ($M = 2.66$, $SD = 1.42$), $t(32) = -4.05$, $p < .001$, $d = 1.14$, 95% CI = [-1.88, -.41]. There were no significant differences between perceived clarity [$t(32) = 3.49$, $p = .73$] of the questions, or whether the questions were surprising, $t(32) = 1.46$, $p = .12$.

Table 4.1

Logistic regression table for predictors of bias (abstraction and question type) in question formulation.

Bias Predictors	B (SE)	95% Confidence Interval		
		Lower	Odds Ratio	Upper
Constant	-10.03 (4.77)			
Abstraction	2.71 (1.78)	.459	15.11	500.07
Accusatory Questions	1.72 (.752)	1.276	5.57 *	24.37
Info-gathering Questions	.14 (.549)	.393	1.15	3.37

* $p < .05$

Guilt judgements across the interview. A test of equality of proportions revealed a statistically significant difference in the number of initial guilt judgements ($n = 6$) and interviewers who needed more information ($n = 26$), $\chi^2(1, N = 32) = 21.89$, $p = .00$. The frequencies also indicated that very few interviewers who began with a biased guilt judgement changed their minds as there was no difference in the proportions, $\chi^2(1, N = 32) = 2.66$, $p = .10$. The movement from the initial judgements to the final judgements was mainly from the interviewers who ‘need more information’. Of those

interviewers, 31% ($n = 8$) changed the judgement to guilty by the end of the interview. The proportions for those who needed more information were significantly different from judgement 1 to judgement 3, $\chi^2(1, N = 32) = 21.89, p = .001$. The one interviewer who initially assumed innocence also changed to a judgement to guilt in the end, and the proportions for the final judgement showed an almost even split between guilt and innocence (see Table 4.2).

Interviewer insights. Three main themes in the interviewer justifications were identified: (i) Falsification/ Alternative Scenarios, (ii) Confirmation of Guilt, and (iii) Information-gathering. In the 165 original questions created, there were four questions that did not fit any of the three main themes and these were removed from the analysis⁶ ($n = 162$) Proportionally, confirmatory motivations were divided with biased (guilty and not guilty) interviewers reporting 48% and neutral interviewers (need more information) reporting 42% of questions were to confirm preconceived ideas about guilt, $\chi^2(1, N = 161) = 1.00, p = .31$. Therefore, the hypothesis that bias would influence interviewers to show more confirmatory motivations was not supported. When the proportions for the other motivational themes were explored, biased and neutral interviewers both reported 42% information-gathering motivations. Biased interviewers reported 10% of falsifying justifications, and objective interviewers reported 16%.

When the justifications for the questions the interviewers chose to ask were examined ($n = 99$), a similar trend was found. Biased interviewers choose 43% confirmatory, 57% information-gathering, and no (0%) falsifying questions. This was comparable with neutral interviewers who chose 41% confirmatory, 50% information gathering, and 9% falsifying questions. Two subthemes also emerged in the justifications

⁶ These questions involved rapport building and pleasantries with the interviewee, but there were no clear justifications as to why the interviewer chose to ask them.

for the asked questions. First, a subtheme of expectation management (9%) was found solely in the information-gathering justifications. Here the interviewer indicated that asking the question a certain way could make the interviewee feel less accused and more likely to offer information. The second subtheme was behavioural observation (21%). Here the interviewers made some mention of observing specific physical behaviours to help them draw conclusions. This subtheme mainly occurred in confirmatory justifications (71.4%), and less frequently in information-gathering justifications (23.8%) and falsifying justifications (4.8%).

Table 4.2

Proportions (%) of guilt judgements over the course of the interview sessions. T1 is pre-interview judgement, T2 is judgement after the interviewer asked own questions, and T3 is judgement after control questions.

Judgement (N=33)	T1	T2	T3
Guilty	18.2 ^a	27.3	39.4
Not Guilty	3.0 ^{bc}	45.4	42.4 ^c
Need More Info	79.8 ^{abd}	27.3	18.2 ^d

Note: proportions with the same postscripts are significantly different from each other at $p < .001$

Interviewers were also asked to justify their subsequent judgements throughout the interview (see Table 4.3). At judgement 2 (after the interviewers asked their own questions), two clear themes emerged for interviewers who judged the interviewee as guilty or innocent. Some interviewers made explicit references to the interviewees' behaviour as cues that guided subsequent guilt judgements (e.g., posture, confusion/consistency about sequence of events, lack/abundance of eye contact), whereas others cited quality of the interviewee's verbal utterances (e.g., unsure/confident language,

perceived evasiveness/ openness in answering, and presence/ lack of speech disturbances). There was also a small proportion of interviewers who made innocent judgements (4%) whose justifications did not fit within the main themes. Because those justifications differed, they were classified as 'other'. All interviewers that judged that they needed more information (100%) at this time point cited that there was just not enough information available to make a judgement. This was not classified as a theme as it was descriptive of the judgement category.

Table 4.3

Proportions (%) of factors (behaviour or utterances) that guided guilt judgements across the interview as well as the change in guiding factors between both time points.

(n = 99)	Behaviour	Utterances
Judgement T2		
Guilty	66.3	33.7
Innocent	33	63
Need More Info	0	0
Judgement T3		
Guilty	61.5	38.5
Innocent	28.6	71.4
Need More Info	30.0	19.0
Change in guiding factor between time points T2 and T3		
Guilty	(7.3)	16.7
Innocent	(15.3)	13.5

At judgement 3 (after the interviewers asked control questions), the same two themes emerged for interviewers that judged the suspects as guilty or innocent (behaviour and utterances). However, some of the interviewers who judged ‘need more information’ also cited the same two themes as reasons they could not make a guilt judgement (49%). In those instances, the interviewers reported conflicting behaviours, or the believability of some answers versus others, as reasons they could not make a guilt judgement. From this category of guilt judgements, 51% of interviewers reported simply not having enough information to decide.

Across both time points interviewers reported using behaviour and utterances to inform their guilt judgements. However, interviewers who made guilt judgements at each time point based their decisions primarily on behavioural cues (66.3 and 61.5% respectively). Interviewers who made judgements of innocence mainly used the interviewee’s answers to guide their judgements (63 and 71.4%). Moreover, at the final guilt judgement, those interviewers who were undecided, based on the interviewee’s behaviour and utterances mainly, reported behaviour as the primary source of their confusion (61.8%; Table 4.3).

Discussion

The present study aimed to replicate previous findings on the relationship between guilt presumption and accusatory questioning as well as word abstraction and language use within an interactive interview environment. The study also aimed to explore the interviewer’s justifications for creating their questions, whether interviewers changed their judgements over the course of the interview, and the factors that may have influenced those changes.

Consistent with the findings reported in Chapter 3 and by previous researchers (e.g., Hill et al., 2008, Kassin et al., 2003; Narchet et al., 2011), formulating accusatory

questions was a significant predictor of also reporting a judgement of guilt. An additional finding from the study reported in Chapter 4 was also replicated. In that study, interviewers who assumed guilt were more likely to use abstract words when formulating questions. Interviewers with a guilt bias specifically used more adjectives, which are the most abstract of the words measured by the LCM (Semin & Fiedler, 1988, 1991; Wigboldus & Douglas, 2007). Adjectives are the most indicative of biased language because they show that the speaker believes that the word used, describes the subject and is generalisable to the subject's characteristics across specific events (Semin 2011; Semin & Fiedler, 1991).

The way interviewers phrased their questions was found to have influenced the subject of the interviewee's response. Unlike the previous study, the questions in the present study were not analysed in the context of guilt presumption. This was due to the findings in Chapter 3 that indicated guilt judgement had no bearing on whether the interviewer used concrete or abstract words (only specific word type was influenced, e.g., DAV, IAV, SV or ADJ). The same pattern occurred in the present study as most of the interviewers, regardless of guilt presumption, used more action verbs and concrete language overall. When an interviewer used action words (concrete language) and placed the interviewee in the subject position of the question, the interviewee replied with themselves as the subject of the response (Semin & De Poot, 1997a). The same held true when state and descriptive words (abstract language) were used in the question, but the interviewee was placed in the object position. The important take away message from this finding is that the interviewee's responses can be manipulated by the interviewer's word choices.

Evidence in the literature suggests that the way action and state verbs are used can effectively manipulate perceptions about who initiates an event, or in this case, the

level of involvement (Au, 1986; Brown & Fish, 1983). Word choices may not be a conscious decision when it comes to word abstraction (Semin, 2011); however, if the interviewer holds a presumption of guilt, the interviewee's responses could be perceived as confirmation of that belief. Considering that over 30% of interviewers judged innocent interviewees guilty based on the interviewee's responses to questions this finding warrants further investigation as to what exactly interviewers were basing those judgements on within the response.

Despite their responses being manipulated by the interviewers' word choices, the interviewees did not perceive the interviewers' questions to sound or feel accusatory. This contrasted with the interviewees' perceptions of the control questions. Although interviewees reported no differences in how accusatory the wording was between the sets of questions, they indicated the control questions felt more accusatory. The disparity found between ratings for interviewer formulated versus control questions may be a direct result of the actual question regardless of verb type. That is, the direct (but non-accusatory) approach of the control questions left nothing to the imagination. It was clear that the interviewer was seeking information about whether the task was completed honestly, whereas the interviewer formulated questions may have been more ambiguous in purpose. Thus, the interviewee may have thought the interviewer was simply trying to find out more information about the taste-testing task. Interviewees also reported that they didn't want to cooperate as much when asked the control questions. Although the feelings of non-cooperation were not predicted, it makes sense that questions perceived as accusatory would prompt this response as overt accusations may make an interviewer appear less empathetic, which has a direct influence of cooperation and IRI obtained (Oxburgh, Ost, & Cherryman, 2012)

When guilt judgements over the course of the interview were examined, most interviewers who initially made a guilty judgement also made a final judgement of guilt. When examining the proportions of the judgements throughout the interview, the belief in the interviewee's guilt or innocence became more polarised with the final judgement. This was due to many interviewers who initially reported needing more information eventually deciding guilt or innocence by the end of the interview. A possible explanation for the shift in guilt judgements during the interviews may come from a need for cognitive closure where the interviewer felt it was necessary to make a clear-cut decision or judgement about the interviewee's guilt (Ask & Granhag, 2005). Those seemingly objective interviewers in the initial and second judgments may have harboured a biased belief about guilt. Then, by the end of the interview, those who needed more information made a decision that may have been congruent with their original, but unreported judgement (Nickerson, 1998).

Further support for this conclusion can be seen in the analysis of question justification. Interviewers revealed three motives for creating their questions: to look for alternative scenarios, to confirm their beliefs, or to gather more information. Some interviewers who claimed to need more information also provided bias confirming justifications for their questions. If this group was expected to be purely neutral; thus, more hypothesis falsifying, and information-gathering explanations would have been anticipated. It is also important to note that the interviewers were not made to feel like they needed to make a judgement.

Methodological considerations. The current study has some limitations that should be considered when interpreting the findings. One shortcoming is the lack of experience in formulating interview questions. When interviewers were tasked with asking their questions to interviewees, most of the questions were concretely worded, but

may not have been constructed to retrieve the desired information, which was to determine whether the tasting task was completed honestly. The lack of solid information elicited when using their own questions may help to explain the shift in guilt judgements over the course of the interview. That is, during judgement 2, most of the interviewers reported needing more information; however, after asking the more focused control questions, there was almost an even split between guilt and innocence. Perhaps it was then that the interviewers received the information they needed to decide; however, this remains unknown.

Another limitation is the use of non-police interviewers, specifically those trained in information-gathering strategies. The relevance a specialised police sample would bring to this research, namely a wealth of job experience, unique heuristics, specialised training, and motivation to do one's job is essential to fully understand whether the findings replicate in practice. However, before the time and resources of law enforcement personnel is requested, it is prudent to test the phenomena, and the bias detection tools, in more controlled environments. Furthermore, the low stress and low motivation to be believed may have influenced the interviewees' responses. Although attempts were made to increase stress levels with the presence of video recording equipment, and to increase motivation with the gift card reward, none of these interventions compare to the real-world stressors associated with being questioned by the police.

Finally, the LCM is a reliable tool for detecting underlying bias in a variety of situations, however, it may have some limitations in applied settings such as police-suspect interviews. Due to the labour-intensive process of coding interview transcripts, the LCM could only be used retrospectively to detect possible guilt presumption or other biases. It would be impossible to notice language abstraction in real-time, and thus, any harm caused through subjecting a suspect to a biased interview would have already

occurred. For this reason, it is imperative that researchers continue to explore other venues of detecting bias in real-time, or to find ways to reduce or prevent guilt presumptions from influencing the interview. Although the findings in the present study have demonstrated that subtle language cues may directly influence the outcome of the interview, more applied research is needed before any definite conclusions can be drawn. The logical next steps for this area of research would be to observe the interview interaction between actual police officers and suspects. This may provide additional, or even different, linguistic cues. For that reason, this research is headed toward testing our assumptions with such a sample.

Conclusion

The present study demonstrated how question type and word choices can reveal clues to an interviewer's underlying guilt presumptions towards a subject. The findings also suggest that question phrasing can influence the respondent to place themselves as the subject in their answers. That type of responding may give the impression that the suspect was involved in the event (even if they were not) and could increase the perception of involvement by keeping the focus on the suspect. If such questions are formulated by an interviewer who has a presumption of guilt, the suspect's responses may inadvertently influence the responder to confirm these beliefs.

The experimental studies presented in the first part of this thesis lend additional support to previous findings concerning the influence of guilt beliefs and accusatory questions on a suspect's behaviour. However, there is very little research that has explored those variables in applied settings. The second part of this thesis examines question type and guilt presumptive language in police-suspect interviews to determine the influence of suspect behaviour and obtaining IRI.

Part II: Exploring Confirmation Bias in Applied Settings

Chapter 5

When Guilt is Presumed: Discursive Indicators of Confirmation Bias During an Interrogation

Overview

The language used in a police-suspect interview can provide clues to the underlying guilt beliefs of the interviewer. This chapter presents an analysis of the discursive indicators of guilt presumption and how it appears through covert speech acts (i.e., insinuation). The utterances (locutions) that led to the insinuation, and how the insinuation influenced the suspect's behaviour (perlocutionary force), were identified through the analysis of instances of covert speech. The findings revealed that suspect denials were the most common speech acts prior to and immediately after the interviewer's use of insinuation. The predominant influence of the covert speech act on the interviewee was to create defensive behaviours, which led to a break down in the dialogue of the interview. The findings in this study suggest that police interviewers may be using covert speech as a tactic to instil a guilt belief in the suspect. However, this tactic does not create optimal conditions for truth-finding or information-gathering during the investigative interview.

Introduction

An investigative interview is a socially organised interaction that occurs within a complex set of circumstances. Although both the interviewer and the interviewee influence the dynamic of the interaction, the interviewer arguably exerts the most influence on the overall outcome of the interview (Hudson, Satchell, Adams-Quackenbush, 2018). For example, an interviewer can manipulate the tone, topic, direction, and questioning techniques of the interview through his behaviour or underlying objectives (e.g., information-gathering or confession seeking; Edvardsson, 2009; Haworth, 2017; Mason, 2016; Moston & Engleberg, 1993). The interviewer can

also influence a suspect's responses and behaviour through questions and statements. That is, during the dialogue of the interview, an interviewer may explicitly state disbelief in a suspect's utterance, directly accuse the suspect of lying, or express guilt presumption (Oxburgh, Myklebust, & Grant, 2010).

Explicit statements of guilt are rare, however, and beliefs are generally uttered using more implied language (Kassin & McNall, 1991; Shuy, 1998). The present study examines a series of police-suspect interviews for discursive indicators of confirmation bias. Specifically, guilt presumptive language expressed as a covert speech act (i.e., insinuation) is examined. The detrimental influence of guilt presumption and covert speech relative to the objectives of the police-suspect interview are discussed (i.e., truth finding and information gathering). Using excerpts from a sample of police-suspect interviews, this influence is presented through examining the suspect's speech before and after a covert speech act is uttered by the interviewers.

Implicature and Covert Speech Acts: Insinuating Guilt

Language is used to construct and convey meaning, and thus, has the power to transform perceptions of reality (Semin, 2011). In situations where there is a power imbalance between interlocutors, language can be used to instil helplessness or to imply threats and negative outcomes (Farinde, Olajuyigbe, & Matthew, 2015). That type of language is often associated with adversarial and confession driven interviews in the literature (e.g., Reid Technique). However, researchers are finding that problems persist within the supposedly less adversarial information-gathering frameworks found throughout parts of Europe and in the United Kingdom (e.g., PEACE). For example, interviewers in the United Kingdom (UK; PEACE) and the Netherlands (General Interrogation Strategy; GIS) are trained to remain non-judgemental and only seek the truth during the interview, yet accusatory and guilt presumptive language is still found

within these frameworks (see Clarke, Milne, & Bull, 2011; Hoekendijk & Van Beek, 2015). This is may be due to interviewers deviating from their training and engaging in more intuitive questioning and confrontational behaviour (Griffiths & Milne, 2006).

The investigative interview is an information seeking interaction that can also contain elements of various types of dialogue (e.g., persuasion, negotiation, inquiry, argumentation, conflict; Walton, 2003). The purpose of the interview is to obtain information from an individual who may or may not be willing to share it with the interviewer. In police-suspect interviews, the objectives of the interviewer and the interviewee are often in conflict, and thus, the dialogue does not follow the normal rules of discussion. Walton (2003) posited that in police-suspect interviews the dialogue can be extremely adversarial and follows its own set of dialectical rules that include: concealment, coerciveness, deception, probing, critical calculation, argumentation, and insinuation by both parties. The adversarial nature of the police-suspect interview dialogue can also create prime conditions for covert speech acts such as guilt insinuation or insinuating consequences for noncompliance.

The complex nature of an interrogative or investigative dialogue can make linguistic analysis difficult as context, implicature, and intent need to be considered to gain insight to the utterances of both the interviewer and the interviewee (Walton, 2003). The study of pragmatics is a branch of linguistics in which language use is examined within the context it occurs and how context contributes to the meaning of an utterance. Within speech act theory (Austin, 1962), an utterance (locutionary act) encompasses and communicates the attitude and intention of the speaker (illocutionary acts), which allows the listener to infer meaning and draw conclusions (Bertuccelli Papi, 1996). For a listener to fully comprehend the meaning behind a speaker's utterance, he or she must be aware of both the overt (meaning) and covert (contextual assumption) information contained in

the utterance (Moeschler, 2013). Moreover, for effective communication to occur, both the speakers and listener must be aware of the other's perspective and intentions – explicit or implied (Holtgraves, 2002; Searle, 1975).

Speech act theory is also concerned with the ways language and utterances influence the listener through actions or state of mind (perlocutionary force). Perlocutionary acts occur because of, and regardless of, illocutionary force. Consider the following excerpt taken from an interview with a murder suspect and a Dutch police officer:

- (1) Interviewer: [exasperated tone] I want you to tell me the truth
- Suspect: I am (3) ((throws hands in the air)) I am done with this (.) I use my right to remain silent

In this example the illocutionary force of the interviewer's utterance seems to *request* that the suspect tell him the truth. The suspect then makes a response because of the request; however, the perlocutionary force results in rebuttal, frustration, and defiance (respectively). The intent was a request for truth-telling; however, the consequence was reduced cooperation - which occurred regardless of intent. When there appears to be a disconnection between the illocutionary and perlocutionary forces there is generally more happening within the implicature than is immediately apparent (Attardo, 1999; Douglas & Sutton, 2003). When speakers do not intend for the listener to be instantly aware of the illocutionary act of the utterance, they may have employed a covert speech act to get their message across (Bertuccelli Papi, 1996). In the excerpt presented above (1), the interviewer sought to achieve a specific perlocutionary force through the use of insinuation as a covert speech act (Attardo, 1999). The interviewer's utterance insinuates

that the suspect has not been telling the truth, without explicitly stating the interviewer believes he has been lied to, and without calling the suspect a liar. The suspect then understands that he has been accused of lying, believes that the interviewer thinks that he is a liar, and reacts to that belief.

When a speaker uses insinuation as part of their communication they are intending to implant a belief in the listener through an utterance without being held accountable for the listener's belief in the truth of that utterance (Bertuccelli Papi, 2014; Haugh, 2013). Insinuation is different than hinting or suggesting and comes with its own set of felicity conditions. First, insinuation does not contain clues to the underlying meaning as found when a speaker uses hints. Second, insinuation is a covert speech act whereas hinting and suggesting are overt acts where the speaker is committed to the truth of what he or she is hinting at, or the likely truth of the suggestion. Third, the speaker can make an explicit statement when insinuating, however, the final requirement is that when insinuating, the speaker cannot make his or her intentions known openly by using performatives such as 'I am insinuating that...' (Attardo, 1999; Parret, 1993), or as in the following example:

- (2) Suspect: I don't know (3) I stick to my earlier statement (.) I just can't picture it happening that way (.) I can't picture that was the day when [name] picked up the car=
 Interviewer: = [confrontational tone] No (.) I understand you can't put your finger on it
 Suspect: [confused] Why do you understand that?

Interviewer: [confrontational tone] Because it's
inconvenient for you [*suspect's name*] It's
inconvenient for your story

In this example, the interviewer was attempting to insinuate that the suspect was choosing to forget details about the day in question. The tone of the interviewer, however, did not match the words he spoke, which caused confusion for the suspect. The locution appears to be one of understanding and agreement, but there is a confrontational tone that accompanied the utterance. The confusion then prompted the suspect to seek clarification as to what the interviewer was trying to insinuate. The request for clarification then caused the interviewer to make a clear statement, which violated one of the felicity requirements for covert speech (i.e., being committed to the truth that the forgetting is intentional; Attardo, 1999).

Covert speech can also have a negative influence on the suspect in a way that breaks down communication between the speaker and the listener. This occurs when, as demonstrated in the previous excerpt (2), the listener understands that an insinuation has been made, but he or she cannot comprehend it within the context of their reality. Another way insinuation breaks down communication is by causing conflict as demonstrated in the following excerpt (3). When people use insinuation, they are not trying to communicate something positive to the listener. An interviewer can use insinuation as a veiled accusation or as verbal manipulation to make the suspect believe something that is implied (Bertuccelli Papi, 2014; Kassin & McNall, 1991). In the following excerpt, the interviewer is making two insinuations meant to manipulate the suspect's perception of his chances of being found innocent of the crime. In the first insinuation, the interviewer implied that the suspect's lawyer is just doing a job and isn't as invested as the suspect believes, so the suspect should confess to help himself:

- (3) Suspect: This can't be true
- Interviewer: WE'RE NOT MAKING THIS UP YOU
KNOW
- Suspect: [defensive tone] Well I'm not making it up
either (.) My lawyer will look into this.
- Interviewer: [raised voice] Yes (.) but your lawyer is
like us as well! She sits on this side of the
table as well (.) NOT the other side
- Suspect: I have nothing to hide.
- Interviewer: [raised voice] It's work to that lady (.) It's
work to us (.) But this is a part of your life
and you just need to come clean

In the second part of the exchange, the suspect responds with a denial of involvement and an assertion that his innocence will be proven in court. The interviewer then insinuates that the suspect's lawyer cannot help him prove his innocence because there is too much evidence against the suspect:

- (4) Suspect: It will come out in court that I am not the
perpetrator and my lawyer will prove this
- Interviewer: How is she supposed to prove you didn't
do it
- Suspect: That's something for my lawyer to work on
- Interviewer: [raised voice] The moment she -
- Suspect: I didn't do it =
- Interviewer: =The moment she begins, she'll already be
down 10 games.

Suspect: But you keep saying I did this. I didn't do it

Interviewer: [raised voice] Yeah but she is going to be
down 10 games, isn't she?

Suspect: [sarcastically] Yup, down 10 to 0.

The suspect responded to this insinuation with sarcasm and the interviewer then continued with a direct accusation of lying. After that exchange, the interview quickly dissolved into a back and forth of accusation, sarcastic rebuttals, and conflict for another five minutes. The suspect eventually declared that he has had enough and invokes his right to silence (non-cooperation). The interviewers then suggest a break. They speak to the suspect more conversationally during the break, and when the interview resumes, they start with a new line of questioning; however, the suspect is wary and defensive for the remainder of the interview.

Present Study

Researchers have extensively investigated interviewer questioning techniques and behaviour to determine how each can influence interview outcomes (e.g., quality and quantity of information and confession elicitation from suspects; see Meissner et al., 2012; Walsh & Bull, 2015). However, the effects of interviewer statements or opinion has been largely unexplored. Griffith and Milne (2006) reported that when interviewers resort to opinionated statements, this is usually an indication of frustration, which increases as the interviewer is unable to obtain an admission of guilt from the suspect. Of course, not all instances of interviewer opinion or statements include insinuations, nor are insinuations definitive evidence of interviewer frustration. The consensus in the limited literature, however, is that interviewer statements can be inappropriate and counter to information-gathering objectives (see Griffiths & Milne, 2006; Oxburgh et al., 2010). When an interviewer deviates from truth-finding and information gathering

towards opinion and statements it creates more opportunity to integrate coercion and covert speech acts into the dialogue.

The exchanges presented in the first part of this paper are examples of how guilt presumptive insinuation can have detrimental effects on the interview outcomes. When interviewers used covert speech acts to express their belief in the suspect's guilt, it resulted in a verbal exchange that did not further the objective of truth finding or information gathering. In the following study, situations that lead to the covert speech act of insinuation are explored by analysing the dialogue that occurs in various police-suspect interviews. The dialectic factors and events that prompted the insinuation are examined within the context that the speech act occurred. The suspects' speech acts immediately prior to and post insinuation are also examined. This provided insight to the overall outcome of the exchange. The goal for this analysis was to determine how the insinuation may have influenced the progression and outcome of the interview.

Method

Interviews. Twenty- three investigative interviews with murder suspects were obtained from the National Police force in The Netherlands. However, ten 'no comment' interviews were immediately excluded. Those interviews consisted of a barrage of questions directed at a silent suspect, and no covert language was used by the interviewers when asking their questions. Another four interviews with suspects who interacted with the interviewers were also excluded from the final analysis because there were no instances of covert language or insinuations of guilt. The average length of the remaining interviews ($N = 9$) was 141.05 minutes ($SD = 69.30$). The shortest interview was 40 minutes in length and the longest interview was 265 minutes.

The interviewers were a mix of female ($n = 4$) and male ($n = 14$) police interviewers from The Netherlands. Each interview had two interviewers present and one

suspect. No legal counsel was visible, nor where they heard, in any of the analysed videos. All the suspects were male ($n = 9$) and were interviewed for their suspected involvement with cases of homicide. All the interview participants spoke Dutch.

Preparing the materials. Due to the severity of the crimes, the interviews were audio and visually recorded at various police interview suites throughout The Netherlands. Each interview was viewed and transcribed verbatim in Dutch by a bilingual (Dutch/ English) research assistant who was naive to the purpose of the study. The Dutch transcriptions were then translated into English by the same assistant. The Dutch-English transcriptions were checked by a second bilingual (Dutch/ English) research assistant for accuracy of translation. The interviews were then viewed by a third researcher to verify speaker tone of voice, interruptions, speaker volume, inflection, and nonverbal behaviours such as gesturing to gain more insight to the atmosphere and context of the interactions.

Identifying and Analysing the Speech Acts. The translated English transcripts were analysed for occurrences of implicature through insinuation by the interviewer within turn taking. Turns were defined as a complete interaction that was initiated by an interviewer's question or comment. The turn continued until the interviewer asked a new question or made a statement on a topic unrelated to the current topic under discussion. Each interview included for analysis contained at least one instance of insinuating language. Once an instance was identified, the suspect's utterances immediately prior to, and immediately after, the insinuation were categorised into speech acts. The exchange was also analysed within the context of the broader interaction from start to finish. The speech acts, outcomes, and overall context were then aggregated, and the proportions for occurrences were calculated.

Findings

Within the nine police-suspect interviews analysed, there were 17 instances where the interviewer used insinuating language. The instances where insinuations were used by the interviewers occurred within five different contexts: information-seeking (11.8%), suspect refusal to respond (11.8%), presentation of evidence (17.6%), confrontation of inconsistencies (17.6%), and opinion statements about the suspect’s behaviour or involvement in the crime (41.2%).

Table 5.1

Suspect’s speech acts and proportions of occurrence immediately prior to and after the interviewer’s covert speech act of guilt insinuation.

Speech Act Pre-insinuation (<i>n</i> =11)	%	Speech Act Post-insinuation (<i>n</i> =8)	%
Confusion	6.8	Resignation	7.2
Resignation	3.5	Confront	10.7
Confront	13.8	Deny	21.4
Deny	34.5	Justify	10.7
Justify	10.5	Rebuttal	17.8
Disbelief	6.8	Defiance	7.2
Rebuttal	3.5	Inquire	14.3
Inquire	3.5	Covert Speech (Sarcasm)	10.7
Anger/ Frustration	3.5		
Covert Speech (Sarcasm)	6.8		
Non-cooperation	6.8		

Prior to the insinuations, 11 different speech acts were identified and post insinuation, eight different speech acts occurred (see Table 5.1). Within this sample of interviews, insinuation primarily came after the suspect made a denial of involvement in the crime (34.5%). Post insinuation, the most common speech act used by the suspect was also denial of involvement (21.4%), closely followed by a rejection (rebuttal) of the insinuation (17.8%; see Table 5.1). The overall perlocutionary force of the insinuations in the interviews was analysed by examining the remainder of the interaction until the interviewer asked a different question, the interviewer changed topics, or the interviewer suggested a break. In 75% of the instances, the overall effect on the suspect was to create defensive behaviours. In 12.5% of the instances the suspects responded with non-cooperation (e.g., exercising their right to silence, or closed posture and minimal utterances), and in a further 12.5% of instances, the suspect responded with anger or frustration.

Discussion

Instances of covert speech acts presented as insinuations were examined within police-suspect investigative interviews. In the original sample obtained by the Dutch police ($N = 23$), 39% of the interviews contained instances of insinuation and were analysed for covert speech. Interviewers mainly insinuated the suspect was guilty of the crime immediately after the suspect made a denial of involvement. Thus, it is possible that interviewers were using insinuation as a tactic. That is, the interviewers may have attempted to imply that the suspect's denials were not believed, and only the suspect's involvement would be considered as an option. Thus, the implication of guilt at that moment in the interview may have been a covert way of seeking a confession. Baldwin (1993) noted that in police-suspect interviews officers used statements to integrate unfair provocation into the interaction. This is what a covert speech act achieves. A tactic of

this type could be used in interview frameworks where confessions are considered optimal, but not overtly sought (i.e., information gathering interviews; see College of Policing, 2016; Van der Sleen, 2009).

Conversely, the use of insinuations may not have been a conscious tactic and instead merely a symptom of the frustration the officer felt when the suspect consistently denied involvement (Griffiths & Milne, 2006). For an interviewer who has a strong belief in the guilt of a suspect, a denial may be perceived as a challenge to his or her ability to persuade the suspect to reveal information or admit involvement (Moston et al., 1992). Thus, the presence of a denial offered an opportunity to respond to that challenge and refute it by insinuating a belief in the suspect's guilt. In this manner, the interviewer implied that the denial was unimportant because guilt had already been established and believed. Speech acts of denial prior to and following the insinuation are supported by Baldwin's (1993) findings that suspects tend to adhere to their initial position. In this case, the suspects denied involvement, and regardless of the interviewer's beliefs and insinuations, they maintained that position. Employing a denial in response to an insinuation may also have contributed to the interviewer's frustration and sense of challenge. That is, the denial essentially implied to the interviewer that the illocutionary force of the covert speech act did not influence the suspect.

Where the denial implies that the covert speech act had no effect on the suspect, an outright rejection of the insinuation is an explicit act of defiance within the dialogue. In the rejection speech acts, the suspect called out the insinuation by using explicit language and then refuted the implication of the utterance. A rejection of an insinuation is demonstrated in the following excerpt taken from our sample:

- (5) Suspect: You also thought I read the case file (.) when
in fact I don't even have it

Interviewer: Oh, I don't think you need the case file.

Suspect: [laughs] That doesn't make any sense(.) You imply I know these things because I was at the scene (.) But these are things you told me that people already stated

In this excerpt the interviewer insinuated that the suspect had specific knowledge because he was at the scene of the crime. However, the suspect rejects the insinuation and calls out the absurdity of it. The suspect then used the interviewer's previous actions against him by drawing attention to the fact the interviewer gave the suspect the information in question. This behaviour seems to be a bold move, and one that would require confidence on behalf of the suspect considering the perceived power imbalance within the interview. Although suspect demographic information was not available for this study, it would be interesting to know if the speech act of rejection occurred more frequently with suspects who had a criminal past versus those arrested for the first time.

The type of speech act demonstrated in the previous example (5), also warrants further attention in future research as it entails the suspect actively identifying and responding to a guilt presumption presented as a covert speech act. It is also noteworthy that the suspect's claim of being leaked information was never addressed or acknowledged by the interviewers. The act of leaking information to a suspect throughout the interview is known to be problematic if the suspect eventually confesses to the crime or admits partial involvement. The suspect is apt to incorporate those details into his statements (Kassin, 2005). In those cases, the confessions are often seen as more credible as they contain details of the crime that allegedly only the perpetrator, or an accomplice, would know. Thus, understanding when and why a suspect exposes an insinuation of guilt could be valuable for research on confessions. Moreover, further research that

examines how a suspect's rejection of an insinuation influences the subsequent tactics used by the interviewer, as well as ensuing dialogue, is also warranted.

A breakdown in communication and reduced cooperation by the suspect was the primary outcome of the interviewer's insinuations of guilt, which did not create ideal conditions for information-gathering endeavours. Those outcomes were most likely due to the suspect correctly identifying the insinuations as a display of interviewer dominance during the interview. The insinuation of guilt implied that those who held the power (the police) already believed the suspect was guilty. The suspect would immediately comprehend that the interviewers were trying to get him to admit guilt and prove the police correct. That understanding of the situation may have caused the suspect to attempt protect his interests by denying the insinuation and refusing to further engage with the interviewers. In forthcoming studies, researchers may wish to investigate why police interviewers use covert speech acts such as insinuation when it clearly undermines the objectives of the interview. Determining whether such utterances occur due to negative emotions, frustration, or as a conscious tactic could further initiatives aimed at improving police-suspect interviews. Often researchers focus on the presence of overt tactics or behaviours observed, and more subtle cues to guilt bias are missed.

Insinuating language is not generally listed as a coercive behaviour during the police-suspect interview (c.f. Moston & Fisher, 2007). However, an interviewer's language can be subtle but have a large influence on the behaviour of the suspect – including wearing down suspects, instilling perceptions of helplessness, and facilitating confessions that may not be true (Kassin, 2005). Police interviewers may not be fully aware of how their speech can reveal underlying beliefs of guilt, nor how insinuations of guilt can influence the progression of the interview dialogue. For this reason, there may be training benefits and possibilities for interview improvement with the ability to

identify biased language and understand how it influences the suspect, as well as the overall outcome of the interview.

Conclusion

The investigative interview is an important yet complex aspect of police work. In this study, evidence was presented that suggests that covert speech acts are not a productive addition to the police-suspect interview. To determine if the pattern of speech acts presented here hold true across many interviews, more interviews need to be analysed. Whilst insinuation of guilt may provide some insight to the underlying beliefs of the interviewer, it is impossible to know why the interviewer chose to make such utterances that were not optimal for acquiring case relevant information. However, the findings lend support for the notion that using guilt presumptive speech is detrimental for achieving the objective of truth-finding and information gathering.

Chapter 6

Detecting Confirmation Bias in a Police-Suspect Interview: An Evaluation of the Accusatory Questions in a Murder Case

Overview

Controlled studies have demonstrated that guilt-presumptive questions are the most reliable indicator of interviewer guilt bias and accusatory behaviours towards a suspect. When evaluating police-suspect interviews, however, conventional methods primarily focus on the appropriateness of questions asked to gather information or elicit a confession. Within the various question categorisations used by researchers' guilt-presumption is not featured as a questioning strategy; therefore, those types of utterances are not recorded. Instead, guilt-presumptive utterances are aggregated with other types of inappropriate opinion statements. Moreover, there is often more happening within an interview than is immediately identifiable by simply focusing on question types and opinions. Examining the interactivity and behaviours that lead to accusations can reveal subtleties that have a profound influence on the flow and outcome of the interviews. In the present study we analysed $N = 6$ interviews from a single murder investigation for guilt-presumptive language (accusations and insinuations of guilt) and question appropriateness. The interactions within the interview that occurred prior to, and immediately after the guilt-presumptive language was used were then analysed. The findings demonstrate that direct accusations prompted suspect denials, facilitated a drastic decline in suspect cooperation, and impeded the ability for interviewers to gain investigation relevant information (IRI). We argue that more applied research on guilt-presumptive language is needed in the investigative interviewing literature, particularly in the context of interviewer beliefs about suspect guilt as well as biased decision-making regarding questioning strategies.

Introduction

Research findings have resulted in a consensus that guilt presumption is a significant underlying factor when police officers employ confrontational and accusatory interview techniques (e.g., Kassin, Goldstein, & Savitsky, 2003; Narchet, Meissner, & Russano, 2011). Despite the potential for detrimental effects on suspect behaviour and interview outcome, guilt-presumptive questions are not generally identified or assessed in research designed to examine question types. Researchers and practitioners have primarily opted to categorise questions using a variety of typologies that do not explicitly include guilt-presumption (for an overview see Oxburgh, Myklebust, & Grant, 2010). Whilst those typologies may be suitable for obtaining a summary of the questions used during the interview, they may not be suitable for when a full understanding of the interview is required. For example, if a confession is called into question or the handling of a criminal case is investigated.

In this study, we examined a selection of interviews from a single Dutch murder case to demonstrate the importance of identifying and understanding the interactivity between the interviewer and the suspect. In the first part of this paper, we analysed the interviews by question type, suspect cooperation, and amount of investigation relevant information obtained. In the second part of the paper, we analysed those same interviews for insinuating and accusatory guilt presumptive language. We then discuss the influence of such language on the suspect's behaviour as well as the dynamic of the interview. We make an argument that guilt-presumptive language should be identified when evaluating interviews, as it may provide insight to the interviewer's guilt presumptions and help explain subsequent interview outcomes (e.g., reduced information obtained and reduced suspect cooperation).

Guilt presumption and information-gathering interviews

The investigative interview is a crucial tool for gathering investigation relevant information (IRI) from witnesses, victims and suspects. Suspect interviews generally occur at a crucial stage in the investigation (Baldwin, 1993), and it is imperative that the interview is conducted in a way that does not impede the investigation. However, factors of the criminal investigation such as scenario creation and identifying a prime suspect can introduce an expectancy of guilt once the suspect interview commences (O'Brien, 2007; Walton, 2003). The challenge for interviewers is then to remain objective whilst attaining the suspect's account, and this must be achieved considering the information they already have – no matter how incriminating that information may seem.

Weak information against a suspect can also be framed in a way to justify arrest and questioning (Kassin, 2005). Researchers have demonstrated that when police investigators do not have strong evidence against a suspect more coercive and undesirable interview tactics are employed to break down suspect denials (Ofshe & Leo, 1997), as most case closure still relies on suspect confessions (Moston & Fisher, 2007). However, some of the tactics used during suspect interviews can facilitate false confessions and lead to eventual miscarriages of justice through coercive tactics and guilt-presumptive questioning (Kassin, 2005). In fact, the most consistent finding throughout the literature suggests that interviewers are more likely to use guilt-presumptive language when they have an expectation of guilt about the suspect (Hill, Memon, & McGeorge, 2008; Kassin et al., 2003; Moston & Engelberg, 1993; Narchet et al., 2011; Ofshe & Leo, 1997). Guilt presumption in police- suspect interviews has been shown to taint judgements of veracity (Meissner & Kassin, 2002), influence the perceptions of others who may witness the interview (Vrij, Mann, Kristen, & Fisher, 2007), alter innocent suspect behaviour (Adams-Quackenbush, Horselenberg, Hubert,

Vrij, & Van Koppen, 2018), and subject other aspects of the investigation to investigator bias (e.g., evidence evaluation, Ditrich, 2015).

Guilt-presumption is generally linked to confrontational interviews but can also be present within information-gathering contexts (see Hill et al., 2008). Van der Sleen (2009) highlighted factors that can contribute to false confessions and juxtaposed those factors with the practices and techniques in one of the more prominent Dutch information-gathering interview methods - the GIS (General Interview Strategy; Van Amelsvoort, Rispen, & Grolman, 2010). Van der Sleen discussed how proper use of the GIS can prevent undesirable interview outcomes. That is, miscarriages of justice often occur when interviewers assume guilt from the beginning due to confirmatory behaviours (Lassiter, 2004) and employ improper questioning techniques. Although officers are trained to use these types of frameworks, there is evidence in the literature to suggest that police interviewers do occasionally diverge from their training and resort to accusatory strategies and coercive tactics to increase interrogative pressure and reduce suspect denials (Griffiths & Milne, 2006; Moston & Engelberg, 1993).

Guilt presumptive language. Guilt-presumptive language can occur in all types of interviews because humans typically have the need to confirm their beliefs (Nickerson, 1998). Within the police-suspect interview, a confession could be perceived as proof that a guilt presumption was correct, and the police were right to focus on the suspect as the perpetrator. When guilt presumption is present, some interviewers may unconsciously employ questioning techniques that help confirm their guilt beliefs. In some situations, this is done through accusations that are presented as statements posed as questions (for examples see Komter, 2003), or as direct opinion statements designed to highlight a power imbalance, instil helplessness, or imply threats to a suspect (see Farinde, Olajuyigbe, & Matthew, 2015). However, the prevalence of those tactics in information-

gathering interviews is suspected to be rare (Moston & Engelberg, 1993), but is currently unknown. The authors of this paper could not locate any literature that specifically evaluated police-suspect interviews for accusatory or guilt presumptive language in information-gathering contexts. However, there is some emerging research that suggested outright accusations of involvement in a crime may be infrequent in information-gathering contexts and more insinuating accusations of guilt may be used to break down suspect denials or resistance (authors, 2018).

Insinuations are a type of covert speech act that are defined by a set of felicity conditions that remove accountability for the truth of the statement from the speaker and the intention of the insinuation is not explicitly stated (Attardo, 1999; Bertuccelli Papi, 1996). In an investigative interview, insinuations may be used in the interview to imply guilt or instil doubt or helplessness in the suspect. That type of language can cause the suspect to respond defensively or to become uncooperative. Both of those behaviours can directly affect the course of the interview dialogue and change the interpersonal dynamic of the interview. Insinuations can occur during questioning; however, they are most likely to be found when the interviewer deviates from inquiry and offers opinion statements or engages in argumentative dialogue with the suspect (authors, 2018). Opinion statements are also where many interviewers deviate from their training and employ poor interviewing practices (Griffiths & Milne, 2006; Van der Sleen, 2009), and where insinuating language is most likely to occur.

Evaluating Investigative Interviews for Guilt Presumptive Language

When evaluating police-suspect interviews, conventional methods primarily focus on the appropriateness of questions asked to gather information or elicit a confession. Within the various question categorisations used by researchers, guilt-presumption is not featured as a questioning strategy; therefore, those types of utterances

are not generally captured. Instead, guilt-presumptive utterances are aggregated with other types of inappropriate opinion statements. In the broadest format, some typologies include categories for appropriate and inappropriate questions (Milne & Bull, 1999; Shepherd & Griffiths, 2013). Some researchers have examined the purpose of the questions more closely and included categories for open, closed, probing, and leading questions, as well as opinion statements (e.g., Davies, Westcott, & Horan, 2000; Griffiths & Milne, 2006). There is no consensus or standardised question types amongst researchers or practitioners regarding those categories. There is, however, overall agreement that certain question types (i.e., leading, rapid/ multiple questions, and forced-choice questions) should be avoided in all types of interviews (i.e., witness, victim, and suspect; Oxburgh et al., 2010).

Including guilt-presumptive language as a question type is important to draw attention to its presence within the interview. It is generally understood that utterances have intention, convey meaning, and occur in context of a situation. Those elements taken together can help interview analysts have a more in-depth understanding of what is happening within the dialogue (e.g., Haworth, 2006; Heydon, 2005). Simply knowing that guilt presumption was present in the interview can provide valuable insight about how the interview was conducted, and perhaps raise some important questions about any confession outcomes (e.g., obtained voluntarily and without coercion). However, simply identifying insinuations or accusations is not sufficient to fully comprehend any negative influences either may have on the interview interaction. For that, a more thorough evaluation of the content is needed. Further insight into the exchanges within an interview is often required to fully understand the effect that guilt-presumptions have on eliciting information and influencing suspect behaviour. Therefore, linguistic techniques rooted in pragmatics and content analysis may be the best approach for identifying guilt

presumptive language and behaviours consistent with confirmation bias (Oxburgh et al., 2010; Grant, Taylor, Oxburgh, & Myklebust, 2015).

Analysing the content of the interview allows the evaluator to focus on the utterances in context, as well as the consequences of the utterances. From an applied and practitioner standpoint, analysing the speech content and the function of the utterances in an interview is also a feasible approach for single cases. Investigative interviews are sometimes subjected to scrutiny because some aspect of the interview has been called into question. In those instances, interview evaluation is conducted by experts who are usually asked to inform a judge on the reliability of a confession⁷. That type of evaluation is only possible if the expert examines the language, tactics, and interactions that occur throughout the interview and has a full understanding of the questions posed to the suspect. Although a report on the types of questions used in the interview would not provide useful information to a court, a report identifying accusatory language as an indicator of guilt presumption and its negative effects – backed up by empirical findings – could be valuable guidance for a judge.

The Present Study

Many controlled studies have highlighted the negative effects of guilt-presumptive questions in interviews (see Hill et al., 2008; Kassin et al., 2003; Meissner & Kassin, 2002; Narchet et al., 2011; Olson, 2013). Those studies have also emphasised the relationship between guilt-presumption, biased decision-making (e.g., confirmation bias), and false confessions. However, when question types are evaluated for police-suspect interviews, guilt-presumptive language is absent from the more popular question typologies used by practitioners and researchers. In the remainder of this article, we will

⁷ Courts will often ask experts to provide opinion on the reliability of confessions; however, this legal phrasing is erroneous from a measurement perspective. A reliable confession would be one that is consistently given in the same way over several time points. A valid confession is one that accurately portrays the details of the crime and is obtained voluntarily without coercion.

demonstrate the benefits of identifying guilt presumptive language through question classification. We then provide further insights to any negative effects of guilt-presumptive language on information-gathering endeavours, the interviewer-suspect interaction, and suspect cooperation. To demonstrate this, we present the data from a portion of interviews in a single murder investigation conducted in The Netherlands.

Background on the Dutch GIS model. The GIS is an interview model loosely based on the PEACE interview framework used in countries such as the UK, Norway, and Australia (see College of Policing, 2016; Hoekendijk, & Van Beek, 2015). Dutch interviewers who use the GIS will plan and prepare for the interview (Van Beek & Hoekendijk, 2015). The interviewers are trained to engage and explain with the suspect, and the within their pursuit of the truth, interviewers will also obtain the suspect's account, clarify information, and challenge statements as needed. Each interview should end with a review of the interview questions and suspect responses. Finally, the investigators will evaluate any information obtained to further the investigation and decide if more interviews are needed (Van der Sleen, 2009). This is where the similarities with the PEACE framework ends. The GIS also contains instructions to 'build interrogative pressure', 'break down suspect denials' and 'reward with praise if the suspect's statement is adjusted to reflect the truth' (see Clement, Van de Plas, Van den Eshof, & Nierop, 2012; Van Amelsvoort, et al., 2010).

Case background. A man was found dead in a small town in The Netherlands. The police conducted an extensive investigation and interviewed many people in relation to the case. Various CCTV information, from multiple locations, showed the victim with an unidentified adult male, hours before his death. The unknown individual was identified by the Dutch rail police through the CCTV footage, and his identity was given to the investigators on the case. It was eventually revealed through interviewing other

witnesses that the man (henceforth referred to as the suspect) was an acquaintance of the victim. Based on the CCTV footage of the suspect and victim leaving the train station together, the investigators believed the suspect was the last person with the victim before his death. The suspect was arrested and brought in for questioning. Some of the physical evidence collected at the scene was traced back to the suspect after a search and confiscation of his personal items. However, the evidence was weak and did not implicate the suspect in the commission of a crime. To further the case, the police needed the suspect to provide his account of events and explain the evidence against him. In accordance with Dutch custody procedures, the suspect was remanded for questioning, which was extended for a little over two months while the investigation continued. During that period, the suspect was interviewed 17 times by two interviewers who used the GIS framework (Van Amelsvoort et al., 2010). The suspect maintained his innocence throughout the process and was eventually freed due to a lack of evidence that implicated him as the killer.

Although the suspect was released from custody, the 2.5 months he was remanded had negative effects in his personal life. During the remand period, the suspect lost his job and placement in a drug rehabilitation program. As a result, he became a financial burden to his family, and returned to drugs, which deteriorated the family dynamic. Ten months after his release, the suspect returned to the police station and offered to confess to the murder if a number of conditions could be met (e.g., specific prison to serve his time, a bible, and access to drug rehabilitation). The conditions were agreed upon, and in the interview that followed he gave his account of the murder. However, the suspect did not reveal key information that only the murderer would know. The investigators conducted four subsequent interviews in an attempt to obtain a statement that was consistent with the evidence; however, the interviewers did not succeed. Prior to trial, all

23 interviews and the case file were sent to an expert for an opinion on the reliability of the confession. Despite initially maintaining his innocence for 17 interviews and providing an inconsistent confession to the crime, the suspect was sentenced to 18 years in prison. The case has been appealed and legal proceedings are ongoing at the time of this writing.

Method

Interviews. Twenty-three interviews with a murder suspect were obtained from the expert involved in the analysis of the police suspect interviews. During each interview two interviewers and the suspect were present. There was no legal counsel present in any of the interviews. The last six interviews were excluded from the analysis as they occurred 10 months after the 17th interview and after the suspect was released due to lack of evidence. Whilst those last six interviews involved the same case, they occurred under a different set of circumstances and were unsuitable for evaluating interviewer guilt presumption. All 17 remaining interviews were coded for speech content and interview theme; however, only six ($N = 6$) were randomly chosen for analysis on question types⁸. The mean interview length of the six interviews was 113 minutes ($SD = 14.77$). The first (#1) interview was purposefully chosen as a natural starting point as it contained the free narrative from the suspect. An additional five interviews were then randomly selected from the remaining sample (interviews #2, #3, #8, #10, and #16).

Five of the interviews had the same two male interviewers. The primary male interviewer who asked most of the questions is indicated by I1. The second interviewer occasionally engaged in asking questions, but his primary role was to type the suspect's responses to each question. He is indicated by I2. In interview #16, the primary

⁸ The pattern of questioning and question types was repetitive throughout the 17 interviews. Because the objective of the case study is to demonstrate the type of information that can be obtained by different methods of interview evaluation, a random sampling of six interviews is sufficient for this purpose.

interviewer (I1) was replaced with a female detective who is indicated as I3. All the interviewers and the suspect spoke Dutch.

Coding Procedure. Due to the severity of the crime, the interviews were audio and visually recorded. All 17 interviews were viewed and transcribed in strict verbatim style in Dutch by a bilingual (Dutch/ English) research assistant (RA) who was naive to the purpose of the study. The RA used Jeffersonian transcription notation for conversational analysis with small variations for denoting overlapping speech, nonverbal behaviour, and contextual notes (Jefferson, 1984; see Appendix F for transcription notation). Each complete phrase uttered by all parties in the interview room received its own line number. The Dutch transcripts were then translated into English by the same assistant. The Dutch-to-English transcripts were checked by a second bilingual (Dutch/ English) RA for accuracy of translation. The interviews were then viewed with both language transcriptions to verify and take notes on: speaker tone of voice, interruptions, speaker volume, and inflection. Nonverbal behaviours (e.g., gestures) were also noted to gain additional insight to the demeanour and context of the interactions.

Coding the Techniques. The interviews were divided into turns for coding purposes. Turns were defined as a complete interaction that was initiated by an interviewer's question or comment. The turn continued until the interviewer asked a new question or made a statement on a topic unrelated to the current topic under discussion. The translated transcripts were coded by the author of this thesis. Only questions directly relevant to obtaining IRI or clarification were coded and questions such as, "*can I get you a drink?*" or "*what did you have for lunch?*" were not coded for analysis. Additionally, only statements that pertained to the case were coded. Informative statements such as "*your sister dropped off clothes and cigarettes for you*" or an interviewer response to questions posed by the suspect during small talk and banter were

also not included (e.g., “*I’ll see what I can do about getting you some warmer clothing*”). To calculate intercoder reliability, 20% of the interviewer questions and 20 % of the statements were randomly selected and recoded by research assistants. Percent agreement was calculated for each factor and conservative agreement thresholds were applied: < .80 = poor, .80 - .86 = fair, .87 - .93 = good, and .94 - .10 = excellent.

The codable questions asked by the interviewers were first categorized by broad question types (appropriate and inappropriate; Milne & Bull, 1999; Shepherd & Griffiths, 2013). Interrater agreement was 89.9%, which suggests a high level of consistency. Questions were then coded using more specific types (open, probing, appropriate closed, inappropriate closed, leading, forced choice, multiple, and opinion/ statement; see Appendix E for definitions). Interrater agreement was 87.3%⁹. All discrepancies in the coding were due to the distinction between appropriate and inappropriate for the closed question category. The disputed questions were then presented within the contextual dialogue to a subject matter expert (in investigative interview questions) for a final decision on ‘appropriateness’.

Identifying and Analysing the Speech Acts. The translated English transcripts were analysed for occurrences of guilt-presumptive language (direct accusations and insinuations of guilt) within each turn. Once an instance was identified, the suspect’s utterances immediately prior to, and immediately after, the insinuation were evaluated for information elicited during the exchange as well as suspect cooperation. A linguist who was blind to the purpose of the study also reviewed the occurrences of insinuation to ensure objectivity in the analysis. There was 100% agreement in all instances.

⁹ All reported interrater agreement was resolved by checking the transcripts for evidence. In cases where subjective decisions were needed, the author of this thesis or a subject matter expert made the final decision when appropriate.

Investigation relevant information (IRI). The responses to each question were examined for IRI within each turn to assess question efficacy. Relevant information was coded using established schemes adapted from previous studies (see Hutcheson, Baxter, Telfer, & Warden, 1995; Milne & Bull, 2003; Oxburgh et al., 2014). The IRI was defined as: **Person information, Action information, Location information, Item information, and Temporal information (PALIT)**. Each piece of information obtained was coded only once across all interviews and only new information was included. Interrater agreement was 94.2%.

Suspect cooperation. If the suspect responded to a question with an answer that gave information or explanation (regardless of detail or length), it was coded as cooperative. If the suspect refused to respond, invoked his right to silence, or evaded the question, it was coded as uncooperative. Interrater agreement was 96.8%.

Part I Analysis: Question Typologies and Outcomes

Across the six analysed interviews there were 1942 codable utterances made to the suspect ($n = 1049$, questions $M_{questions} = 174.8$, $SD = 58.9$; $n = 893$ statements, $M_{statements} = 148.8$, $SD = 88.8$). The GIS interviewing framework requires interviewers to conduct two types of interviews: suspect oriented and case oriented. Moreover, interviewers who use the GIS approach start each interview with a theme for questioning and some prepared questions (see Table 8.1 for additional information on each interview). To determine whether interview type influenced the types of questions asked, ANOVAs were conducted to compare the variables of interest, and no significant differences emerged. Despite the interviewers focus on the suspect (person-oriented) or the information and evidence (case-oriented), frequency of accusatory questions [$F(4,1) = .75$, $p = .44$], number of appropriate questions [$F(4,1) = 1.01$, $p = .37$], and number of inappropriate questions [$F(4,1) = 2.15$, $p = .22$] did not differ across interview types.

Question types. There were no occurrences of guilt-presumptive questions in these interviews, however there were 13 direct accusations of involvement in the crime and 12 insinuations of involvement. Guilt-presumptive language made up 7% of the utterances that were coded as inappropriate statements. All guilt-presumptive language occurred within the category of inappropriate opinion statements. Within the overall statements made by the interviewers, $n = 347$ (38.8%) utterances were categorised as inappropriate. The remaining 61.2% of the overall statements pertained to the case and were considered appropriate utterances. However, within the coding structure there was no category for appropriate statements, thus, they were not included in the subsequent analyses of appropriate and inappropriate utterances (see Appendix F for a list of question type definitions).

Most of the questions posed to the suspect were appropriate (61.9%), which was attributed to the high number of closed-appropriate questions overall (AYN; 34.4%). The interviewers use of open (Tell Explain Describe: TED) questions was negligible across the interviews (< 1%). The most commonly used inappropriate questions were leading questions (16.1% of questions asked) followed closely by inappropriate closed questions (IYN; 11% of questions asked; see Figure 6.1). Guilt-presumptive language featured more prominently, in relation to other types of questioning, at interviews #2 and #8, which were both case-oriented interviews.

Interviewers obtained 198 pieces of investigation relevant information (IRI), with most of the IRI received during the suspect's free narrative within the first interview (40.9%). The amount of IRI attained steadily decreased over the course of the interviews with sharp drops at interviews #8 and #16 and a small spike at interview #10 (see Figure 6.1). A similar trend was observed with suspect cooperation. In the first interview, the suspect cooperated with interviewers 90% of the time, with a sharp decrease at interview

#3 to only cooperating 15% of the time. The suspect maintained a low level of cooperation for the remainder of the interviews with a small increase in cooperation in interview #10 (13%; see Figure 6.2).

In the previous analysis, we demonstrated the type of information that can be obtained from police-suspect interviews when the question type, IRI, and suspect cooperation are coded. An overview revealed that the majority of questions were appropriate-closed. Whilst those types of questions are not considered the best for gaining IRI, they are effective for confirming information and obtaining short and specific responses. When used excessively, appropriate-closed questions are an indication of amateur or poor questioning practices (Shepherd & Griffiths, 2013).

Part II Analysis: Guilt Presumption and Accusations in Context

In the first interview of this case, the presence of guilt presumptive language within what was supposed to be a free-narrative or ‘first contact’ interview (Amelvoort et al., 2010) may suggest that the interviewers assigned to the investigation showed evidence of guilt bias towards the suspect. The interviewers initially follow the standard process and inform the suspect of his rights and the process of the interview. The interviewers then provide the suspect with procedural information and the reason for his arrest. The free narrative is prompted with an open question about the day the suspect was seen travelling with the victim. That allowed the suspect to provide a narrative that is punctuated with some probing, clarifying, and appropriate- closed questions.

At 40 minutes into the interview, the suspect gives some resistance when he does not want to provide the name of his drug dealer, as he feels this is unrelated to the murder and doesn’t want to cause the dealer unnecessary problems with the police. He has also previously given his first denial of involvement. After some discussion about

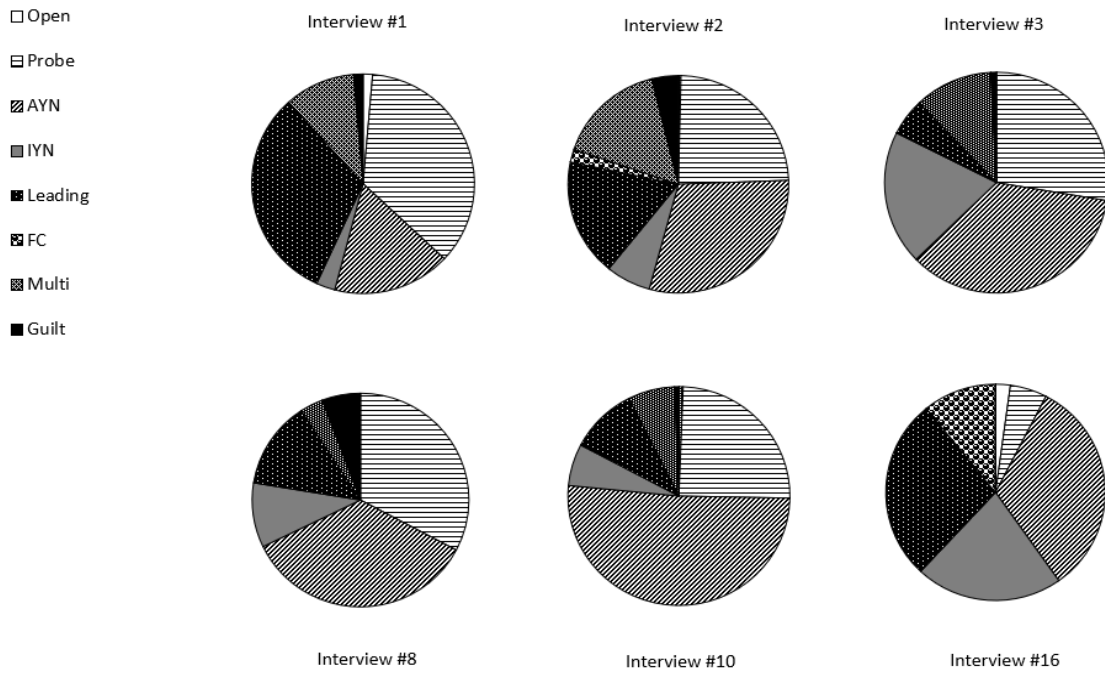


Figure 6.1. Question types coded for each interview presented as proportions.

Note: AYN = closed appropriate questions, IYN = closed inappropriate questions, FC = forced choice questions. See Appendix F for definitions.

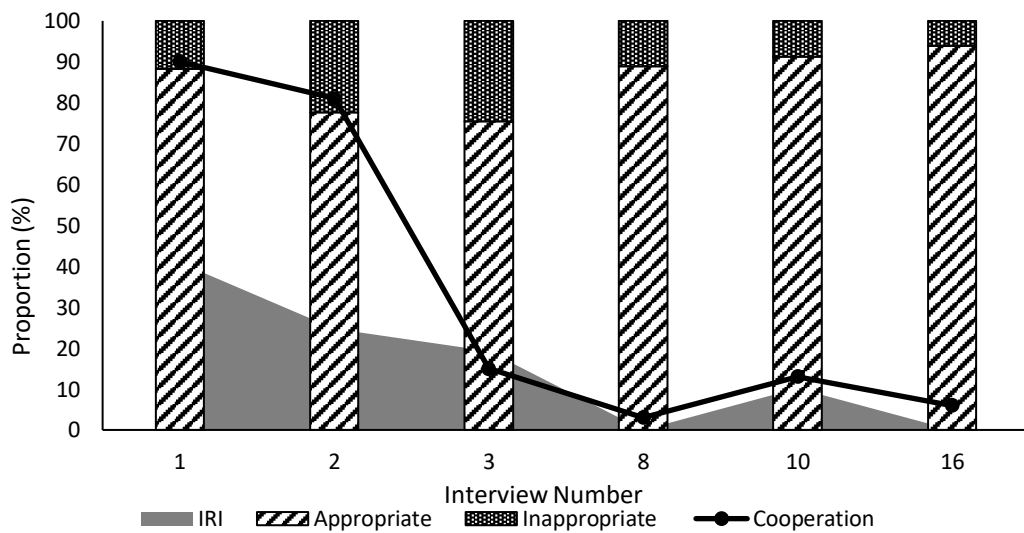


Figure 6.2. Proportion of appropriate questions and inappropriate questions asked, investigation relevant information obtained, and suspect cooperation over six interviews.

Table 6.1

Descriptive information about the interviews: primary interviewer, interview length, interview type and the themes for questioning.

Interview #	Primary Interviewer	Secondary Interviewer	Length (min)	Interview Type	Questioning Themes & Topics
1	I1	I2	148	Opening/ Case	Charges Free narrative Alibi Suspect knowledge of crime details
2	I1	I2	123	Case	Acquaintances Transportation Cell phone use (Suspect) Cell phone use (Victim) Drug use Alibi (clarification)
3	I1	I2	124	Person	Religion Residence Finances Employment Confiscated belongings On-line presence Cell phone use & Contacts Recreational drug use Shared clothing & items
8	I1	I2	155	Case	Witness statements Confront inconsistencies
10	I1	I2	128	Person	Relationship with daughter Daughter's statement Phone contacts
16	I3	I2	132	Case	Presentation of evidence Alibi substantiation

the importance of knowing who the dealer is so he or she can substantiate the suspect's alibi, the first accusation occurs at 0:42:26 minutes into the interview:

I1: Yes, but those are people at that moment who can confirm whether some people were or were not present at the time.

S: Um:: I think it's such a minor detail (.) I mean =

I1: = Yes to you to you it is a:: it is a small detail (.) but on the other hand ((*points at the suspect with dramatic emphasis*))
YOU are here =

S: = Yes I do know that, but //

I1: /And you are sitting here because you are involved in the death of [*Victim*]/

S: = Yes

I1: And if you say yes but I have nothing to do with it then really use this opportunity that YOU now have // to say like yeah so and so can confirm that I (.) wasn't there // that I was somewhere else =

S: /Yes/

S: /Yes but I keep saying that, [*person name*] eh (mumbles)/

S: = ,oh him him him too (inaudible) [*male name*] [3] I do know I do know the address number (hhh) anyway he is still using and eh he always comes there too eh/

The accusation is a clear statement that the suspect is being interviewed because he was involved in the victim's death. The phrasing of this statement to indicate actual involvement is very important. The interviewer could have delivered that message with less accusatory phrasing, but that would not have led to the desired effect. This guilt-

presumptive language was used as a tactic to reduce the resistance of the suspect and remind him of the severity of the situation. However, the use of accusatory and confrontational questions has been shown to have negative effects on suspect cooperation that last up to 15-minutes (Kelly, Miller, & Redlich, 2015). In this instance, the suspect responded with cooperation and attempted to provide the name of a male drug-user who could verify the alibi instead of naming the dealer. This also provided the interviewers with IRI (person).

A tactic used within the GIS is to conduct a person-oriented interview early in the process. This is often the second step of the interview process after the free narrative or 'first contact' interview. The person-oriented phase allows interviewers to establish rapport, gain some insight into the person they are interviewing, and to get the suspect talking (Van Amelsvoort et al., 2010; Geijssen, Vanbelle, Kop, & De Ruiter, 2018). The interviewers in this case opted not to employ this tactic and continued with their efforts from the previous day to gather case specific information. That decision, however, may have impeded their ability to attain meaningful IRI. Then throughout most of this interview, the interviewers asked pointed questions about specific pieces of information that the suspect already provided in the first interview. The suspect answered the questions and additional IRI was obtained as indicated in Figure 6.1; however, towards the end of the interview there was a sudden shift in interviewer behaviour when I1 asked I2 if he had any questions. I2 responded with an insinuation that the suspect was lying. I2's primary role within the interviews was to record the suspect's responses into an interview table that was located on a computer (he typed almost continuously throughout the interviews). That document contained a list of topics, themes, and specific questions that the interviewer uses as a guide, as well as information that had been collected about the case (Van Beek & Hoekendijk, 2015). I2 would have information that called the

suspect's claim of returning home by train into question (revealed in a later interview). Because it was too soon to confront the suspect with that information, he insinuated dishonesty and then accused the suspect of lying.

I1: I am eh::: running out of questions so I am looking at [I2's
name] (looks at I2)

I2: (hhh) I think he really needs to think very hard right now

S: About?

I2: You came back by train (.) yes?

S: ((nods))

I2: Then you're telling a story

Just prior to the that interaction, the suspect stated that it was a regular day to him, so he could not recollect the exact and minute details about his whereabouts, the people he spoke to, and the phone calls he may have made that the interviewers were pressing him for. I2 and I1 use the suspect's utterances as a starting point for a stream of guilt-presumptive language that included statements as questions and insinuations of involvement.

I2: That is a very crucial day right? // Look it might be a day like
any other day to you =

S: /(mumbles) (inaudible)/

S: = Yes but I'm saying –

I2: So do remember that that day was the last day eh::: that [*victim*]
saw the light of day (.) Yes?

S: (nods) Yes but I –

I1: And you are simply one of the last (.) maybe the last person
who saw him (.) So, eh::: you can say that is an ordinary day to

me and I went from there to there and I really don't remember everything (.). And as [I2] already mentioned a few times (.). you need to start to think really hard right now

S: Yes because I'm telling you –

I2: SOMEONE HAS BEEN KILLED AND YOU WERE THERE

=

S: = [defensively] But I just know (.). Look (.). if I was so to say there (.). and if I had done it (.). then it would have been a special moment (.). special day (.). then I would know about that and that

I2: = Mhrm =

S: [defensively] ((gestures for emphasis)) To me it's a day like any other day and I can't say like (.). well I come across him and so and so often (.). so many different people (.). it's just (.). to me really nothing special happened that day

I1: Now (.). very briefly [*suspect's name*] (.). you went to [*town in the Netherlands*] with [*victim*] =

S: = Yes =

I1: AND HE WAS FOUND DEAD AFTER

The exchange continued with the interviewers repeating that the suspect was with the victim on the day of his death another three times. The suspect retorted by asking the interviewers how they know that he was the last person with the victim if they lost track of the victim's whereabouts after he left the train station. At that point, the interview dialogue deteriorated into an argument filled with sarcastic replies, and further guilt-presumptive language uttered by the interviewers. That exchange continued for another

seven minutes. The dialogue was never recovered, and the suspect became uncooperative. The interviewers decided to end the session and start again after lunch.

The third interview (conducted a few hours after the previous exchange) was when the interviewers attempted to conduct a person-oriented interview. If that interview was analysed in a study that examined question types and rapport building, it would have appeared as an anomaly. The interview contained the highest proportion of inappropriate questions and one instance of guilt-presumptive language, neither of which were conducive for building rapport or obtaining IRI. Most of the inappropriate questions came from the category of inappropriate-closed questions (IYN), which also included echo questions used for clarification. It was also during this interview that the most drastic decline in suspect cooperation occurred, which also influenced the amount of IRI obtained.

Most of the issues with the third interview can be directly attributed to the confrontational and accusatory behaviour exhibited by the interviewers in the interview directly preceding it. When the suspect returned to the interview room after lunch he was in a foul and uncooperative mood. The interviewers spent a significant amount of time negotiating the suspect's cooperation, to no avail. It appeared that the last thing the suspect wanted to do was talk about himself with two people who clearly believed he was involved in the death of his acquaintance. His demeanour was closed, and his posture was defensive. Moreover, no trust or rapport was built up by this point. Any rapport or trust that may have naturally formed over the first two interviews may now have been destroyed.

Periodically throughout interview #3, the suspect answered some questions and divulged a bit of new information. At one point in the interview, he spoke about a serious health issue concerning one of his family members and how being incarcerated was

troubling him, because he could not be there for that person because he was in custody. The suspect also lamented that he had been doing well in his life and now the arrest had changed that. That was a perfect opportunity for the interviewers to seize a moment of rapport and open the dialogue to learn more. Instead, this was where the interviewer insinuated his belief that the suspect was involved in the victim's death:

S: [The suspect's utterance was omitted as it was almost completely comprised of identifying information]

I1: Yes, but there is a reason why you are here (.) isn't there! And t-that silly thing that happens (.) I don't want to hear that and that (.) You do it to yourself (.) Its that you - At some point when we are discussing normal questions you just go and say like well I'm not going to cooperate any more.

S: Yes =

I1: = I can (.) my gut feeling is not getting any stronger about you [*suspect*] to say that guy really has nothing to do with it

S: No way (.) eh:: I have (.) that's why I'm saying (.) I told you to the point where I saw [*victim*] and what happened and the last time I saw him (.) But otherwise I have nothing to do with it! And I'm not going to tell you stuff or put words in your mouths because that's where that I'm thinking like (.) well you (.) you all know it too

The exchange between I1 and the suspect around his involvement in the crime continues. It eventually ended with the suspect invoking his right to silence and the interviewers once again attempting to negotiate cooperation. The interview dialogue was not regained within this interview, and rapport building did not occur.

Interview #8 was case-oriented and occurred four days after interview #3. In that time, four other interviews were conducted. In the four unanalysed interviews, the suspect was confronted with witness statements. Those statements potentially called into question the suspect's account of his whereabouts, as well as the suspect's knowledge of why the victim travelled to the town where he was found dead. Interview #8 contained many appropriate questions (88.83%; probing and appropriate-closed); however, no IRI was obtained and suspect cooperation was at the lowest point over the six interviews that were analysed. By the eighth interview, it could be concluded that the suspect simply had no more information to offer, or perhaps he was overwhelmed with the evidence against him. However, a closer look at the 10 instances of guilt-presumptive language identified within the interview may provide a different perspective.

The interview started as usual with a reminder of the suspect's rights, re-introductions, and some inquiries about the suspect's well-being (e.g., health, warmth, if he has eaten, etc.). The interviewers then made some small talk about their roles in the investigation and that they were simply assigned to be his interviewers. They told the suspect they do not judge him and there were no hard feelings toward him. The suspect seemed to be mildly embarrassed but appreciative of this gesture. The interviewers then made some inquiries about the suspect's religious faith and what that meant for his morality and honesty. The suspect engaged in the banter until eight minutes into the interview. At that point, I1 suddenly moved the topic of discussion to his belief that the suspect had been lying to them over the previous interviews. That led to the first insinuation of involvement in the interview:

I1: Look (.) we are investigating all things that are AGAINST you
(.) but if there are things that work in your favour (.) I want to
investigate those too

S: Mm:::

I1: You are here for murder. Not me

S: (hhh) Yes (.) no that's why –

I1: And there are things coming to light that are not right (.) I do believe that! But I think that most of the things that come up are things that you stated that are not true.

S: So eh (hhh) We will see when this goes to the judge (hhh)

Although the interviewer made an explicit mention that the suspect is in custody for murder, it was also a clear insinuation of involvement or guilt. The utterance implied that the suspect would not be in custody if he was not involved in the murder, and because he remains in custody, it is evidence of his involvement. Although it comprised tautological thinking, such an utterance meets all the felicity conditions for insinuations as covert speech act (see Chapter 7 of this thesis; Attardo, 1999) and the utterance is clearly intended to convey a negative message without being committed to the truth of that message (Bertuccelli Papi, 2014; Haugh, 2013).

Immediately after the aforementioned exchange, the theme of the interview was revealed (case oriented- presentation of evidence) and the suspect was presented with more witness statements. Within the GIS, an interview of that type is supposed to be an opportunity for the suspect to hear the evidence and respond to it, or offer further explanation (Van Amelsvoort et al., 2010). In this instance, however, the witness statements were presented as facts and the suspect statements were consistently challenged. The suspect was confronted with two witness statements that claimed the suspect confessed to a murder whilst having a religious moment. The suspect found those statements incredulous and denied such a confession or being involved in the murder of the victim. The interviewers stated that the witnesses never indicated who was murdered

and concluded that the suspect has in fact killed someone. They pressed the suspect using repeated (inappropriate) questions asking him who he has killed. The interviewer's behaviour resulted in multiple suspect denials, sarcastic exchanges, arguments about involvement, and increased suspect non-cooperation.

The tenth interview was a person-oriented interview centered around a member of the suspect's family for whom the suspect had a great deal of concern. The interviewers presented the suspect with a partial statement from that person, which had mixed results on the suspect's behaviour. Initially, the suspect was upset that the police approached the family member and he attempted to close the dialogue with uncooperative behaviour. The interviewers read the statement anyway and that invoked an emotional response in the suspect. The suspect's demeanour softened a bit and he became responsive to some of the questions, which resulted in a slight increase of IRI. Interview #10 contained no direct accusations and only one instance of insinuating language after the interviewers attempted to gain information about the suspect's conversations with a behavioural management therapist. The suspect did not want to provide that information and claimed it had nothing to do with the case. The interviewers disagreed and then implied that they could tell by the suspect's nonverbal behaviour that he was involved in the murder:

I1: Yes (.) you don't want to talk about anything that has to do
with this case

S: (mumbles) I am talking about it (.) That has nothing to do with
that case (.) what I said to the behavioural therapist then what
or how -

I1: Ye::s (.) that that your behaviour tells us something too right?
I can see now on some of the questions how you eh (.) how

you react and what kind of body language you use. There are almost no words necessary anymore [*suspect*]

S: Yes yes (hhh) (laughs) I think that's great. Then you only ((points to video camera)) need that kind of thing and then you see how they react and they are like that ((makes closed posture)) closed (.) like ((makes open posture)) open and eh ((shrugs)) Yes ((shrugs)) See what you want

The suspect immediately caught on to the interviewer's implication that his body language was indicative of his guilt and made a sarcastically humorous retort about it. Some banter ensued, and the exchange ended with the interviewer making some inquiries about people the suspect had in this mobile phone contact list. This is where all the IRI (person information) for this interview was obtained.

The sixteenth interview was the second penultimate interview that occurred before the suspect was released due to lack of sufficient evidence to proceed to trial. The interview was composed almost entirely of appropriate questions (93.9%); however, no IRI was obtained. This was due to that nature of the interview. The sole purpose of interview #16 was to confront the suspect with all the evidence against him. The interview was conducted by a detective who was assigned to the case and consisted of an elaborate (and sometimes dramatic) unveiling of information through a visual presentation using well known presentation software. The suspect was asked to remain silent during the presentation and told he would get an opportunity to respond after all the evidence had been disclosed. Once the presentation was completed, the suspect seemed confused as to how he was supposed to respond. In the ensuing dialogue, it appeared that the investigators now believed that the suspect was not the killer but was

at the crime scene and was protecting whoever killed the victim. There was no guilt presumptive language or insinuations uttered during the interview.

Discussion

The objective of the analysis presented in this article was to demonstrate the importance of identifying guilt-presumptive questioning and statements within the police-suspect interview. We evaluated a portion of the interviews in a murder case to demonstrate the type of information that can be obtained by identifying question types and the outcome of those questions (i.e., IRI and suspect cooperation). The analysis revealed that important information can be missed when evaluating interviews using typical question typologies. Evaluating the question types alone, gave the impression that these interviews contained mainly appropriate questions overall, even if they were not the most sophisticated types of questions. However, closer examination into the content revealed that although relatively infrequent, the guilt-presumptive language influenced the amount of IRI and suspect cooperation. An evaluation of the content that occurred immediately prior to and after the guilt-presumptive language suggested that direct accusations and insinuations of involvement had negative effects on dialogue, rapport, cooperation, and IRI (see author, 2018). For example, the negative effects from the very first interview tainted subsequent interviews with the suspect. Those effects could be particularly detrimental in jurisdictions where multiple interviews are a regular part of the processes, such as in The Netherlands.

Finally, it is up to the courts to ultimately decide guilt based on the available evidence and the ‘reliability’ of a confession. Judges will sometimes approach experts to help guide them in those decisions. An expert in this area would know that guilt-presumptive questioning has been repeatedly shown to indicate interviewer bias. An expert would also know that there is an abundance of literature that highlights the

relationship between biases, coercive tactics, and false confessions. Thus, question type becomes an important factor when advising a judge on the ‘reliability’ of a confession. For that reason, more research is needed that captures guilt presumptive language as a questioning type and definitively demonstrates its detrimental effects on the interview. With enough evidence in that area, an expert would be able to advise a judge that the presence of such questioning indicates a probability of psychological coercion, which could call the confession evidence into question.

Methodological considerations. We acknowledge that this case is exceptional in that i) it is a single case, and ii) it was previously evaluated by an expert for confession reliability (i.e., validity), which implies at least one judicial player questioned the overall appropriateness. We do not propose that the interviews analysed here, or the fragments chosen as examples, are representative of all interviews that contain guilt-presumptive language, nor are they an example of a typical Dutch suspect interview. We do, however, present this analysis as a contribution to the plethora of extant literature that cautions against guilt-presumption, biased interviewing, and the potential for both to contribute to miscarriages of justice. That is, the pattern of behaviours described from the content of the interviews follows the findings previously outlined by other researchers who have examined suspect denials, uncooperative behaviours, and poor interviewing practices (e.g., Baldwin, 1993; Kassin, 2005; Kelly et al., 2015; Moston & Engelberg, 1993; Ofshe & Leo, 1997).

We also acknowledge that the ground truth of the interviewer beliefs was not known. This means we cannot comment explicitly on the presence of confirmation bias in the interviewers. Granted, the first interview contained an accusation of guilt, which may suggest that the interviewers assigned to the investigation believed the suspect was guilty. It is also possible that the accusations were merely used as a tactic to reduce

resistance and the insinuations were uttered in frustration due to suspect denials (Griffiths & Milne, 2006; Kelly et al., 2015). That is, the interviewers may have held no strong beliefs about guilt one way or the other. Yet, when all the interviews were taken together, it became clear that the investigators entered the interview with the intention to prove one scenario correct – that the suspect was involved in the murder of his acquaintance. It is not until the final interviews that the dialogue suggested the interviewers may have entertained a second scenario - that the suspect was at the scene and knew who committed the murder or was an accomplice. Nevertheless, in both scenarios the suspect was guilty of something and that remained the focus of the interviewers until the final interview.

Conclusion

The typologies currently used by researchers to evaluate question types do not contain a specific category for guilt-presumptive language. Identifying those types of utterances can prompt evaluators to investigate the interviews more closely, which may reveal how an interviewer's accusatory and insinuating language can negatively influence the interview outcomes. A cursory evaluation of interview question types can provide useful information about how the interview was conducted overall. However, there is a need for researchers to examine the content of interviews more closely, to identify guilt-presumptive language, and to build a literature that can be used to further research in investigative interviewing, improve the interviewing process, and inform the practitioners who use interview outcomes in their legal decision-making.

**Part III: Implications of the Research for the Police-
Suspect Interview**

Chapter 7

General Discussion: Identifying Confirmation Bias in Police-Suspect Interviews

Overview

Within legal contexts, confirmation bias begins as a belief that a suspect is guilty. Previous researchers have demonstrated that guilt presumptive beliefs can have detrimental effects on the police-suspect interview in terms of tactics used (Narchet et al., 2011; Olson, 2013), and suspect confession behaviour (Hill et al., 2008; Kassin et al., 2003; Meissner & Kassin, 2002). In this thesis, past research has been expanded upon and attempts were made to identify reliable indicators of confirmation bias via interviewer guilt presumption.

The overarching research question was approached from both an experimental and applied methodology. In the first part of this thesis, the experiments were designed to replicate and expand upon previous findings regarding guilt presumption and question formulation in information-gathering contexts (Hill et al., 2008). In the second part of this thesis, police-suspect interviews were obtained and analysed using linguistic techniques to examine the utterances of interviewers and the behaviour of the suspects. The five studies presented in Chapters two through six demonstrate that guilt presumptive language (i.e., accusatory questions, insinuations, and direct accusations of involvement) are consistently found in guilt presumptive interviewers. When taken with previous findings (Hill et al., 2008; Kassin et al., 2003; Narchet et al., 2011; Olson, 2013) there is strong evidence that guilt presumptive language (i.e., covert speech and direct accusations), should be investigated as reliable indicators of an interviewer's guilt confirmatory cognitions and behaviours.

In this final chapter, the overall findings of those six studies are discussed in context of current knowledge about questioning practices within police-suspect

investigative interviews. Implications of these findings for police practice are also discussed along with the methodological considerations that may influence the interpretation of the overall findings contained in this thesis. Finally, avenues for future research are presented as there are still many unanswered questions concerning guilt presumption and confirmation bias in relation to the police-suspect interview.

Research Scope

The scope of this thesis has narrowed from an attempt to identify behavioural indicators of confirmation bias to examining the influence of guilt presumption as a precursor to biased behaviour. This shift occurred once the results of the experimental studies contained in the first part of this thesis were considered within the context of the extant literature. The common finding within the investigative interviewing literature was that interviewers who held guilt presumptive beliefs about the suspect were more likely to use accusatory questions. The results of the studies presented in Chapters three through to five were consistent with those previous studies (Semin & De Poot, 1997b; Hill et al., 2008; Kassin et al., 2003; Narchet et al., 2011). Those findings, however, remained untested in applied settings where the ground truth of interviewer guilt judgements was unknown, and explicit accusatory questioning was said to be rare in information-gathering frameworks (Moston & Engelberg, 1993). Thus, the next logical step appeared to be a focus on interviewer utterances in applied settings.

It was also at that time it became necessary to apply linguistic techniques to find solutions to the research problems. Within the linguistic literature there was an abundance of evidence that suggested biased language could be identified through word abstraction. This was achieved by analysing the content of the utterances within the context of the situation (e.g., speech act theory; Austin, 1962). The infrequency of accusations became apparent when analysing the transcripts used in the study presented

in Chapter 5. Many of the interviews contained language that was more implicit, thus, a more in-depth analysis of the interviews was employed. The speech events were closely analysed to determine what was occurring in those situations (e.g., Grant et al., 2015). The application of speech act theory helped to demonstrate what the interviewer was intending to achieve with his or her utterances (illocutionary force) and the outcome of the utterance on the suspect (perlocutionary force; Holtgraves, 2002; Searle, 1975). The analysis revealed that the interviewers were using covert speech acts to make insinuations of guilt and that guilt presumptive language had a direct and immediate influence on suspect behaviour. The findings of Chapter 5 then prompted the case study analysis of Chapter 6. There were many factors that needed to be considered when examining the effects of guilt presumption and confirmation bias. It became increasingly apparent that using only one approach to evaluate interviews was to ignore the depth and breadth of the information available.

Indicators of Guilt Presumption in Interviewers

Chapter 1 of this thesis contains a comprehensive review of confirmation bias and how it occurs in various settings and interactions. A plethora of literature on confirmation bias has demonstrated that confirmatory thinking stems from pre-existing beliefs and the need to find evidence to support those beliefs despite contradictory information (Kunda 1990; Nickerson, 1998). Researchers have previously found evidence for the effects of confirmation bias in criminal justice contexts on the evaluation of evidence (Ask & Granhag, 2005), during suspect interviews (Kassin et al., 2003), within witness and victim interviews (DePoot & Semin, 1997b; Olson, 2013), and when performing veracity assessments (Meissner & Kassin, 2002). The effects of confirmation bias have also been found to negatively influence jury decisions (Hope, Memon & McGeorge, 2004), and

judicial decisions (Porter & Ten Brinke, 2009). Those studies have provided valuable insight to some of the possible outcomes associated with confirmatory thinking.

The findings in this thesis add to the extant literature by providing additional support for the detrimental effects of guilt presumption on the police-suspect investigative interview. The findings also help to demonstrate that false confessions are not the only consequences of guilt presumptive questioning. When taken together with the findings in the false confession literature, however, there is strong evidence that implied or explicit assertions of suspect guilt have detrimental effects on the investigative interview and may have an influence on the entire criminal investigation, as highlighted by the case study presented in Chapter 6. Despite the evidence of its negative influence on the criminal justice process, sufficient efforts have not been made to identify reliable indicators of confirmation bias and guilt presumptive behaviours in relation to the police-suspect interviewer.

Accusatory Questioning and Information-gathering Frameworks

The presence of accusatory questioning has been largely under studied in interviews that used information-gathering frameworks (e.g., PEACE and GIS). The information-gathering frameworks that are used in various countries (e.g., UK, Norway, Australia, The Netherlands, and parts of Canada) are not technically focused on obtaining a confession, however, most case closure still relies on obtaining an admission of guilt (Moston & Fisher, 2007; Stephenson & Moston, 1994). Thus, interviewers may continue to seek confessions during the confront and challenge phases of the interview. This type of behaviour was demonstrated in the questioning style and utterances of the interviewers discussed in Chapter 6. If those confessions were sought based on confirmatory beliefs as opposed to strong evidence against the suspect, miscarriages of justice could occur (see Belloni & Hodgson, 2000; Ditrach, 2015; Wagenaar, Israels, & Van Koppen, 2009).

Although accusatory and insinuating utterances occurred infrequently throughout the interview, the interviewers did not create optimal conditions for gaining suspect cooperation or eliciting IRI.

It is widely believed that information gathering frameworks help to reduce biased behaviour because they are not confession driven (Van der Sleen, 2009). Some researchers have demonstrated that false confessions can be significantly reduced by information-gathering interviews compared to confession driven interviews (see Meissner et al., 2014). However, those studies were not conducted within the context of interviewer biases. Until empirical research can establish otherwise, it should not be assumed that information-gathering methods are impervious to the effects of confirmatory thinking and guilt presumption. The simple fact remains that interviews are conducted by interviewers who *are* vulnerable to the effects of guilt presumption and confirmatory thinking.

As demonstrated in previous studies, as well as this thesis, interviewers can easily deviate from their training and the principles outlined in information-gathering frameworks such as PEACE (Griffiths & Milne, 2006). Interviewers then employ poor questioning techniques as a result (Heydon, 2012; Powell, 2002). For example, the study presented in Chapter 3 and the interviews evaluated in Chapter 6 demonstrated that accusatory questioning can occur in information-gathering frameworks (Hill et al., 2008). However, more evidence is needed to make a definitive link between accusations, guilt presumption, and confirmatory behaviour in non-confession driven interviews.

Guilt Presumption and Language in Information-gathering Interviews

The studies that comprise Chapters 3 and 4 were designed to determine whether guilt presumption could naturally form in interviewers that were exposed to the guiding principles of the PEACE framework (College of Policing, 2016), and how guilt

presumption influenced question formulation in information-gathering contexts (Hill et al., 2008). In those studies, approximately half of the interviewers naturally formed a presumption of guilt that was accompanied by the increased formulation of accusatory questions. The questions formulated in the first study (Chapter 3) were more explicitly accusatory. This may have been a result of the interviewers not having to pose their questions to a suspect. Those assumptions were confirmed with the findings of the second study (Chapter 4). In that study, the interviewers knew they needed to interview the suspect with their questions, and thus, they formulated less overt accusations.

The change in the nuances of how the questions were phrased prompted queries about how language was being used to convey the interviewer's presumptions of guilt. For that reason, the linguistic properties of the questions in both studies became the focus (Chapters 3 and 4). Efforts were made to determine if the word choices revealed any additional insights to the relationship between the guilt judgements and the biased behaviour. Both studies revealed that interviewers who presumed the suspect was guilty showed patterns of biased language through increased word abstraction.

The finding that guilt presumptive interviewers used more abstract wording in their questions was pivotal for this research. Not only did the interviewers self-report a guilt bias, but their word choices confirmed the presence of biased beliefs about the suspect in both the explicit and implicit accusatory questions. The use of abstract words is a well-tested linguistic indicator of biased beliefs about the person or topic of an utterance (Beukeboom, 2012). Speakers who held a bias against the subject of their utterance tended to choose more abstract language whether they were aware of those biases or not (Semin & Fiedler, 1988, 1991). Although most literature suggests that word choice is unconscious, some researchers have posited that communicators can inhibit biased language when given the opportunity to choose their words carefully (Douglas &

Sutton, 2008). In those cases, it is possible that interviewers made choices to ‘soften the language’ of the question using epistemological hedging. Hedging occurs when speakers use a mitigating word or phrase construction to soften a bold statement or appear polite (Recasens, et al., 2013). However, the phrasing was still revealed as accusatory when the question was evaluated by question type. Moreover, the use of abstract language betrayed the underlying bias, which in these situations was a presumption of guilt.

Conversely, one may argue that the motivations of the interviewer when asking accusatory questions or using covert speech is paramount for determining whether their actions are driven by a guilt presumption. That possibility was explored in Chapter 4. To provide insight to any underlying motivations of guilt confirmation, the non-police interviewers were asked to justify their questions by explaining what they hoped to achieve by asking them. Interestingly, there was no difference in the justifications between interviewers who self-reported a guilt presumption and those who reported needing more information. That is, both groups created a similar amount of questions designed to confirm suspect guilt. The most likely interpretation is that the interviewers who reported needing more information were undecided about guilt and were truly seeking more information to confirm their guilt beliefs before reporting one way or another. Indecisiveness has also been associated with the tendency to gather information about the option that is ultimately chosen (Rassin et al., 2008). Evidence for this behaviour was found in the changing guilt judgements that occurred in that group across the course of the interview.

Abstract language, however, cannot be used to detect guilt presumption in applied settings. Previous research has demonstrated that people can use speech to convey messages, even when they don’t personally believe in the message. Over five studies, Douglas and Sutton (2003) demonstrated that communication goals have a strong

influence on language abstraction. When using the LCM to detect biased language, the researchers determined that language abstraction occurred independent of the speaker's actual beliefs and expectancies. They concluded that abstract language may be used consciously or subconsciously to convey beliefs. However, abstraction could also be consciously used by communicators to create new beliefs to an intended audience, regardless of a speaker's actual beliefs on the topic. Therefore, ground truth of a guilt bias would be needed to ensure the officer held the belief of suspect guilt. In sum, word abstraction remains a reliable indicator of biased language, but it is not a reliable indicator of biased beliefs. Therefore, more consistent indicators need to be identified.

A potential avenue of research for a reliable indicator of guilt presumption is covert speech acts such as insinuation of guilt. In Chapter 5, a review of police-suspect interview transcripts involving serious crimes revealed that direct accusations were indeed rare (Kassin & McNall, 1991; Shuy, 1998). In fact, none of the transcripts contained any accusatory questions, overt statements of guilt belief, or adversarial techniques. However, each analysed interview contained at least one instance where the interviewer insinuated suspect guilt or involvement in the crime. Those speech events were analysed and found to have occurred primarily when the suspect denied involvement. It is likely that those utterances were made by the interviewer in a moment of frustration (Griffiths & Milne, 2006) because the interviewer was seeking an admission and received a denial (Moston et al., 1992).

It is also a possibility that the interviewers used insinulative language as a tactic to send a message that the denial was not believed. Evidence for both the use of insinuation as a tactic and an expression of frustration was found in the case study presented in Chapter 6. That is, the interviewers appeared to use insinulative language to convey irritation, get the upper hand with the suspect, and to break down resistance

(denials). The multiple uses of insinuation show that further investigation is needed before it can be cited as a reliable indicator of guilt presumption. Covert speech exhibits more promise as a reliable indicator because the speaker must believe the intended message is true. The premise of a covert speech act is to convey a negative message without being *accountable* for the intended truth of that message (Bertuccelli Papi, 2014; Parret, 1993); however, the speaker must *believe in the truth* of their message (Attardo, 1999). When applied to the police-suspect interview, this means there must be some belief that the suspect is guilty for an insinuation of guilt to be uttered.

The Effects of Guilt Presumption on the Suspect

Although the primary objective of this thesis was not to focus on how guilt presumption affected the suspect (e.g., confessions, behaviour, and cooperation), its influence on the interview outcome is an important aspect of this research. Studies that have examined interview tactics and questioning techniques are generally conducted to understand the factors involved. This allows researchers and practitioners to improve upon current interview practices, and to provide evidence-based information that interviewers can use to inform procedural decisions. More research is certainly needed to fully understand the scope and implications of perceived wrong doing on a suspect's behaviour and the overall interview outcomes. The findings presented in this thesis provide additional insight to some of the cognitive and behavioural factors that need to be considered in future investigations on confirmation bias.

An interesting finding regarding interviewee behaviour was demonstrated in Chapter 2. The ease in which confirmation expectancy effects were created in the experimental group of participants was unexpected. The participants did not need to believe they had done anything wrong for the slightest suggestion of wrongdoing to alter their behaviour (Bargh et al., 1996; Najdowski, 2012). The expectancy effect was

activated when the interviewer implied a problem with the test results and stated she needed to ask a few more questions. The influence of perceived interviewer beliefs of wrongdoing was then demonstrated as observable behaviours in the suspects primed for an expectancy effect. The changes in the nonverbal behaviour suggested there was an increase in cognitive load (stillness and blink rate), which is known to impede performance (Croizet et al., 2004) and impair comprehension (Berggren et al., 2013). The participants in the study also reported difficulty thinking (Barrouillet et al., 2007) and feelings of defensiveness, although the questions posed to them were information-gathering and presented in a professional and non-confrontational manner. Other noticeable behaviour changes included shorter answers and less smiling.

The expectancy effects in the study (Chapter 2) were powerful enough to have small but significant influence on the behaviour of the suspects within the non-adversarial and low stress environment of the study. That finding suggested that in the more stressful environment of the police-suspect interview, the suspect may be further disadvantaged due to the high stress and cognitively taxing nature of the interview. Thus, interviewers should be cognisant of the effects of their behaviour and language on the suspect's behaviour. Especially if a suspect's behaviour could be interpreted by an interviewer as support for his or her guilt presumptions. Many police interviewers have reported using body language to inform decisions about veracity (Vrij & Mann, 2001) and perceptions of cooperation and guilt (Meissner & Kassin, 2004). It was also clear from the findings in Chapter 5 that most non-police interviewers who held an initial guilt presumption used behavioural cues to inform their subsequent judgements of guilt.

The effects of guilt presumption on suspect behaviour were also found when analysing the content of police-suspect interviews. In Chapter 5, examining the speech events revealed that insinuations of guilt mostly occurred just after a suspect denied

involvement, which then prompted further denials and reduced suspect cooperation. Those findings were supported further in Chapter 6 where each accusation and insinuation caused further damage to the interview dialogue and impeded the effectiveness of the interview (Kelly et al., 2015). In Chapter 6, there was also a tendency for interviewers to note and rely on nonverbal cues. In one of the interviews, the police officer implied that the suspect's body language was providing proof of the suspect's involvement in the crime.

It should be noted that it remains unclear whether the interviews evaluated in the second part of this thesis were conducted on guilty or innocent suspects. However, most miscarriages of justice begin when a prime suspect has been identified and is subsequently interviewed (see Griffin, 2001; O'Brien, 2007). The very nature of the police-suspect interview dictates that there must be some belief that the suspect is involved as that is the starting point (O'Brien, 2009). That basic truth means that the suspect may experience the effects of perceived interviewer guilt expectancy by simply being present (Darley & Fazio, 1980). It can also be argued that regardless of suspect involvement, guilt presumptive language is not beneficial to the objectives of the information-gathering interview and should be avoided.

Implications of Research Findings for Police Practice

The most relevant finding in this thesis for police practice involves the manner in which interviews are evaluated. A common method to rate an interview for effectiveness and appropriateness is to base performance on the types of questions asked and information elicited (IRI). Simply evaluating the question types in the interviews revealed that the interviewers asked mainly appropriate questions designed to seek clarification. The analysis in Chapter 6 also revealed that whilst technically appropriate, most questions posed were closed or clarifying. On the surface, an abundance of those

questions categories may prompt a trainer or supervisor to refresh the interviewer on the use of open (TED) questions (Shepherd & Griffiths, 2013). However, a closer evaluation of the interviews by question type and speech event revealed that the most damaging utterances were captured in the broad category of opinion statements.

Including a separate category for guilt presumptive utterances could have valuable applied implications. The main argument in Chapter 6 involved the typologies used to classify interview questions as appropriate or inappropriate. Currently, those categories do not capture the presence of accusatory language and provided no insight to the potential negative outcomes of those accusations or insinuations. When guilt presumptive language did occur, the influence of those statements on obtaining IRI and suspect cooperation were lost in the question type analysis. The decrease in IRI and cooperation could have been easily explained as phenomena that naturally occurred over time as a result of the suspect being challenged and confronted with evidence. As demonstrated in Chapter 8, and in previous research, accusatory language can derail even the best laid interview plan and undo or impede any efforts to build rapport and gather IRI (Kelly et al., 2015). It was when interviewers deviated from their training or got frustrated, that accusations occurred (Griffiths & Milne, 2006).

Analysing interviews by question type is a popular method amongst researchers (see Oxburgh et al., 2010), and may gain some momentum with practitioners since the creation of interview evaluation tools such as the Griffith's Question Map (GQM; Shepherd & Griffiths, 2013). There is no reason to dissuade practitioners from using question typologies as a method to track and improve upon interview performance. Based on the findings presented in Chapter 5 and 6, however, those who train interviewers should be aware of the negative effects that guilt presumptive utterances can have on the interview. The plethora of literature extolling the negative influence of accusatory

utterances on the police-suspect interview cannot be ignored within information-gathering interview frameworks.

The evaluation technique presented in Chapter 6 could be further developed into a tool to identify specific utterances and problematic behaviour in the context of the interaction. That type of approach could make interviewers aware of how their beliefs and emotions can be conveyed through their language. Moreover, an evaluation of the interaction during accusations and insinuations highlights the detriment of covert speech. Those small comments can have a big influence on the interview by eliciting defensiveness and uncooperative behaviour from the suspect. Thus, an inclusion of a separate categorisation for assumptions and insinuations of guilt is strongly suggested. This would mean that the context, lead-up, and outcome of those interactions could be explored closely, and any opportunities for learning and development could be identified.

Unless more in-depth methods are used to evaluate the interview performance on multiple features, opportunities for development could be missed. Police officers who conduct interviews in the UK are encouraged to perform self-evaluations and seek feedback from supervisors and peers regarding their interview techniques (Griffiths & Milne, 2006). Moreover, factors such as appropriate use of language, avoiding accusations and insinuations of guilt, and maintaining a professional demeanour should become regular areas for peer and supervisory feedback.

Despite over 25 years of interviewing reform in countries such as the UK and The Netherlands, inappropriate questions and accusatory statements still occur in information-gathering frameworks. It may be the case that interviewers have a fallacious belief that using accusatory language will assist them in obtaining IRI or help to establish the truth. Interviewers may not be acting on grounds of a guilt or confirmation bias, but merely employing an inappropriate technique. If that is the case, interviewers need to be

made fully aware of how detrimental their language can be to the objectives of the investigative interview - regardless of their motivation. Although more research is needed to make definitive links between the guilt beliefs of interviewers and their interview behaviours, there is strong evidence in the literature that this type of language is associated with guilt presumptions and support that guilt bias can lead to confirmatory behaviours.

Methodological Considerations

This thesis is the first empirical work that has focused on identifying indicators of guilt presumption and confirmation bias within information-gathering frameworks. Various methodologies to explore the research questions were employed and the research problem was approached from several perspectives (e.g., question type evaluation, content analysis, and linguistic techniques). However, there are limitations to this research that need to be considered when drawing conclusions from the overall findings. For example, some of the experimental findings were unable to be tested using the applied materials. The LCM (Semin & Feidler, 1991) is a good linguistic tool for identifying biased language in texts, political speeches, and experimental studies. It may even be appropriate for analysing transcripts of free narratives provided by suspects, victims, or witnesses. The LCM was certainly insightful to understand how language was used to convey biased beliefs in the experimental studies. However, interaction and language structure were different in the police-suspect transcripts than in the experimental studies. Due to the focused (and often closed) nature of the questions that were designed to clarify or obtain information, analysing the verb abstraction was not suitable. The properties of the questions also made using the QAP (Semin et al., 1995) inappropriate in the applied studies. It is possible that the LCM could be an effective evaluation tool during the confront and challenge stage of the interview, where the

interviewer is expected to do most of the talking. However, that type of analysis would only be feasible for research purposes. It is unlikely that law enforcement organisations would employ trained linguists to analyse interviews on that level as it is complex and labour-intensive work.

The influences of expectancy confirmation effects on suspect behaviour identified in Chapter 2 could also not be tested with the applied materials. The most appropriate study to examine the suspect's nonverbal behaviours would have been in the interviews evaluated in Chapter 6. However, the poor quality of the video recordings made it impossible to code behaviours such as blink rate, which is a reliable indicator of cognitive load. Moreover, the suspect tended to excessively use verbal fillers and crutches (ums and ahs). With no baseline behaviours for comparison it would have been difficult to glean any meaningful conclusions from that analysis. It may have been possible to compare suspect behaviours between interviews by type (person versus case oriented) or by using the first interview as a baseline; but by the final study, the scope of the thesis had shifted to question types and interviewer utterances. For that reason, behavioural analysis would not have been appropriate within the case study analysis.

Language could also be a limitation with the interview evaluations. The interviews analysed in Chapters seven and eight were limited to materials obtained within The Netherlands from the Dutch Police and an expert witness. Those interviews were translated to English from Dutch prior to analyses. Although every precaution was taken to ensure the translations were accurate, some of the nuances of the interactions could have been lost when converting from one language to another. If that occurred, there is a possibility some very nuanced insinuations may have been missed. However, if translation is to be maintained as a potential limitation for the interview evaluation, it must also be accepted that the number of insinuating utterances reported in the findings

may be less than the actual number of occurrences within the interviews. Due to the type of analysis conducted within both studies, there is no reason to believe that missing some of the more nuanced insinuations could have significantly influenced the research findings.

Another limitation to the applied studies in this thesis is the generalisability of the findings. It could be argued that the findings from the applied studies are only applicable to interviews conducted in The Netherlands and with police interviewers who use the GIS. Attempts were made to obtain interviews from UK law enforcement agencies, however, participation was declined with no explanation. Whilst the findings from the Dutch interviews mirror patterns of behaviour reported in studies conducted in North America (e.g., Kassin et al, 2003; Ofshe & Leo, 1997), no conclusions can be drawn for guilt presumptive language and behaviour for police officers who work within the PEACE framework. Some researchers in the UK have suggested that poor interview practices occur when officers do not adhere to their training (e.g., Griffiths & Milne, 2006); but the extent and consequences of non-adherence remains unknown.

A final methodological consideration concerns the limited sample sizes for the two applied studies. Although the sample size was constrained by the materials made available, the analysis revealed that examining the interview content for guilt presumptive language is a viable avenue for further research. It is important to note that the case study presented in Chapter 6 was obtained because of perceived issues with the way the interview was conducted, which limits the generalisability of the findings. Although it was an exceptional case, those interviews clearly demonstrated the consequences of guilt presumptive language on the investigative interview. Whilst interviewer beliefs were not explicitly known, there was compelling evidence contained within the interview transcripts that suggested the interviewers held a bias towards

suspect guilt. The subsequent interviewer behaviours followed established patterns demonstrated in experimental studies (e.g., accusations, insinuations, poor interviewing behaviour), and there were explicit assertions of guilt beliefs. Therefore, the applied studies provide support for further investigations into guilt presumptive language during information-gathering interviews.

Future Directions

In Chapter 1, it was argued that more research is needed to determine whether guilt presumption and confirmation bias produced similar outcomes in applied settings as in laboratory studies. Possible methods to identify guilt presumptive language and improve interview evaluations were presented. However, any tactics or techniques that could be used by police interviewers to reduce the occurrences in real-time interviews were not provided. Thus, this may be the most appropriate avenue for future research. The methods used here are most suited for retrospective analysis of investigative interviews for evaluation and training purposes.

To further our understanding of guilt presumption and the police-suspect interview, the most successful research endeavours will likely require the cooperation, collaboration, and participation of law enforcement agencies (see Innes, 2010). Police participation in this type of research is paramount because police organisations are more likely to implement evidence-based practices when they are directly involved in the research (Telep, 2017). There are valid explanations as to why law enforcement agencies frequently deny requests to participate in empirical studies. For example, operational and human resource constraints are often cited as reasons for non-participation. The importance of the job requires officers to be engaged in active policing and there is little to no down time during working hours. This means the only time officers are available participate would be during their personal time, which many are not keen to offer.

Many of the remaining questions regarding guilt presumptive behaviours and confirmation bias cannot be answered without access to interview transcripts and/ or audio and visual recording of police-suspect interviews. If those materials cannot be made available, researchers are left with limited options for investigating the phenomena. Considering those limitations regarding access to applied materials, the following are suggestions for undertaking possible experimental and quasi-experimental investigations. There is still much research to do to fully comprehend the various factors associated with confirmation bias and guilt presumption in police-suspect interviews.

Alternative scenarios. An area of study that has received a lot of attention in the legal decision-making and crime investigation literature is the formulation of alternative scenarios (e.g., Rassin et al., 2010). Whilst formulating alternative scenarios may seem like a viable solution for reducing confirmatory thinking, it can be a difficult endeavour (Koehler, 1991). When people are required to imagine or explain a possible scenario, there is a moment when they must believe the scenario is true. In this moment, confidence in the truthfulness of the scenario increases, as does the likelihood that confirmatory information searches will occur (Koehler, 1991). The first belief formed by police investigators is one of suspect involvement, which must be believed, if only for a moment. To create an alternative scenario, the police officer must then suspend any belief of suspect involvement and replace it with a new belief. There is also the possibility that the belief of suspect guilt is more plausible than a scenario where he or she is not guilty. Thus, the motivation to be accurate in the guilty scenario increases, which also increases the likelihood of seeking information that confirms the presumption (Kunda, 1990). Recent research has suggested that weighting criminal evidence using pencil and paper to make notes, whilst considering alternative scenarios, helps to reduce confirmation bias in criminal investigation contexts (see Rassin, 2018). Further examination of such a tool

is warranted for the police-suspect interview and could be employed in the planning and preparation phases present in both the PEACE and the GIS framework.

Debiasing. As discussed in Chapter 1, recognising and disrupting confirmatory behaviours in the self is an extremely difficult task for a variety of reasons grounded in human cognition and behaviour (Arkes, 1991; Frey, 1982; Merton, 1948; Miller & Turnbull, 1986; Ross et al., 1975). That also holds true when others attempt to disrupt a cycle of confirmation bias as they too may form the same expectancies based on the nature of the situation (Narchet et al., 2011) or by belonging to the same social group (Chatman & Von Hippel, 2001). However, attempts to debias or dissuade biased behaviour have not been tested on law enforcement populations in the context of police-suspect interviews.

Investigations on successful debiasing strategies could involve designing studies where interviewers conduct questioning in pairs (as is customary in countries such as The Netherlands). Various debiasing strategies can be tested using this method. For example, interview pairs could be instructed to develop an interview plan and preliminary questions based on case information. Participant pairs could then be instructed to consider the opposite (Arkes, 1991; Lord, Lepper, & Preston, 1984; Mussweiler, Strack, & Pfeiffer, 2000) and create alternative scenario questions contrary to their initial guilt judgements. Then, question type and question appropriateness could be compared. If researchers are interested in the polyadic interaction between interviewer participants and mock-suspects, interviewers could be permitted to ask the questions from each plan (original judgement and considered opposite) to determine any effects on interviewer and suspect behaviour.

Researchers could also investigate the ability of peers to effectively dissuade guilt presumption or confirmatory behaviour in their interviewer counterparts. That design

would most likely require the use of a confederate to ensure consistent biased behaviours and language toward the suspect. The non-confederate participant could be exposed to various strategies for identifying guilt presumptive behaviour (e.g., accusatory questioning, insinuations of guilt, direct accusations or even inappropriate interview tactics such as raised voice or shouting). Depending on the outcome variables of interest, participants could be instructed to intervene if they notice guilt presumptive behaviour or left to make their own decisions.

Hypothesis disconfirmation. In terms of identifying confirmation bias in applied settings, more research is needed regarding hypothesis confirming or disconfirming strategies. In experimental studies, this can be achieved by asking participants to provide justification for their questions (as demonstrated in Chapter 4) or rationale for their behaviours. In applied studies, this could be achieved by analysing the interviewer's utterances for evidence of underlying motivations (as demonstrated in Chapters 5 and 6). Although that technique would require the researcher to draw conclusions with no ground truth of interviewer motivation, this is a common method used in linguistic and social interaction research (e.g., Farinde et al., 2015; Haworth, 2017). Perhaps conducting more in-depth analysis of a larger sample of interviews, obtained from a variety of sources, is needed to advance this area of study.

Belief perseverance. Due to the cognitive tendencies of police officers and the requirements of police work, confirmatory thinking is a difficult phenomenon to disrupt and prevent (Ross et al., 1975; Brewer & Nakamura, 1984). If the interviewer has a strong belief in suspect guilt, he or she is likely to become more persistent in their attempts to prove their assumptions are true (Kunda, 1990). The best approach to influence change in police practice is through effective training and awareness of personal biases and presumptions. Based on previous research in belief perseverance, the police officers most

likely to be receptive to that type of training are those who have not formed interview habits based on anecdotes, pseudoscience, or personal beliefs (Burns, 2004; De Neys & Glumicic, 2008; Lilienfeld & Landfield, 2008; Marietta & Barker, 2007). Whilst the cooperation and collaboration of police agencies would be needed to bring a training initiative to fruition, researchers should continue to conduct high quality research that can be used by police organisations and individual police officers to inform their practice and procedures.

Conclusions

It was evident in the findings of this thesis that insinuations of guilt are generally a rare occurrence and direct accusations are even rarer (Stephenson & Moston, 1994). Therein may lie the problem for further research and implementing changes to training and interview evaluation. That is, the rarity of such interviewer utterances may lessen the perception of this type of interview behaviour as a problem (underweighting; Kahneman & Tversky, 1984). However, it was evident from the interviews analysed in this thesis that it may not be the frequency of guilt presumptive utterances that matter, but the mere presence of that type of language. For that reason, the detrimental influence of guilt presumptive questioning on the interview cannot be ignored, regardless of infrequency.

Despite its importance for the criminal investigation, attempts to detect guilt presumption in police-suspect interviews outside the laboratory have been scarce. The primary problem that researchers face is the ground truth regarding interviewer guilt bias. Interviewer beliefs are not known unless explicit statements of guilt presumption are made, and those types of statements rarely occur in information-gathering contexts. In applied research, having reliable indicators of a phenomenon allows for assertion that the phenomenon is present with a probability higher than chance. That is beneficial in situations where the ground truth of interviewer beliefs is unknown.

The studies contained in this thesis provide additional support for guilt presumptive language as a potential indicator of guilt presumptive beliefs. The study findings, taken with previous research, suggest that even in information-gathering contexts, an investigative interview can quickly become a search for proof of guilt and have detrimental effects on the information gathering objectives that guide such interviews. For that reason, it is important for interviewers to have the ability to recognise their own guilt bias, as well as the biases of others.

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Appendix A

Countermeasures and symptoms of nervousness included in a self-report measure for participants in Chapter 3.

Countermeasures

Think about how you responded to the interviewer today. Did you do anything to purposefully appear more truthful? (Check all that apply):

- a. Increased eye contact without being asked
- b. Used hands and body to illustrate your words
- c. Decreased eye contact
- d. Smiled
- e. Used pauses to collect your thoughts and formulate the lie
- f. Did not include a lot of detail in your responses
- g. Used your hands and body less while talking
- h. Tried to answer the question immediately once asked
- i. Reduced smiling
- j. Tried to appear honest through facial expression and body language
- k. Tried to control your body movements
- l. Put on a serious face
- m. Tried to control symptoms of nervousness

Nervousness

Did you have any of the following symptoms during the interview (check all that apply):

- a. Sweating or cold/damp skin
- b. Fast heartbeat
- c. Tightening of chest
- d. Shortness of breath
- e. Difficulty thinking clearly
- f. Stuttering or tripping over words
- g. Fluttery feeling in stomach
- h. Indigestion
- i. Feelings of defensiveness
- j. Feeling like you wanted to run away

Appendix B

Interviewer Information: PEACE Guidelines

Detailed and Broad instructions given to interviewers in Study 1, Chapter 4. In Study 2, Chapter 4, only the detailed instructions were given.

Ethical Information-gathering Interview (DETAILED)

In any interview, it is extremely important for the investigator to behave in a professional manner and conduct themselves with integrity. Here are some guidelines you will need to create questions to conduct a good interview:

1. Establish a professional relationship

If people trust you, they are more likely to give you the information you are asking for. Your goal is to get an accurate and reliable version of events.

2. Be methodical

Being logical, precise, and orderly in formulating your questions will help you get the most information. Think about what you want to know and ask questions that will allow the interviewee to give you this information. You are free to ask a wide range of questions.

3. Personal Style

What you say and your body language can affect how the interviewee responds to you. Remain open and friendly. Be genuinely interested in the responses. Be genuinely interested in the interviewee's feelings and well-being.

4. Be Fair

Be prepared to believe any account of events the interviewee tells you unless you have evidence to the contrary. It is okay to challenge information that is known to be untrue; however, common sense and good judgement are better than personal beliefs when making this judgement.

5. Deal with suggestibility issues

Sometimes interviewees can be influenced by what they think you want to hear. Make sure you formulate your questions in a way that does not imply the answer you want. Also, make sure you do not accuse the interviewee of wrongdoing.

6. Admissions of Guilt

Your role here is to find out as much information as possible from the interviewee so we can continue our investigation. If the interviewee admits to wrong doing early on, ask more fact-finding questions to make sure their admission matches with known information

Principles of Investigative Interviewing (Control Group)

Principles of Investigative Interviews:

1. To obtain accurate and reliable accounts of events.
2. Interviewees must be treated fairly and equally in accordance with human rights
3. Accounts from the individual should always be tested against what the interviewer already knows.
4. You are free to ask a wide range of questions to get to the information you need for the investigation.
5. Interviewers should recognize the benefits of an early admission.
6. Interviewers do not have to accept an answer that is given, especially if they have information to the contrary.
7. Even when a suspect exercises the right to silence, investigators have a responsibility to question them.

Appendix C

Case Vignette

Interviewers in both studies received the following information. In Study 1, the participants were presented with the information as facts of the case. In Study 2, interviewers were presented with the information as observations of the interviewee completing the taste-testing task and having a brief interview with the researcher about their results. In both studies, the information was presented consecutively, and questions were formulated after each presentation.

1. Background:

The person of interest signed up to participate in this study and they were randomly assigned to the juice taste testing task. Their task was to match apple juice flavours with their corresponding brand in a blind taste test. Scoring 100% on this task is statistically improbable; however, the person of interest has somehow managed to correctly identify all six juices by matching them to their brand.

The set-up of the study is such that the person of interest could have obtained the correct answers for the task, and achieved a perfect score, if they were left unattended. It so happens that the person of interest was left alone for approximately 3 minutes during the task. At this time, we are not certain what happened in the room while the researcher was away; however, the researcher suspects the participant may have cheated on the task, but she needs more information to prove it.

2. Why we think we cannot trust the person of interest's results:

Previous studies have found that being able to distinguish items that are very similar in taste is extremely difficult when there are only two or three choices (think blind taste testing colas). In this study we doubled the number of juices and also employed some tricks to make correct identification nearly impossible. Yet, the person of interest managed to score them all correctly.

3. To motivate the person of interest, a monetary incentive was offered if they got all 6 juices correct (We wanted them to try really hard). The person of interest seemed very excited about this and eager to obtain the gift card. We later learned the person of interest was having financial difficulties.

4. When the researcher realized the results were anomalous, she conducted an initial interview. The person of interest sounded very nervous. When answering questions about the task and the results, the person of interest frequently stumbled over their words, and took a long time before answering the questions.

5. Also during the initial interview, the person of interest refused to make eye contact with the interviewer, they fidgeted a lot, and then they sat with arms crossed looking very defensive.

Appendix D

Test Testing Procedure

To set up the task, six different apple juice brands were poured into six identical 500ml plastic bottles with attached paper labels showing the brand name. The containers were uncovered, and the participant was asked to taste each and memorize the brand. For the blind portion of the test, opaque paper covers were slid over each bottle so that the brand name was no longer visible, and the participant turned away while the bottles were shuffled to mix up the order. The participants were then asked to taste the juice again and identify each brand by taste alone. Each participant made their choice by marking the letter on the covering to the corresponding brand on an answer sheet. During this portion of the task the research assistant left the room under the pretense they needed to check the progress of the interviewer. Meanwhile, the surveillance equipment was recording the participant to verify later if the participant lifted the covers to get a good score or not. A review of all tapes revealed that 100% of the participants self-elected into an honest condition, as no one cheated on the task.

Appendix E

Definitions of Question Types

Question Type	Definition	Examples
Accusatory	<ul style="list-style-type: none"> • Directly accuses the interviewee of wrong doing • Implies that the interviewee was involved in wrong doing • Asks why the interviewee committed a wrong doing 	<ul style="list-style-type: none"> - I know you cheated, just tell me how. - If you didn't cheat then how did you get 100% - Why did you cheat?
Other	<ul style="list-style-type: none"> • Does not advance the interview in any way • Pleasantries or small talk • Well-being check 	<ul style="list-style-type: none"> - Would you be willing to redo the test? - How are you today? Are you a student here? - How are you feeling? Are you nervous?
Neutral	<ul style="list-style-type: none"> • Seeks to gather more information pertaining to the case • Asks for clarifying details • Asks for perspective 	<ul style="list-style-type: none"> - Tell me what you did when... - Were you left alone during the test? - Did you find the test easy or difficult?
Open Question (TED)	<ul style="list-style-type: none"> • Allows for the interviewee to provide detail and longer answers • Contains or implies to Tell, Explain or Describe to provide a complete answer 	<ul style="list-style-type: none"> - Tell me what happened when you entered the room. - Explain the process to me. - Describe the test, please.

Question Type	Definition:	Examples:
Probe	<ul style="list-style-type: none"> • Asking a follow-up question to fully understand the response • Obtaining specific or more in-depth information • Who, what, where, when, why, how questions 	<ul style="list-style-type: none"> - I don't know what you mean by XYZ. Can you clarify? - Jason? Who is that? - You said she fell. When she fell, did she injure any part of her body?
Leading	<ul style="list-style-type: none"> • Suggests or encourages the answer • Respondent is manipulated to agree with inserted qualities or circumstances that have not been previously offered by the respondent 	<ul style="list-style-type: none"> - Just to be clear, you were <u>very drunk</u>, right? - Are you always <u>aggressive</u> when you drink?
Appropriate closed (AYN)	<p>*Context specific – gaining additional information or clarifying information</p> <ul style="list-style-type: none"> • Answered with a short response (one or two words) • Can be used to clarify • Includes appropriate use of echo questions • Used to obtain facts quickly 	<ul style="list-style-type: none"> - Were you driving that day? - Is Jason your brother? - [Person states XYZ], [Interviewer responds] XYZ? (this prompts for further information or clarification) - Are you employed? - Just to be clear, I heard you say XYZ, do I [have that right/ understand that correctly]?

Question Type	Definition:	Examples:
Inappropriate closed (IYN)	<p>*Context specific – used at the wrong point in the interview, or excessively repeating the answer in question format (echo) as a means of clarification</p> <ul style="list-style-type: none"> • Answered with a short response (one or two words) • Includes inappropriate use of echo questions 	<p>- Do you know this man? - When she fell did she hit her head? (when no mention of a head injury was made) - You went to the store? You went by car? You bought bread? You returned home?</p>
Forced Choice	<ul style="list-style-type: none"> • Limits responses to finite choices 	<p>- Was the woman blond or brunette?</p>
Multiple	<ul style="list-style-type: none"> • Many questions asked at once • Interviewers taking turns asking a barrage of questions • Rapid fire questions 	<p>- When you arrived, who was there? What did you do when you got there, and how many people were already drinking?</p>
Opinion/ Statements	<ul style="list-style-type: none"> • Posing opinions • Making statements (not posed as questions) as opposed to asking questions. 	<p>- I think you have more to say and just don't want to cooperate. - Let me tell you how easily a night of drinking can go horribly wrong...</p>
Guilt Presumptive language	<ul style="list-style-type: none"> • Direct accusations of guilt or involvement • Insinuations of guilt or involvement • Implied guilt or involvement 	<p>- We know you killed her, just tell us why! - I once interviewed a cold-blooded killer who was just as relaxed as you are.</p>



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ECP- 163_02_03_2016

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Maastricht
10-3-2016

Geacht bestuur,

Na kennisname van de onderzoekslijn "*Confirmation Bias and Expectancy Effects: The Making of a False Confession*" van Marko Jelicic is de ECP tot het volgende oordeel gekomen:

Deze onderzoekslijn wordt goedgekeurd.

- Dit onderzoek valt niet onder de werking van de WMO en behoeft derhalve geen verdere goedkeuring van een Medisch-Ethische Commissie.
- Gegeven het door de ECP gehanteerde toetsingskader, zijn er geen bezwaren tegen uitvoering van de in het aanmeldingsformulier beschreven onderzoekslijn.

De ECP heeft in haar vergadering van 13 februari 2012 besloten dat op alle advertentieteksten, van door de ECP goedgekeurde onderzoeken, het ECP kenmerk vermeld dient te worden.

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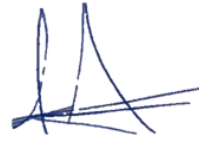
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Opgemerkt zij dat veranderingen in de onderzoeksopzet een hernieuwde kennisname door de ECP noodzakelijk maken.

Wij verzoeken de aanvrager ons kenmerk te vermelden bij toekomstige correspondentie.

Met vriendelijke groet,



Mr. M. Schrijnemaekers ,
Ambtelijk secretaris



FORM UPR16

Research Ethics Review Checklist



Please include this completed form as an appendix to your thesis (see the Postgraduate Research Student Handbook for more information)

Postgraduate Research Student (PGRS) Information		Student ID:	795863
PGRS Name:	Nicole M Adams-Quackenbush		
Department:	Psychology	First Supervisor:	Prof. Aldert Vrij
Start Date: (or progression date for Prof Doc students)	September 2015		
Study Mode and Route:	Part-time <input type="checkbox"/>	MPhil <input type="checkbox"/>	MD <input type="checkbox"/>
	Full-time <input checked="" type="checkbox"/>	PhD <input checked="" type="checkbox"/>	Professional Doctorate <input type="checkbox"/>

Title of Thesis:	Indicators of Confirmation Bias in the Investigative Interview with Suspects
Thesis Word Count: (excluding ancillary data)	54,944

If you are unsure about any of the following, please contact the local representative on your Faculty Ethics Committee for advice. Please note that it is your responsibility to follow the University's Ethics Policy and any relevant University, academic or professional guidelines in the conduct of your study

Although the Ethics Committee may have given your study a favourable opinion, the final responsibility for the ethical conduct of this work lies with the researcher(s).

UKRIO Finished Research Checklist:

(If you would like to know more about the checklist, please see your Faculty or Departmental Ethics Committee rep or see the online version of the full checklist at: <http://www.ukrio.org/what-we-do/code-of-practice-for-research/>)

a) Have all of your research and findings been reported accurately, honestly and within a reasonable time frame?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
b) Have all contributions to knowledge been acknowledged?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
c) Have you complied with all agreements relating to intellectual property, publication and authorship?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
d) Has your research data been retained in a secure and accessible form and will it remain so for the required duration?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>
e) Does your research comply with all legal, ethical, and contractual requirements?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

Candidate Statement:

I have considered the ethical dimensions of the above named research project, and have successfully obtained the necessary ethical approval(s)

Ethical review number(s) from Faculty Ethics Committee (or from NRES/SCREC):	ECP-163_02_03_2016
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If you have *not* submitted your work for ethical review, and/or you have answered 'No' to one or more of questions a) to e), please explain below why this is so:

Ethical review was obtained from home university (Maastricht University) and was submitted and accepted for the study completed at UoP. Ethics documentation is appended in the thesis.

Signed (PGRS):		Date: September 25, 2018
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