

**MODELLING SELF REPORTED CONFESSIONS AND COOPERATION WITH POLICE
INTERROGATORS**

By Dianna Brooks

A thesis submitted to the School of Graduate Studies

In partial fulfilment of the requirements for the degree of

Master of Science

Department of Psychology

Memorial University of Newfoundland

June 2014

St. John's, Newfoundland

Abstract

This study modelled self-reported confessions and cooperation with police interrogators. Incarcerated men ($N = 100$) were interviewed about their most recent police interrogation. A logistic regression analysis was performed to predict confession decision using nine predictors: Humanitarian Style, Legal Advice, Interrogation Length, Perception of Evidence, Age, Previous Conviction, Number of Convictions, Offence Seriousness, and Attitude Toward Police. A model containing Perception of Evidence, Humanitarian Style, Previous Convictions, Number of Convictions, and Legal Advice predicted confession decision 79% of the time (versus 60% for a base model). A multiple regression analysis, using the same predictors, revealed that Humanitarian Style, Previous Convictions, and Number of Convictions accounted for 29% of the variance in self-reported cooperation. The implications of the findings for interrogations practices are discussed.

Acknowledgments

I would like to offer my most sincere thanks to my supervisor, Dr. Brent Snook. Dr Snook has been unbelievably helpful, supportive, and patient, and I am truly thankful for his guidance throughout this process. I would also like to express my gratitude to the staff and management at the correctional facility where the present research was conducted. I am also thankful for those who have graciously agreed to act as members of my thesis committee, Dr. Aimee Surprenant, and Professor Malcom Grant, as well as external reviewers, for the time and effort spent reading my thesis. Finally, I would like to acknowledge those who participated in my study, and to whom I am eternally grateful for their willingness to share with me their personal experiences of police interrogation.

Table of Contents

Abstract	I
Acknowledgments	II
Table of Contents	III
List of Tables	V
1.0 Introduction	1
1.1 <i>Accusatorial Interrogation Approach</i>	2
1.1.1 <i>The Reid Model</i>	2
1.1.2 <i>Problems with the Reid Model</i>	3
1.2 <i>Information Gathering Approach</i>	9
1.2.1 <i>The PEACE Model</i>	10
1.2.2 <i>Advantages of the PEACE Model</i>	11
1.3 <i>Perceptions of Interrogation Approaches</i>	16
1.4 <i>Limitations of Previous Studies and the Current Study</i>	18
2.0 Method	19
2.1 <i>Participants</i>	19
2.2 <i>Recruitment</i>	21
2.3 <i>Materials</i>	21
2.3.1 <i>Interview Protocol</i>	22
2.4 <i>Procedure</i>	23
3.0 Results	25
3.1 <i>Preliminary Analyses</i>	26
3.2 <i>Main Analyses</i>	27
4.0 Discussion	30

5.0 References	39
6.0 Appendix	43
7.0 Footnotes	45

List of Tables

Table 1. Zero-Order Correlations with Self-Reported Cooperation and Correlations between Predictors	54
Table 2. A Summary of the Logistic Regression Analysis on Self-Reported Confession Decision	55
Table 3. A Summary of the Standard Multiple Regression Analysis of Self-Reported Cooperation	56

Modelling Self-Reported Confessions and Cooperation with Police Interrogators

1.0 Introduction

Police officers consider the interviews they conduct with suspects and accused persons (henceforth referred to as detainees) to be one of the most important tasks of a criminal investigation because it can help obtain the probative evidence required to lay charges or secure convictions (Milne & Bull, 1999). There is much debate, however, about the best way to elicit information and confessions from detainees (Meissner, Redlich, Bhatt, & Brandon, 2012). In Canada and The United States, practitioners appear to prefer (as evidenced through its use and training) an accusatorial approach to interviewing detainees (see Snook, Eastwood, Stinson, Tedeschini, & House, 2010). Conversely, an information-gathering method appears to be preferred by academics and practitioners in other parts of the world (e.g., UK, New Zealand; see Milne & Bull, 1999). Proponents of the accusatorial approach may be driven by common-sense reasoning that interviewers “must deal with criminal suspects on a somewhat lower moral plane than that upon which ethical, law-abiding citizens are expected to conduct their everyday affairs” (Inbau, Reid, Buckley, & Jayne, 2013, p. 15). On the other hand, proponents of the information-gathering approach tend to be driven by the scientific evidence that shows that taking a humane approach to interviewing leads to a greater amount of accurate information being obtained from detainees (Kebbell, Hurren, & Mazerolle, 2006), along with the evidence that the strategies that comprise the accusatorial methods have a heightened risk of obtaining false confessions (Kassin & Kiechel, 1996). One new line of research to help shed light on this debate is to obtain perceptions about interviewing practices from the detainees themselves. The goal of the current research is

to examine the detainee's perspectives of their most recent police interview, in order to identify the factors that relate to their decisions to provide information to their interviewers and confess their crimes.

1.1 Accusatorial Interrogation Approach

Accusatorial interrogation methods are commonly used by law enforcement in Canada and the United States (Costanzo & Redlich, 2010; Leo, 2008), and involve gaining psychological control over the detainee, as well as employing psychological manipulation in order to gain information (Meissner et al., 2012). Also known as a guilt presumptive method (Meissner et al., 2012) accusatorial methods involve the interviewer being certain of the detainee's lack of credibility and high likelihood of culpability prior to conducting an in-depth questioning of the detainee, and maintaining this perspective throughout the interview. Specifically, the goal of an accusatorial style of interviewing is to obtain a confession from the detainee, and in order to do so, an accusatorial method involves the utilization of confirmatory, closed-ended, and leading questions (Meissner et al., 2012; for operational definitions of the question types, see Snook, Luther, Quinlan, & Milne, 2012).

1.1.1 The Reid Model

The Reid Model of interrogations is perhaps the most predominant accusatorial method of interrogation (Gallini, 2010). The Reid Model takes its name from one of its co-creators, John Reid, who along with Fred Inbau, designed a method of interrogation which was originally intended to effectively identify guilty suspects without encouraging false confessions (Gallini, 2010). As Gallini explains, prior to the creation of the Reid Model in 1942, barbaric tactics including beating, humiliating, torturing, and demeaning

the suspect – collectively known as ‘third degree tactics’ – were not uncommon, and thus, at the time of its creation, the Reid Model was initially considered a step forward in methods of suspect interrogation.

The Reid Model consists of nine steps that are employed to ultimately gain compliance in the form of a confession from the detainee. The Reid method begins with a Behavior Analysis Interview (BAI), during which the interviewer determines the interviewee’s credibility, based on their behavioural responses (Gallini, 2010). Gallini explains that at this time the interviewer must decide whether or not to proceed with the actual suspect interrogation, based on whether or not the interviewee has been deemed as deceptive and therefore culpable (Gallini, 2010). If it is decided that an interrogation is warranted, the second step involves the interrogator stating his or her certainty of the detainee’s guilt, followed by the development of explanations, or ‘themes’, on behalf of the interrogator in order to justify the detainee’s commission of the offence. The following steps involve effective handling of the detainee’s denials and objections to their presumed guilt, and concludes with the interrogator obtaining an oral confession from the detainee, which is then ultimately translated into a written one (Gallini, 2010).

1.1.2 Problems with the Reid Model

Despite the positive claims about the usefulness of the Reid Model by some of its advocates, research has shown that various Reid Model strategies are correlated with an increase in false confessions (Kassin & McNall, 1991; Kassin & Kiechel, 1996; Russano, 2004; Russano 2005; Meissner et al., 2012). The accusatorial interrogation process can lead to a coerced-compliant false confession, where the detainee accepts responsibility for the crime but remains aware of their innocence. Research suggests that such forms of

false confessions occur because the detainee wishes to avoid punishment, gain an implied or promised reward, or to escape a stressful situation (Kassin, 2008). Moreover, research has shown that some Reid-based strategies can lead to internalized false confessions; that is, the detainee not only falsely confesses, but actually comes to believe they are culpable. Specifically, internalized false confessions have been reported to occur when the detainee is exposed to highly suggestive police interrogation tactics (Kassin, 2008).

Certain interrogation tactics inherent to the Reid model are particularly well-suited for eliciting false confessions. For instance, researchers have found that the use of maximization (implying things will get worse without a confession) and minimization (implying leniency will follow from a confession) tactics (Kassin & McNall, 1991; Russano, 2004; Russano 2005), presentation of false evidence (Kassin & Kiechel, 1996), and the experience of physical isolation during interrogation (Kassin, Appleby, & Perillo, 2010) may all lead to innocent detainees confessing falsely.

In addition to the psychological influence tactics inherent in the Reid model, it seems that individuals with certain dispositional traits are particularly susceptible to offering a false confession when exposed to the coercive tactics advocated by the Reid model. For instance, individuals who are intellectually impaired (Drizin & Leo, 2004), youth under the age of 18 (Drizin & Leo, 2004), and those who score high on measures of certain personality traits such as compliance (Gudjonsson, 2003), are disproportionately vulnerable to making a false confession when coercive tactics are used during the interrogation.

Perhaps the two most widely studied Reid-based strategies are minimization and maximization. Minimization tactics involve the interrogator mitigating the crime by

engaging in victim blaming (e.g., In the case of a sexual assault, stating that the victim is partially responsible for the incident due to provocative clothing and sexually suggestive behaviour.) or offering excuses for the detainees alleged offence (e.g., ‘You committed this assault because you were heavily intoxicated, otherwise you would have never assaulted the woman’.) Maximization tactics involve the interrogator exaggerating the strength of evidence and magnitude of the charges (e.g., In the case of a minor assault resulting from a bar fight, stating to the detainee that they may be charged for attempted murder). A series of studies conducted by Kassin and McNall (1991) examined the effects of using both maximization and minimization. The first experiment involved 75 participants who were required to read interview transcripts within which an interrogator utilized one of five tactics in an effort to encourage a confession: maximization, minimization, the threat of punishment, an offer of leniency, or none of the above (the dependent measures). Participants were then given a questionnaire and reported their impressions of the interrogator, the context of the interrogation, and their expectations for sentencing. A second experiment was conducted, similar to the first, but with the addition of transcripts that depicted a variety of cases. The second experiment involved 36 participants. The results of the first two experiments revealed that minimization tactics, even though they may initially appear to be non-coercive, communicate an implicit offer of leniency to the detainee, and maximization tactics communicate an implicit threat of punishment to the detainee. The third experiment examined how confessions obtained by the use of maximization and minimization tactics are perceived by jurors. Mock jurors read an interview transcript that differed only in the tactic used to obtain the confession. Participants were randomly assigned to one of five transcript conditions: a no-confession

control group, a promise group, a threat group, a minimization condition, and an unprompted confession condition. Despite the mock jurors being aware that minimization had been used to elicit the confession, the majority of mock jurors wished to convict an accused person who had confessed to committing a crime. Such a finding suggests that the use of tactics inherent to the Reid model, maximization and minimization, are in fact coercive in nature, and surprisingly jurors may favor a guilty verdict despite the knowledge that the accused's confession was obtained using one of these coercive tactics (Kassin & McNall, 1991).

More recently, Russano (2004) examined the use of maximization and minimization techniques using an experimental paradigm with more ecological validity compared to the above-mentioned research. The experiment involved guilty and innocent research participants being accused of a minor infraction while participating in a problem-solving task. Participants included 330 undergraduate students, who initially believed they would be participating in a study examining decision making processes of individuals and teams and completing logic problems. Participants were randomly assigned to one of eight possible conditions, which were produced by a 2 (innocent vs. guilty) X 2 (minimization vs. no minimization) X 2 (deal vs. no deal) between-subjects factorial design. Participants were required to complete the logic problems with a female teammate (i.e., confederate). The researchers instructed participants that certain questions were to be completed together and that other questions were considered 'individual' questions and the teammates were not permitted to work together or discuss their solutions for these problems. For participants in the 'innocent' condition, the confederate refrained from asking the participants for help. For participants in the 'guilty' condition,

the confederate asked the participant for help with the individual questions. After completing the problem solving task, the experimenter (blind to the participants guilt or innocence) informed the participant that there was a problem and escorted the participant to a room where they were interrogated without the confederate present. At this time, the participant was accused of having cheated on the problem-solving task (by sharing answers) and asked to sign a statement agreeing with the accusations. The experimenter then implemented two versions (emphasizing consequences of confession vs. no mention of consequences) of both maximization and minimization tactics in order to encourage the participant to sign a statement confessing to cheating. It was found that minimization techniques – showing sympathy, minimizing seriousness of the accusation, offering excuses for infraction – on behalf of the interrogator increased the rate of confession in both guilty and innocent participants. Russano (2004) explained that detainees, regardless of their guilt or innocence, are more likely to confess when minimization is used because the detainee infers that their punishment will be less severe if they confess than if they do not. Moreover, it seems that when these questionable techniques are combined (e.g., using minimization, and an explicit offer of a deal in exchange for confession), a cumulative increase in the likelihood of false confession occurs (Russano, 2005).

In addition to minimization and maximization techniques, another powerful tactic that has been found to lead to false confession is the use of false evidence ploys.

Although it is not overtly permissible in Canada, police are able to present the detainee with fabricated incriminating evidence during the interrogation in the United States and other countries where accusatorial methods are the standard (Kassin et al., 2010). Kassin and Kiechel (1996) demonstrated that false confessions can be obtained easily from

innocent individuals when they are presented with false incriminating evidence.

Participants (79 undergraduate students), were randomly assigned to one of four groups in a 2 (high vulnerability vs. low vulnerability) X 2 (presence vs. absence of a falsely incriminating witness) factorial design. Participants were told by the experimenter that they would engage in a reaction time task on a computer, along with another participant (i.e., a confederate). Before beginning the task, participants were told not to press the ALT key on the computer keyboard, as this would result in catastrophic loss of data on the computer and affect its functioning. One minute after the task began, the computer was pre-programmed to cease functioning, and the experimenter returned and accused the participant of having pressed the forbidden ALT key. The presence of false incriminating evidence was manipulated; the confederate either corroborated the accusations of the experimenter in the presence of the participant, or denied the accusations of the experimenter with the participant present. Although all participants were truly innocent and initially denied the accusation, after being questioned, the majority (69%) of participants signed a confession confirming their culpability. The researchers found that there was an especially high rate (100%) of false-confession for those participants who were told a witness (confederate) had seen the participant committing the infraction (i.e., hitting the ALT Key). These results suggest that presenting a detainee with false evidence in order to elicit a confession is a particularly powerful and coercive tactic, as this may result in the detainee providing a confession regardless of whether or not they are innocent.

As Kassin and colleagues (2010) explain, under highly stressful situations such as when one is about to undergo a police interrogation, individuals desire the company of

other people in order to gain social support and decrease their anxiety. However, the Reid Model promotes isolation of the detainee both prior to and during the interrogation. In order to produce an environment of isolation, the Reid manual stipulates that the detainee be questioned in an unfamiliar room, first having the detainee sit alone in the room prior to questioning, with the goal of promoting insecurity, doubts, and concern in the mind of the detainee (Gallini, 2010).

Although the Reid model does not encourage excessively lengthy interrogations, in a study examining 125 cases of proven false confessions, in which tactics inherent to the Reid model were used, more than 80% of those interrogations lasted longer than six hours, with a mean length of 16.3 hours (Drizin & Leo, 2004). Researchers believe that prolonged isolation from familiar sources of social support (e.g., family and friends) during an interrogation is a form of deprivation, and can further increase the detainees' distress, causing an increased desire to remove themselves from this highly stressful situation by whatever means possible, which for some may involve offering a false confession (Kassin et al., 2010).

1.2 Information Gathering Approach

Unlike accusatorial approaches to interviewing, an information-gathering approach involves fair, compassionate, and non-aggressive demeanour of the interviewer (Kebbell et al., 2006), and begins with the interviewer establishing rapport with the detainee (Meissner et al., 2012). Rapport building is accomplished through showing interest in the detainee, personalizing the interview, asking the detainee open-ended questions, and engaging in active listening. All aspects of building rapport are important when developing a trusting relationship between the interviewer and the detainee, which

is essential when the interviewer requires the detainee to share highly personal information (Milne & Bull, 1999). An information gathering approach attempts to obtain as much information as possible through the use of open-ended, exploratory questions (Meissner et al., 2012), and avoidance of questions that constrain answers (i.e., forced choice, close ended questions). As its name suggests, the goal of an information gathering method is to gather as much complete and accurate information as possible concerning the crime (Milne & Bull, 1999) and differs greatly from accusatorial methods.

1.2.1 The PEACE Model

The PEACE model of investigative interviewing typifies an information-gathering approach to interviewing suspects and accused persons. According to Milne and Bull (2009), prior to the mid 1980s, there was no known comprehensive source of empirical data for law enforcement officers on how to conduct a successful suspect interview. The advent of the United Kingdom's PEACE model of investigative interviewing in 1992, its creation stemming from several high-profile wrongful convictions, revolutionized interviewing because there was a new emphasis on obtaining complete and accurate information; regardless of whether the interviewee is a witness, victim, or suspect (Bull, 2013). The model consists of five steps which provide structure to the interview, and are each represented by the PEACE acronym: Planning and preparation, Engage and explain, Account, Closure, and Evaluation, as described by Milne and Bull (1999).

The first stage of the PEACE model, Planning and preparation, involves the interviewer actively preparing to interview the detainee by taking steps such as analyzing existing evidence and clearly defining the aims and objectives of the interview. The Engage and explain stage marks the beginning of the interview, at which time the

interviewer must greet and build rapport with the detainee (engage phase), prior to offering the detainee reasons for, and an outline of, the interview (explanation phase). Next, the interviewer prepares the detainee to offer an account of the events in question, ensuring the detainee has been made aware of their right to silence and other legal considerations. Once all of the information has been obtained from the detainee, the interview concludes with the Closure phase, in which the interviewer explains to the detainee what will happen in the future, and answers any questions the detainee may have. The final stage of PEACE is the Evaluation phase, at which time the interviewer should evaluate the information obtained during the interview, as well as the investigation itself in light of the novel information obtained. Additionally, the interviewer is urged to evaluate his or her own performance during the interview, in order to further improve interviewing skills.

1.2.2 Advantages of the PEACE Model

Overall, advocates of the PEACE model recommend interviewers adopt a humanitarian style of interviewing, which involves showing respect for the interviewee and an interest in their needs, treating the detainee in a humane manner, and utilizing a problem oriented approach (Holmberg & Christianson, 2002). The philosophy of the PEACE model runs completely counter to a dominant, or accusatorial, approach to interviewing where the interviewer is perceived as impatient, aggressive, and condemning (Meissner et al., 2012).

A meta-analysis conducted by Meissner et al. (2012), albeit with three studies, examined research on the effectiveness of both accusatorial and information gathering methods of interrogation and interviewing. When directly contrasted with one another,

information-gathering methods elicited a significantly greater proportion of true confessions while decreasing the likelihood of false confessions. Meissner and his colleagues (2012) also found that the use of accusatorial methods significantly increased the likelihood of both true and false confessions.

When a humanitarian interviewing style is used in questioning a detainee, previous studies have revealed that a greater amount of information can be obtained (Collins, Lincoln, & Frank, 2002; Holmberg & Madsen, 2014). A humanitarian style of interviewing is an information gathering approach that according to Holmberg and Madsen mirrors existing theoretical prototypes of rapport, such as that proposed by Tickle-Degnen and Rosenthal (1990). According to Milne and Bull (1999) rapport building involves creating a sense of security, trust, and confidence for the detainee. Rapport building begins at the onset of first communication, and can be established with the detainee by personalizing the interview, communicating empathy, and engaging in active listening. Indeed, rapport building is an integral aspect of information gathering models such as PEACE, and is considered critically important to a successful interview, as the opening of an interview will invariably determine how well the interview proceeds (Milne & Bull, 1999).

A study on rapport building by Collins et al. (2002) illustrates why it is imperative that rapport building be developed at the onset of the interview. Participants were exposed to a one- minute video that depicted an emergency situation. Participants were subsequently placed in one of three interview conditions: Rapport Building (e.g., interviewer was friendly, used gentle tone of voice, referred to participant by name, adopted a relaxed posture), Abrupt (e.g., interviewer was only interested in conducting

the experiment, used a harsh tone of voice, did not refer to participant by name, and adopted a stiff posture), or Neutral (e.g., interviewer maintained a neutral demeanor, voice tone, and body posture). Participants were then asked to recall as much information as possible from the emergency video. Participants in the rapport building condition recalled significantly more correct information and a significantly greater amount of information overall than those in the abrupt or neutral conditions. Moreover, those in the rapport building condition recalled significantly less incorrect information than those who experienced the abrupt or neutral approaches.

More recently, Holmberg and Madsen (2014) conducted a study examining rapport building that manipulated interviewing style (humanitarian or dominant) and elapsed time (one week or six months). All participants were first exposed to an interactive computer simulation depicting a fictitious (yet realistic) disaster. Participants assigned to the humanitarian condition were interviewed in an informal and relaxed manner. Specifically, the interviewer engaged in rapport building, asked open-ended questions, was helpful, friendly, empathetic, and engaged in personalized conversation. Alternatively, participants assigned to the dominant interviewer group were interviewed in a brusque and impersonal manner, where the interviewer did not engage in rapport building, and was non-accessible, unemotional, unfriendly, and formal. Additionally, participants were interviewed either one week or 6 months following the exposure to the stimulus. Unsurprisingly, those who underwent a humanitarian style interview that contained a rapport building component recalled significantly more information overall than those participants interviewed in a dominant style.

Information gathering methods of interviewing, such as the PEACE model, advocate for the use of certain question types during an interview. Milne and Bull (1999) explain that the type of questions posed by the interviewer, can greatly affect the amount and accuracy of information elicited from the interviewee. According to Milne and Bull (1999), interview questions can be dichotomized as either appropriate or inappropriate. Open-ended questions (e.g., ‘tell me everything that happened last night’), for example, fall into the category of appropriate question types, while forced-choice (e.g., ‘Did you use a hunting knife or a kitchen knife?’), leading (e.g., ‘On the evening of May 24th, were you camping in Pippy park?’), and multiple questions (e.g., ‘What were you wearing last night? Do you own construction boots? What is your shoe size?’) constitute inappropriate question types. Open-ended questions are favored from an information gathering perspective, as they are un-restrictive and allow the detainee to have control over the flow of information during the interview. In turn, the detainee may feel more in control of the interview, and as a result become more comfortable divulging information to the interviewer. Open-ended questions are those that begin with ‘Tell’, ‘Explain’, or ‘Describe’. An example of an open-ended question would be ‘Tell me everything that happened on March 30th’. The use of open-ended questions minimizes the likelihood that the interviewer will inadvertently impose their view of the given issue onto the detainee, and open ended questions are associated with more elaborate and accurate responses (Snook et al., 2012; Milne & Bull, 1999). Information gathering models such as PEACE encourage the use of open-ended questions, whereas accusatorial models such as the Reid model, advocate for the use of close-ended and confirmatory questions (Meissner et al., 2012).

Numerous studies have shown that interview style, whether information gathering or accusatorial in nature, is related to confession and cooperation outcomes (Collins et al., 2002; Holmberg & Madsen, 2014; Kassin & McNall, 1991; Kassin & Kiechel, 1996; Meissner et al., 2012; Russano, 2004; Russano, 2005; Walsh & Bull, 2012). Much attention has been paid to interviewer characteristics, and their effect on interview outcome. For example, a recent study by Bull (2013) examined the characteristics of an effective police interviewer, concluding that overall, those interviewers who engage in a humanitarian interview style, which includes preparation and planning, as well as showing empathy, engaging in rapport building, and appealing to cooperation, among other things, are believed to be, and have been shown empirically to be, the most successful interviewers. However, it is likely that other factors aside from interviewer characteristics or the style of interviewing can affect whether or not a detainee cooperates or confesses during a police interview. For example, age and criminal history of detainees, as well as seriousness of the alleged offence, the receipt of legal advice, how the evidence is perceived by the detainee, the length of the interrogation, and general attitude towards the police, have all been shown to predict an interviewee's willingness to divulge information during a police interview (Gudjonsson, 2003). [Deslauriers-Varin, Lussier, and St. Yves (2009) conducted a study examining the broad range of factors (and the interactions among them) that may influence an offender's decision to confess to police. Participants consisted of 221 adult male offenders recruited from Canadian correctional facility. Researchers collected and analyzed information concerning offenders' correctional files, police reports, and self-report data.] The results revealed that

the strength of evidence was the sole factor that influenced offenders' decision regarding whether or not to confess.

1.3 Perceptions of Interrogation Approaches

Given that interviews are central to police work (Milne & Bull, 1999), it is essential that interviews be carried out in a manner which will elicit cooperation and the provision of information by the detainee. One new line of research that has been pursued to help determine the best approach to interviewing involves obtaining the perceptions of police interviews from detainees. Several studies have examined incarcerated offenders' personal experiences of police interviews and how their decisions about whether to confess are influenced by these experiences (Godjonsson & Petursson, 1991; Holmberg & Christianson, 2002; Kebbell, Alison, Hurren, & Mazerolle, 2010). Although these studies are few in number, they are critically important in that they have sparked interest in including the perceptions of former detainees in the modeling of interview outcomes.

The first study to involve former detainees was conducted by Godjonsson and Petursson (1991), who examined the reasons offenders offer for having confessed to the police. The researchers also examined additional factors, including attitudes, offence type, personality, and their association with interview outcomes. Participants were 73 inmates serving time in an Icelandic correctional institution, nearly all of whom had previously confessed while being interviewed by police. A specially designed confession questionnaire was administered to participants, that included questions concerning factors related to their reasons for having confessed. Various additional measures of intelligence, personality, socialism, and blame attribution were also administered to the sample. Results indicated that reasons for confession during interrogation can be grouped into

three primary factors: Internal pressure (i.e., a personal desire to confess, often to decrease feelings of guilt), External pressure (i.e., factors attributed to the interviewer and the police environment), and Proof (i.e., perception of evidence against the detainee). Moreover, offenders' reasons for having offered a confession were related to the type of offence committed, attitudinal, and personality factors. For example, participants questioned in relation to non-person crimes were significantly more likely to confess due to external pressure, whereas those questioned about sexual offences were significantly more likely to report internal pressure as the reason for their confession.

Holmberg and Christianson (2002) conducted the second study to examine the perceptions of police interrogations from 83 Swedish male inmates convicted of either sexual offences or murder. The authors chose to narrow their focus to these two crime types, as murder and sexual offences often carry the most severe sentences, and constitute great violations of societal norms, meaning that they may be the most difficult crimes for which to admit culpability. Participants were administered a self-report measure which included questions related to their perception and responses to their most recent police interview, in addition to background questions (e.g., participant age, educational background, crime type, sentence given). Results indicated that attitudes towards interviewers could be grouped into two factors, dominant (i.e., interviewer was aggressive, brusque, impatient) and humanitarian (i.e., interviewer was friendly, patient, empathetic). Participants who reported the interviewer as displaying a humanitarian attitude were significantly more likely to confess than those who reported being interviewed in a dominant manner.

Kebbell, Alison, Hurren, and Mazerolle (2010) conducted the most recent study involving former detainees' perceptions of police interviewing. Participants consisted of 43 convicted sex offenders, as well as a comparison group of 20 violent offenders, currently incarcerated in Australian correctional facilities. The researchers examined participants' perceptions of their police interview and their decision about confessing, as well as their opinion concerning how police should interview other (culpable) sex offenders in order to elicit confession, using two separate self-report measures. Regardless of offence type, participants who confessed during their own police interview reported that they were treated significantly more humanely and ethically by the interviewer, compared to those participants who denied guilt during their interview. When asked how to conduct an interview in order to elicit a confession from a guilty sex offender, participants indicated that the ideal interview would be conducted ethically, with humanity, and with more evidence presentation strategies, compared to their own interview. Additionally, participants thought that an interviewer who was less dominant than the one who had interviewed them would have a better chance of getting a confession from a guilty sex offender.

1.4 Limitations of Previous Studies and the Current Study

Previous studies conducted with former detainees with the goal of understanding best practices for police interviews have been revolutionary, but there are four limitations concerning this line of research, which will be addressed in the current study. First, previous studies have had relatively small sample sizes. Godjonsson and Petursson (1991) stated that although their sample was representative of several offence types, the number of participants in each category was quite small, and as a result it was difficult to make

any associations between confession outcome and crime type. Second, the two most recent studies involved only persons convicted of sexual offences (Kebbell, Alison, Hurren, & Mazerolle, 2010), or those convicted of crimes carrying comparatively more severe sentences, such as sexual offences and homicide (Holmberg & Christianson, 2002). The interview experiences of offenders who committed less serious crimes have not been explored. Third, previous research focused mostly on offenders' willingness to confess to an alleged crime (Godjonsson & Petersson, 1991; Holmberg & Christianson, 2002), as opposed to offender willingness to divulge information and cooperate with the police during the interview, which is arguably the most important outcome of an interview. Finally, previous studies have been conducted in Iceland, Sweden, and Australia. There has not been any similar research conducted in the Canadian (or North American) context to determine if previous results are applicable to these locations. In response to these limitations, the current study is a conceptual replication and extension of previous studies that examined offenders' perceptions of police interrogations.

2.0 Method

2.1 Participants

Participants were 100 adult males who were incarcerated in a Canadian provincial correctional and remand facility. Nearly half of participants (49%) were serving a provincial sentence, 25% were serving a federal sentence, 13% were on remand (either awaiting the commencement of a trial, a verdict, or sentencing) and *expecting* a federal sentence, 11% of participants reported that the charges had been dropped or dismissed in court, and two percent were on remand but *expecting* a provincial sentence.

The mean age of participants at the time of the interrogation was 30.73 ($SD = 10.72$). The mean age of participants at the time of the study was 32.84 ($SD = 10.82$). The vast majority of participants were Caucasian (91%), 6% were aboriginal, and 3% self-identified as being a member of another ethnic group. The majority of participants (87%) had a criminal history. Just over half of the participants who had a criminal history (56.32%) indicated that they had more than 10 convictions, 29.89% had 1 to 5 convictions, and 16.09% had between 6 and 10 convictions. Participants were questioned about the type of offense that had been the subject of their most recent interrogation. Responses to this question were distributed as follows: break and enter (18%), armed robbery (16%), drug related offence (13%), sexual offences (11%), assault (11%; these include simple, aggravated, and with a weapon), theft under \$5,000 (7%), fraud (5%), murder (4%), impaired driving (4%), and other (11%; this included 8 different types of crimes).

The participants were interrogated by one of three Canadian police organizations. Specifically, 58% of participants were interviewed by members from one organization, 38% were interviewed by a second organization, 3% by members of the first and second organizations, and 1% by a third organization (See Footnotes). Thirty-eight participants indicated that they sought legal advice prior to their interrogation. In terms of perceived evidence, 46% indicated that they agreed (somewhat agreed, agreed, strongly agreed) that the evidence against them was strong ($M = 3.99$, $SD = 2.13$). Forty-one participants (41%) reported that their most recent interrogation lasted for less than an hour, 34% indicated that the questioning lasted for 1-2 hours, 17% indicated that the questioning

lasted for 2-3 hours, two (2%) indicated that the interrogation lasted 3-4 hours, and six (6%) indicated the questioning lasted for more than four hours.

2.2 Recruitment

Approval for the study was first obtained from the university's ethics review board and government officials who were responsible for the correctional institution. One non-uniformed staff member (accompanied by two correctional officers) assisted with participant recruitment by distributing a one-page Willingness-to-Participate form (which documented the purpose of the study) to each inmate housed in the nine units comprising the correctional facility. Each unit housed approximately 20 inmates. Because research has shown that literacy levels of inmates tend to be deficient (Caddick & Webster, 1998; Davies, Lewis, Byatt, Purvis, & Cole, 2004; Jovanic, 2011), the staff member also read the recruitment form aloud to the groups of inmates housed in the various units and provided an opportunity for them to ask questions. Specifically, inmates were informed that the provision of a signature on the recruitment form indicated that they were interested in participating in the study. A total of 130 of the 160 inmates indicated that they were willing to participate in the study. Because release or transfer dates of the inmates who were willing to participate varied dramatically, the interview schedule was determined by those dates; inmates whose release or transfer dates were most imminent were interviewed first. Thirty inmates were released/transferred before having the opportunity to participate in the study, therefore a total of 100 inmates participated in the study.

2.3 Materials

2.3.1 Interview Protocol

A 50-question structured interview protocol, with seven sections, was created. Section 1 (free recall) contained instructions for participants to provide a free recall of their most recent interrogation. The instructions contained the option for participants closing their eyes or diverting their gaze, a mental reinstatement of context script and a prompt for additional details (e.g., what else do you remember?). Section 2 (dependent measures) contained a closed yes/no question pertaining to the confession decision (1 = *No Confession*; 2 = *Confession*), a probing question about the reason for their confession decision, and a question that asked them to indicate, on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*), the extent to which they agreed that they *cooperated* with interrogator. Section 3 (interrogator style) contained 30 questions that asked participants to rate, on 7-point scales (1 = *strongly disagree* to 7 = *strongly agree*), the behaviour of the interrogator (e.g., respectful, talked in calm voice). Section 4 (legal advice) contained a closed yes/no question about seeking legal advice (1 = *No*, 2 = *Yes*), a probing question about their seeking or ignoring legal advice, a closed yes/no question about their satisfaction with the legal advice (1 = *No*, 2 = *Yes*, if applicable), and a probing question about the reason for their satisfaction or dissatisfaction with the legal advice they received (if applicable). Section 5 (interrogation characteristics) contained questions about the length of the interrogation (1 = *< 1 hour*, 2 = *1-2 hours*, 3 = *2-3 hours*, 4 = *3-4 hours*, 5 = *> 4 hours*), a question about the extent to which they agreed that the evidence against them was strong (1 = *strongly disagree* to 7 = *strongly agree*), which police organization conducted the interrogation (1 = *redacted A*, 2 = *redacted B*, 3 = *other*) an open-ended question regarding the offence for which they were interrogated, and the type of sentence

received (1 = *provincial*, 2 = *federal*; 3 = *other*). Section 6 (attitude toward police) contained three questions that asked participants to rate (1 = *strongly disagree* to 7 = *strongly agree*) the extent to which they have trust in the police, confidence in the ability of police to do their job, and satisfaction with the overall quality of policing. Section 7 (demographic characteristics) asked participants to provide their current age and their age at the time of their most recent interrogation, their ethnicity (1 = *Caucasian*, 2 = *Canadian American*, 3 = *Aboriginal*, 4 = *Asian*, and 5 = *Other*), whether or not they had a criminal record (1 = *No*, 2 = *Yes*), and number of past convictions (if applicable). See Appendix for a copy of the interview booklet.

2.4 Procedure

The author (henceforth referred to as ‘the interviewer’) conducted all interviews in a room that was used primarily for institutional programming. The room was located in an area of the prison to which inmates did not normally have access, and contained a table, panic button, and security camera without audio capabilities. All interviews were conducted during hours when a correctional officer was assigned to watch the camera monitors.

The interviewer started each interview session by calling one of the correctional officers who was working in a unit that housed a willing participant and requesting that the participant be escorted to the interview room. If a participant at the top of the interview schedule was unavailable on that particular day (e.g., absent from the institution to attend court proceedings, in solitary confinement as a result of institutional misconduct), the next participant on the list was contacted and so on. Participants who

were unavailable were checked for availability at the start of next day when the interviewer was given access to the interview room.

Once a participant was secured and escorted to the interview room, they were greeted by the interviewer, and seated in the interview room. Given that the success of an interview depends partially on the establishment of a working alliance between interviewer and interviewee (e.g., Milne & Bull, 1999), the interviewer first personalised the interview (e.g., exchanged names, engaged in conversation) and then obtained informed consent. Given that the reading abilities of incarcerated men tends to be low (Caddick & Webster, 1998; Davies et al., 2004; Jovanic, 2011) and that the participants' reading skills were not tested, participants were given a choice to either read the form themselves or have the interviewer read the form aloud.

All participants were informed of: the purpose and benefits of the study; their right to discontinue their participation at any time; their right not to answer questions; the fact that all answers were confidential and anonymous; their right to have their data withdrawn from the study; and the fact that they would be reimbursed for their participation if any of their ethical rights were invoked. All participants who agree to participate answered all questions, and no participant requested that their data be withdrawn from the study. The informed consent form also required participants to agree to participate and agree to have the interview audio recorded using a Sony IC Recorder. For the nine participants who refused to have their interview audio recorded, detailed notes during the free recall portion of the interview were taken.

Upon receiving consent, participants were thanked for agreeing to participate, and reminded of the value of their contribution and that the interviews were confidential and

anonymous. Participants were then asked to tell the interviewer why they believed they were being interviewed to make sure any remaining misconceptions or confusion were clarified. Participants were informed again that they would be interviewed about their most recent interrogation. If a participant reported being interrogated more than once in relation to their most recent criminal charge, they were asked to think about the *primary* interrogation. Participants were then reminded that it was important for them to report everything they could remember regarding the interrogation, that the interviewer would not express any opinions during the interview in order to remain unbiased, and that they would not be asked questions related to the details of the criminal charge. The interviewer then proceeded to administer the interview protocol verbally.

Once the participant was informed that there were no further questions, they were thanked for their contribution and the audio recording was stopped. The interviewer then spent approximately five minutes conversing with the participant concerning a neutral topic before the correctional officer escorted them back to their unit. Each interview lasted approximately 45 minutes and participants' were reimbursed for their participation (i.e., their institutional bank accounts were credited with \$20). The modest reimbursement was offered as a means of expressing gratitude for the participants' time and effort, and was not intended to be a sole motivator for research participation (Hanson, Letourneau, Olver, Wilson, & Miner, 2012).

3.0 Results

To maintain an appropriate predictor to case ratio when conducting regression analyses (i.e., 1:10; see Tabachnick & Fidell, 2012) the number of predictor variables was limited to nine: Humanitarian Style, Legal Advice, Interrogation Length, Perception of

Evidence, Age, Previous Conviction, Number of Convictions, Offence Seriousness, and Attitude Toward Police. The values for all but three of the predictors were presented in the earlier description of the interview protocol and the associated descriptive statistics can be seen in the *Participants'* section above.

3.1 Preliminary Analyses

A principal components factor analysis without rotation was performed on the responses to the 30 questions pertaining to the interrogators' behaviour during the participants' most recent interrogation (Section 3 of the interview protocol). Although nine factors were extracted, the first factor, which accounted for the 24.49% of the variance, was the only dimension that was interpretable. The variables that loaded heavily on this factor were: thanked interviewee for providing information (.72), showed respect (.69), made effort to make interviewee feel like an equal (.67), seemed sincere during the interrogation (.65), ended the interrogation on a positive note (.62), used calm voice (.61), seemed grateful for the information provided (.62), was impatient (-.64), tried to confuse the interviewee (-.62), rushed the interviewee to provide answers (-.61), was threatening (-.58), and was intimidating (-.58). The first factor was labelled *Humanitarian Style* and the associated factor scores were calculated and used in the subsequent regression analyses.

Attitude Towards Police. Given that the responses to the three questions comprising Section 6 of the interview protocol were highly-correlated ($M_r = .52$), a single measure of Attitude Toward Police was calculated by adding the scores together; the values of this combined measure could range from 3 to 21. The mean rating of Attitude Toward police was 9.82 ($SD = 4.56$).

Offense Seriousness. A binary variable called Offense Seriousness (1 = *non-person crime*, 2 = *crime against a person*) was created from the type of crime that the participant indicated was the focus of their most recent interrogation. The crimes of break and enter, fraud, theft under \$5000, drug offences, operation (of vehicle) while disqualified, theft of a vehicle, possession of a prohibited weapon, arson and evading police were each reclassified as non-person crime ($n = 54$). The crimes of murder, assault, sexual assault, armed robbery, disguise with intent (to commit an indictable offence), home invasion, uttering threats, and impaired driving causing bodily harm were reclassified as a crime against a person ($n = 46$).

Zero-order Correlations. The zero-order correlations among the predictor variables and self-reported cooperation are shown in Table 1. Only Age, Humanitarian Style, and Attitude had a significant ($p < .01$) zero-order correlation with self-reported cooperation.

3.2 Main Analyses

Logistic Regression. A logistic regression analysis was performed on self-reported confession decision and nine predictors: Humanitarian Style, Legal Advice, Interrogation Length, Perception of Evidence, Age, Previous Conviction, Number of Convictions, Offense Seriousness, and Attitude Toward Police. The full model with all nine predictors had a deviance value (- 2 log likelihood) of 71.18 compared to a value of 134.60 for a constant-only model (i.e., a model with no predictors). This difference was statistically significant, $\chi^2(9, N = 100) = 63.43, p < .001$, indicating that the predictors together distinguished significantly between inmates who had confessed and those who had not. A large amount of the variance in confession decision was accounted for as well

(Nagelkerke's $R^2 = 0.64$). Classification was good, with 50 out of 60 (83.3%) of non confessions predicted correctly and 29 out of 40 (72.5%) of confessions predicted correctly, for an overall success rate of 79.0% (compared to an accuracy of only 60% for the base-rate model).

A summary of the influence of each of the nine predictors in the logistic regression analysis on confession decisions (1 = no confession, 2 = confession) is shown in Table 2. According to the Wald criterion, Perception of Evidence, Humanitarian Style, Previous Convictions, Number of Convictions, and Legal Advice each made a unique contribution to predicting confession decisions. Specifically, the likelihood of an interrogation ending in a confession was greatest when evidence strength and humanitarian scores were high, and when the interviewee had few previous convictions and had not obtained legal advice.

An examination of the odds ratios shows that, when holding all other variables constant, Humanitarian Style and Perception of Evidence had a medium effect on confession decision (see Borenstein, Hedges, Higgins, & Rothstein, 2009, for how to interpret the magnitude of odds ratios; also see Rosenthal, Rosnow, & Rubin, 2000). Each unit of increase on the scale of humanitarian style was associated with a fourfold increase in the odds of the interrogation ending in confession. Each unit of increase on the scale of perception of evidence strength was associated with a 2.5 times increase in the odds of the interrogation ending in confession. Although non-significant, interrogations pertaining to crimes against a person were nearly 2.5 times as likely to elicit a confession than interrogations that pertained to property crimes. There was a medium effect of Number of Convictions, and a large effect of Previous Convictions and Legal Advice on

confession decision. The odds of an interrogation ending in a confession were reduced by a factor of 50 for persons with previous convictions, by a factor of 3 for each previous conviction, and by a factor of 7 for persons who had sought legal advice.

Standard Least-Squares Regression. A summary of a standard regression, using the same nine-predictors, on self-reported level of cooperation is shown in Table 3. The model with all nine predictors accounted for a significant portion of the variance, $F(9, 90) = 5.40$, $p < .001$, with R^2 at 0.35 (95% CI = 0.21, 0.49). The adjusted R^2 value of 0.29 indicates that the nine predictors account for nearly 30% of the variability in self-reported level of cooperation. Humanitarian Style, Previous Convictions, and Number of Convictions were the only statistically significant predictors ($p < .05$) of level of cooperation. The direction of the relationships suggests that an increase in the humanitarian style score was associated with an increase in cooperation; the confidence limits around the regression coefficient for Humanitarian Style were 0.39 to 1.26. Conversely, cooperation tended to be lower when the interviewee had a previous conviction (95% CI for $B = -3.86, -0.98$) and cooperation decreased as number of convictions increased (95% CI for $B = -1.45, -0.49$).

The generalizability of the regression model was assessed by using a formula suggested by Rozeboom (1978):

$$\text{Rozeboom's } R^2 = 1 - [(1 - R^2)(N + K)/(N - K)]$$

In this equation, R^2 is the multiple squared correlation, N is the number of cases, and K is the number of predictors. The more predictors there are in the model, relative to the number of cases, the more unreliable the model and the smaller the value of

Rozeboom's R^2 (Snook et al., 2009). In the present study, Rozeboom's R^2 was .15, which suggests that the model would perform somewhat less well with a different set of data.

4.0 Discussion

The ability to predict self-reported confessions and willingness to divulge information during police interrogations was examined. As with past research, it was found that the use of a humanitarian interview style by the police interviewer and the perception that there was strong evidence against the detainee were the strongest predictors of the decision to confess (Gudjonsson & Petursson, 1991; Holmberg & Christianson, 2002; Kebbell et al. 2010). Similarly, a humanitarian interview style and previous convictions were the best predictors of the decision to cooperate with the police interviewer. The implications of these findings for determining the best way to conduct interrogations are discussed below.

Of particular interest was the finding that, similar to previous studies (Collins et al., 2002; Holmberg & Madsen, 2014; Kassin & McNall, 1991; Kassin & Kiechel, 1996; Meissner et al., 2012; Russano, 2004; Russano, 2005; Walsh & Bull, 2012), interview style was closely associated with the decision to confess and willingness to cooperate with the police. As previously stated, the humanitarian interview style involves the interviewer being fair, respectful, compassionate, and non-aggressive. In the current study, a factor analysis revealed that the variables showing respect, attempting to make interviewee feel like an equal, seeming sincere, ending the interrogation on a positive note, using a calm voice, and seeming grateful for the information provided all loaded heavily on the humanitarian scale. The finding that a humanitarian style has a positive

impact on interrogation outcomes is consistent with previous research involving the perceptions of incarcerated offenders regarding their experiences during police interviews. For instance, Kebbell et al., (2010) reported that detainees who were treated humanely and ethically by the interviewer tended to confess more than those who faced a more domineering interrogator. The power of a humanitarian approach is also consistent with previous studies that have shown that interviews that contain higher levels of rapport are associated with an increased amount of correct information, and a decreased amount of incorrect information, elicited from a detainee (Collins et al., 2002; Holmberg & Madsen, 2014).

By contrast, the factor analysis also revealed that being impatient, trying to confuse the interviewee, rushing the interviewee to provide answers, threatening the interviewee, and intimidating the interviewee, were related to decisions to deny criminal involvement and being uncooperative with the police. These behaviours are similar to those identified by Christian and Holmberg (2002) as corresponding to a dominant interviewer attitude. They found that when the interviewer was impatient, brusque, and aggressive, negative interrogation outcomes were more likely. Moreover, the aforementioned variables which are negatively correlated with humanitarian interview style can be considered akin to an accusatorial interview style, exemplified by the Reid Model of interrogations where guilt is assumed and psychological manipulation and control tactics are used to elicit information from the detainee (Meissner et al., 2012). Therefore it is understandable that these behaviours exhibited by the interviewer would negate the establishment of rapport between the detainee and interviewer, and therefore are not conducive to a confession or cooperation outcome.

The finding that a humanitarian style, versus a domineering style, of interviewing is predictive of confession and cooperation decisions can perhaps be explained by Social Exchange Theory (Homans, 1958). According to Homans, social interaction between individuals is a process of exchange, at which time material goods, or non-material goods (such as symbols of approval or prestige) are transferred. When one party receives something from the other, they feel the urge to reciprocate, offering something to the other individual in return. In line with Social Exchange Theory, if an interviewer adopts an accusatorial style, behaving in an impersonal, dominant, and aggressive manner, the detainee may be less inclined to offer the interviewer information they may have concerning the case. The cost of doing so may simply be too great, given that no reward (in the form of gratitude, empathy, etc) is offered. If however, an interviewer engages in a humanitarian style of interviewing, offering the detainee empathy, acceptance, and warmth, social exchange theory would predict that the detainee would in turn feel compelled to reciprocate and offer the interviewer something desirable (presumably information in the form of a confession or cooperation concerning their involvement in the case at hand) despite this coming at a cost to the detainee.

The detainees' perception of the strength of evidence against them was also a significant predictor of a confession outcome. As the perception of the strength of evidence against the detainee increased, so too did the likelihood that they would confess to police. This finding is in line with similar research involving incarcerated offenders that has examined factors that may influence a detainee's decision to confess to police (e.g., Deslauriers-Varin et al., 2009). As participants in the current study explained, when they perceived the evidence against them as strong, they often felt as though denial was

futile and that it was in their best interest to confess because it might result in a more lenient sentence, or at the very least, a quicker end to the judicial process. Those who perceived the evidence against them to be weak, and who did not confess, often explained that they did not confess because they believed that without an admission of guilt on their behalf, the evidence would be insufficient to warrant a conviction. Therefore it seems that in addition to the style of interviewing being used, the detainees' perception of the strength of evidence against them is also a factor that can influence decisions regarding whether or not the detainee will admit guilt. Interestingly, strength of evidence was the strongest predictor of confession but had no bearing on cooperation decisions. Of importance, however, is the use of evidence by interrogators. Given that detainees who perceive the evidence against them as strong are more likely to confess during the interview, it is important that interviewers refrain from coercive techniques that involve a distortion of the evidence. Indeed, past research has shown that perception of evidence can easily elicit false confessions (e.g., Kassin & Kiechel, 1996).

As with past studies, it was found that the detainees' criminal history, including whether or not they had previously been convicted of a crime and the number of convictions on their record, was also associated with confession and cooperation decisions (Gudjonsson, 2003). Specifically, a negative correlation was found between criminal history and confession decision and cooperation decisions. Detainees who did not have a history of previous convictions were significantly more likely to confess to and cooperate with police, than those who did have a criminal record. Moreover, as the number of previous convictions increased, the odds of the interview ending with a confession and the likelihood of cooperation decreased. Presumably, there exists a

relationship between previous convictions and experience interacting with police, where the more previous convictions an individual has is related to more experience in interacting with police. It seems that detainees with a record of previous convictions have decided that it is in their best interest not to offer a confession or divulge information to police during the interview.

Not surprisingly, those who reported having received legal advice during their most recent interrogation were significantly less likely to confess to police, presumably because participants who reported having received legal advice all reported being advised by counsel not to speak with police. Those who had previous experience with the legal system were more likely to seek legal advice than those without any experience with the legal system. Interestingly, whether or not the detainee received legal advice did not affect cooperation with the interviewer.

Without legal advice and lacking previous interrogation experience, it appears the odds of a confession outcome are greater among younger detainees. Although the increased odds of confession outcome with inexperienced, younger detainees may sound promising for the interviewer, previous research also dictates that those under the age of 18 are particularly vulnerable to coercive tactics and as a result are at an increased risk of providing a false confession (Drizin & Leo, 2004). Therefore, interviewers, if they wish to to avoid miscarriages of justice, are urged to take special precautions when interviewing detainees under the age of 18, who may be inclined to admit to an offense they did not commit in order to escape an uncomfortable interview (Milne & Bull, 1999).

In discussing the results of the current study, several possible limitations must also be acknowledged, the first of which involves the presence of demand characteristics.

Demand characteristics are cues transmitted from the experimenter to the participant pertaining to the experimenter's expectations of the results of the study, or expectations regarding how the participant is expected to perform/respond. Although the information conveyed to participants prior to participating (recruitment materials, informed consent forms) was carefully delivered such that the participant would not be made aware of any expectations the interviewer had, it is possible that participants in the current study may have provided information that was in line with their interpretation of what they *believed* the interviewer's hypothesis to be. Ideally, a blind interviewer without knowledge of the experimental hypothesis would have been used in order to eliminate the possibility of intentional or unconscious bias.

Additionally, given that the interviewer was a young, pro-social female, and the participants consisted of males incarcerated for a multitude of offences varying in severity, it is also possible that participants may have tailored their responses during the interview in order to increase their social desirability towards the interviewer. As a result, the second limitation involves the interviewer herself, such that a sole female interviewer conducted all 100 interviews. Theoretically, it is impossible to know whether participants may have responded differently to the interviewer as a result of the interviewer's gender or some other intrinsic characteristic. Ideally, each participant would have been randomly assigned to be interviewed by one of several interviewers (both male and female, of diverse ages and ethnicities, and all unaware of the purpose of the study). However, time and resources did not permit this type of experimental paradigm to be implemented. Additionally, although having multiple interviewers would have eliminated many potentially biasing demand characteristics, having more than one primary

interviewer would also have affected the consistency of the delivery of the interview script, resulting in other limitations.

Another possible limitation of the present study is that the information regarding each participant's interview experience was based on self-report measures. Self-report measures are those which rely on the individuals own reporting of a given variable. Without a validation measure to verify the participants responses, some argue that it is difficult to determine whether the respondent is answering truthfully (Leong & Austin, 2006). Such concerns will always exist when self-report measures are used. The results of the present study are promising as despite the use of a self-report measure, the results triangulated with more controlled experimental studies where it was similarly found that humanitarian interview style and perceived strength of evidence are the strongest predictors of confession (Gudjonsson & Petursson, 1991; Holmberg & Christianson, 2002; Kebbell et al. 2010).

In the present study, the interview protocol was delivered to all participants in the same sequence. As a result it should be acknowledged that order effects, occurring when changes in the dependent variable are affected by the order in which stimuli are presented (Leong & Austin, 2006), may have affected the results of the current study. The effects of presenting questions in varying order in this area is research is yet to be studied, and may be an issue worthy of further exploration in future studies.

The final limitation relates to the correlational nature of the present study. Although a strong correlation was found between a humanitarian interview style and a greater likelihood of confession and cooperation outcomes, this association does not equate to causation. We are not able to conclude that a humanitarian style causes a

detainee to cooperate or confess, only that there is a relationship among these variables. When interpreting the results of any experimental study, limitations are ever present. However, considering time and resource constraints, we are satisfied that the aforementioned limitations are relatively minor and do not negate the findings of the current study.

The present study mirrors existing research in that it demonstrates that the use of a humanitarian interview style on behalf of the police interviewer is the best predictor of a confession outcome (Godjonsson & Petursson, 1991; Holmberg & Christianson, 2002; Kebbell, Alison, Hurren, & Mazerolle, 2010; Meissner et al., 2012). In addition, the current study revealed novel findings, such that the use of a humanitarian style is also the best predictor of self-reported cooperation during a police interview. Given that cooperation is arguably a more preferable outcome than confession, further research is needed in order to replicate the current study to confirm the findings, and potentially identify other factors that may affect a detainee's decision to cooperate with police during an interview. Although humanitarian interview style has been shown to be the strongest predictor of cooperation and confession outcomes, additional factors including previous convictions and perceived strength of evidence also add to our ability to predict cooperation and confession, and should also be considered during the preparation stages prior to conducting an interview. Perhaps the most important finding for applied purposes is that detainees with a history of previous convictions and interview experience are often distrustful of police interviewers, perhaps because they have experienced negative or deceitful practices in the past, and perceive the humanitarian style of interviewing as insincere. As a result, police interviewers are advised to be conscious of the importance

of rapport building and rapport maintenance with all detainees, especially those who have had previous experience with police and interviews. It is with these people that an extended period of rapport building prior to the onset of the interview may be particularly helpful in countering resistance to the interviewer and the use of a humanitarian style. The competition between information gathering and accusatorial approaches to interviewing still exists, but converging evidence from experimental studies regarding false confessions (Kassin, Appleby, & Perillo, 2010; Kassin & Kiechel, 1996; Kassin & McNall, 1991; Russano, 2004; Russano, 2005) and offender perceptions (Godjonsson & Petursson, 1991; Holmberg & Christianson, 2002; Kebbell, Alison, Hurren, & Mazerolle, 2010) points towards the humanitarian style as the best means of conducting interviews with detainees.

References

- Bull, R. (2013). What is 'believed' or actually 'known' about characteristics that may contribute to being a good/effective interviewer? *Investigative Interviewing: Research and Practice*, 5, 128-143.
- Collins, R., Lincoln, R., & Frank, M. G. (2002). The effect of rapport in forensic interviewing, *Psychiatry, Psychology and Law*, 9(1), 69-78.
- Costanzo, M. & Redlich, A. (2010). Use of physical and psychological force in criminal and military interrogations. In J. Knuttsson & J. Kuhns (Eds.), *Policing around the world: Police use of force*. Praeger Security International.
- Deslauriers-Varin, N., Lussier, P., & St-Yves, M., (2009). Confessing their crime: Factors influencing the offender's decision to confess to the police, *Justice Quarterly*, 28, 113-145.
- Drizin, S. A., & Leo, R. A. (2004). Problem of False Confessions in the Post-DNA World, *The NCL rev*, 82, 891.
- Gallini, B. (2010). Police "Science" in the Interrogation Room: Seventy Years of Pseudo-Psychological Interrogation Methods to Obtain Inadmissible Confessions, *Hastings Law Journal*, 61, 529-577.
- Gudjonsson, G. (2003). *The psychology of interrogations and confessions*, Chichester: Wiley.
- Godjonsson, G., & Petursson, H. (1991). Custodial interrogation: Why do suspects confess and how does it relate to their crime, attitude, and personality, *Individual Differences*, 12(3), 295-306.

- Holmberg, U., & Christianson, S. (2002). Murderers' and sexual offenders' experiences of police interviews and their inclination to admit or deny crimes, *Behavioural Sciences and the Law*, 20, 31-45.
- Holmberg, U., & Madsen, K. (2014). Rapport operationalized as a humanitarian interview in investigative interview settings, *Psychiatry, Psychology and Law*, (ahead-of-print), 1-20.
- Homans, G. C. (1958). Social behavior as exchange. *American Journal of Sociology*, 597-606.
- Inbau, F. E., Reid, J. E., Buckley, J. P., & Jayne, B. C. (2013). *Criminal interrogations and confessions*. Jones & Bartlett Learning.
- Kassin, S. M., Appleby, S. C., & Perillo, J. T. (2010). Interviewing suspects: Practice, science, and future directions, *Legal and Criminological Psychology*, 15(1), 39-55.
- Kebbell, M., Hurren, E., & Mazerolle, P. (2006). An investigation into the effective and ethical interviewing of suspected sex offenders, *Trends and Issues in Criminal Justice*, 327, 1-6.
- Kassin, S. M., & Kiechel, K. L. (1996). The social psychology of false confessions: compliance, internalization, and confabulation, *Psychological Science*, 7(3), 125-128. doi: 10.1111/j.1467-9280.1996.tb00344.x
- Kassin, S. M., & McNall, K. (1991). Police interrogations and confessions: Communicating promises and threats by pragmatic implication, *Law and Human Behaviour*, 15(3), 233.
- Kassin, S. M. (2008). False confessions causes, consequences, and implications for reform, *Current Directions in Psychological Science*, 17(4), 249-253.
- Kebbell, M., Hurren, E., & Mazerolle, P. (2006). An investigation into the effective and ethical interviewing of suspected sex offenders, *Trends and Issues in Criminal Justice*, 327, 1-6.

- Kebbell, M., Hurren, E., & Mazerolle, P. (2010). How do sex offenders think the police should interview to elicit confessions from sex offenders? *Psychology, Crime, and Law*, 16(7), 567-584.
- Leo, R. A. (2008). *Police interrogation and American justice*. Cambridge, MA:Harvard University Press.
- Leong, F.T.L., Austin, J.T. (2006). *The Psychology Research Handbook: A Guide for Graduate Students and Research Assistants*. Thousand Oaks, CA: Sage.
- Meissner, C. A., Redlich, A. D., Bhatt, S., & Brandon, S. (2012). Interview and interrogation methods and their effects on true and false confessions. *Campbell Systematic Reviews*, VOL #?, 4-52. doi: 10.4073/csr.2012.13
- Milne, R., & Bull, R. (1999). *Investigative interviewing: Psychology and practice*, Chichester: Wiley.
- Russano, M. (2004). True and false confessions to an intentional act: A novel experimental paradigm, *Dissertation Abstracts International*, 65?
- Russano, M. B., Meissner, C. A., Narchet, F. M., & Kassin, S. M. (2005). Investigating true and false confessions within a novel experimental paradigm. *Psychological Science*, 16(6), 481-486.
- Snook, B., Eastwood, J., Stinson, M., Tedeschini, J., & House, J. C. (2010). Reforming investigative interviewing in Canada. *Canadian Journal of Criminology and Criminal Justice*, 52(2), 203-217.
- Snook, B., Luther, K., Quinlan, H., & Milne, R. (2012). Let'em talk! A field study of police questioning practices of suspects and accused persons, *Criminal Justice and Behavior*, 39(10), 1328-1339.

Tickle-Degnen, L., & Rosenthal, R. (1990). The nature of rapport and its nonverbal correlates, *Psychological Inquiry*, 1(4), 285-293.

Walsh, D., & Bull, R. (2012). Examining rapport in investigative interviews with suspects: Does its building and maintenance work? *Journal of Police and Criminal Psychology*, 27(1), 73-84.

Appendix

Interview Script

Hello, my name is Dianna Brooks and I am a graduate student from Memorial University, conducting this study as a requirement for my Masters thesis. Feel free to call me Dianna. What would you like me to call you?

First of all, I would like to thank you once again for agreeing to speak with me today. In participating in this study you are making an important contribution to research that will hopefully inform what we know about interrogations, and benefit all parties involved with the justice system.

Before we begin, I want to remind you that our conversation today will be audio recorded for the purposes of our study, so that I am able to have an accurate and complete account of all the information you provide today. I want to remind you that everything we discuss today will be kept confidential (only me and my research supervisor will see the responses) and anonymous (that is, the information you provide today will be assigned a number and will not be associated with your name). I want to assure you that the tape recording of our conversation will be stored in accordance with Memorial University policy. Only the primary researchers will have access to the interview tapes, the tapes will be stored in a secure location, and destroyed after my research is complete.

So, just to make sure we are on the same page, please tell me why you think we are here today?

participant states why they believe they are here

So today I am going to ask you to tell me everything you remember about your most recent interrogation with the police, resulting from your most recent alleged offence.

How many times were you interrogated by police for that offence?

We will focus on that particular interrogation (If interrogated only once for most recent offence).

We will focus on the *primary* interrogation (If interrogated multiple times for most recent offence).

Remember, I am not interested in learning about the details of the alleged crime, but am interested in what happened during your interrogation and all of your thoughts about the interrogation. Please do not leave anything out; everything you have to say is important to me. Keep in mind that you are the one who has experienced the interrogation with police, so you are in charge of how our conversation unfolds today. You will do all of the talking and I will listen to everything you have to say about your interrogation experience.

Another important point to keep in mind is that I need to remain un-biased throughout our conversation today. In other words, I will cannot agree or disagree with anything you say, or show any emotion.

Now I am going to ask you to put yourself back in the same place where you experienced your most recent interrogation with the police. It's kind of like when you've lost something (eg your car keys) and you try and picture in your mind where you last had it. Some people find it helpful to put their head down, or stare at a point on the wall, to decrease their distraction at this step.

After each pause I make, do not answer out-loud, but instead retrieve the information in your mind and use it to help you form a mental picture. What I want you to do is create a picture in your mind of that location where you were interviewed by police. Think of *where* you were...How you were *feeling* at the time...What could you *hear*...What could you *smell*...Think of all the *people* who were present...think of all the *things* that were said...think of the *layout* ...Get a really good picture in your mind and tell me everything you can remember about your last interrogation experience without leaving anything out.

****Free Recall****

Thank-you very much for that information. So that I have a very clear understanding of exactly what occurred during your most recent interrogation with police, I have a few more questions to ask you about your experience. Once again, I would like you to remain focused on your most recent interrogation with police. [Note, these questions will only be asked if they are not revealed during the free recall phase].

The first question is:

1. Did you confess to the police during the police interrogation you just described?

YES NO

2. Explain why you confessed (or did not confess) during the interrogation.

I am now going to read you a series of short statements. I would like you to respond to the statements on this 7-point scale [show participant a hard-copy of the scale]. An answer of 1 means you strongly **disagree** with the statement and an answer of 7 means you strongly **agree** with the statement. Please do not hesitate to let me know if you do not understand and need me to clarify any of the questions for you.

The first question is:

3. I cooperated with police officer fully during the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

What I would like you to do now is **focus on the police officer**, the main person who conducted your most recent interrogation. Again, please respond to the following statements with the 7-point scale

1. The police officer tried to make me feel comfortable before the interrogation began

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

2. The police officer made me feel like `just another suspect`

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

3. The police officer made an effort to get to know me before the interrogation began

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

4. The police officer made an effort to make me feel like an equal during the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

5. The police officer tried to see things from my perspective

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

6. The police officer showed me respect

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

7. The atmosphere in the interrogation room was relaxed

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

8. The police officer spoke in a calm voice throughout the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

9. The police officer spoke slowly throughout the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------------------	----------------	-------	----------------

			Agree			
1	2	3	4	5	6	7

10. The police officer interrupted me often during the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

11. The police officer encouraged me to continue talking about the alleged crime

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

12. The police officer made me feel rushed to provide information during the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

13. The police officer seemed distracted while I was speaking

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

14. The police officer was impatient during the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

15. The police officer tried to confuse me

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------------------	----------------	-------	----------------

			Agree			
1	2	3	4	5	6	7

16. The police officer tried to trick me during the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

17. The police officer ended the interrogation on a positive note

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

18. The police officer thanked me for the information I provided

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

19. The police officer seemed grateful for the information I provided

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

20. The police officer was threatening

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

21. The police officer made me feel shameful

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------------------	----------------	-------	----------------

			Agree			
1	2	3	4	5	6	7

22. The police officer talked more than me during the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

23. The police officer provided me with excuses for my alleged behaviour

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

24. The police officer made the charges against me seem less serious than they really were

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

25. The police officer exaggerated the seriousness of the alleged offence

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

26. The police officer exaggerated the strength of the evidence that existed against me

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

27. The police officer seemed sincere during the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
-------------------	----------	-------------------	----------------------------	----------------	-------	----------------

			Agree			
1	2	3	4	5	6	7

28. The police officer made me feel like I had control over the flow of the interrogation

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

29. The police officer was intimidating

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

30. The police officer worked hard to help me understand my rights

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

Thank you for that information. Now I have some questions about the context, in other words the environment, in which the interrogation was conducted.

1. Did you seek any legal advice (from legal counsel) during the course of your interview
 Yes No
2. Why (or why not) choose to seek legal advice (from legal counsel) during the course of your interview?
3. If sought legal advice, What legal advice did you receive?
4. Were you satisfied with your legal advice?

a. Why?

5. How long did the interrogation last

(a) Less than 1 hour (b) 1 to 2 hours (c) 2 to 3 hours (d) 3 to 4 hours (e) > 4 hours

6. At the time, I believed the evidence against me was strong

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

I have a few questions to ask you concerning the police organization that conducted your interrogation.

1. Who conducted the interrogation?

RNC RCMP Other

2. I trust the police in this province.

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

3. I am confident in the ability of the police in this province to do their job

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

4. I am satisfied with the quality of policing in this province

Strongly disagree	Disagree	Somewhat Disagree	Neither Disagree nor Agree	Somewhat Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

I have a few brief questions to ask you concerning some background information

1. How old were you at the time of the interrogation?

(a) Youth (<18) (b) Emerging adult (18-25) (c) Young Adult (25-30)

(d) Adult (30-40) (e) Middle adulthood (40-60) (f) Older adult (60+)

2. What is your ethnicity?

Caucasian Canadian American Aboriginal Asian Other

3. Did you have any previous convictions at the time of the police interrogation?

Yes No

If yes - How many convictions did you have?

(a) 1 - 5 (b) 5 - 10 (c) more than 10

I also have a two final questions about the offence for which you were interrogated

1. What was the offence for which you were being interrogated?

2. Was this a federal or provincial conviction?

I would like to thank you once again for the information you have provided. I do not have any more questions prepared, but if there is any additional information about the interrogation you would like to share with me, please feel free to do so now.

participant provides possible additional info here

Your participation in the study has been greatly appreciated.

Table 1

Zero-Order Correlations with Self-Reported Cooperation and Correlations between Predictors

	Zero-Order Correlation (<i>r</i>)	Humanitarian Style	Legal Advice	Interrogation Length	Perception of Evidence	Age	Previous Conviction	Number of Convictions	Offence Seriousness
Humanitarian Style	.37*								
Legal Advice	-.08	-.03							
Interrogation Length	-.12	.06	.17						
Perception of Evidence	.16	.16	.00	.09					
Age	.23*	.13	-.14	-.09	.00				
Previous Convictions	-.13	-.13	-.25*	-.09	.05	.07			
Number of Convictions	-.17	.21	.00	-.01	.02	-.04	-.51**		
Offence Seriousness	.00	.08	.15	.20*	-.01	-.01	-.18	.11	
Attitude Toward Police	.27*	.34**	.18	.02	.05	.21*	-.17	-.05	.07

Note. $N = 100$; * $p < .05$; ** $p < .01$.

Table 2

A Summary of the Logistic Regression Analysis on Self-Reported Confession Decision

Predictor	β	Wald χ^2 - test	p	Odds Ratio	95% Confidence Intervals for Odds Ratio	
					Lower	Upper
Age	-0.06	2.51	.11	0.94	0.88	1.01
Humanitarian Style	1.39	11.94	.00	4.02	1.83	8.86
Previous Convictions	-3.80	7.78	.01	0.02	0.00	0.32
Number of Convictions	-1.04	5.68	.02	0.35	0.15	0.83
Interrogation Length	-0.33	1.32	.25	0.72	0.41	1.26
Perception of Evidence	0.98	19.13	.00	2.65	1.71	4.10
Legal Advice	-1.96	5.54	.02	0.14	0.03	0.72
Attitude Toward Police	-0.02	0.08	.78	0.98	0.83	1.15
Offence Seriousness	0.86	1.63	.20	2.37	0.63	8.93

Note. The 95% confidence intervals were rounded up. No confession = 1 and confession = 2.

Table 3

A Summary of the Standard Multiple Regression Analysis of Self-Reported Cooperation

Predictor	<i>B</i>	<i>SE B</i>	β	<i>t</i>	Sig. (<i>p</i>)
Age	0.033	0.019	0.15	1.71	.09
Humanitarian Style	0.825	0.219	0.36	3.76	.00
Previous Convictions	-2.421	0.726	-0.36	-3.34	.00
Number of Convictions	-0.967	0.240	-0.42	-4.03	.00
Interrogation Length	-0.322	0.184	-0.16	-1.75	.08
Perception of Evidence	0.146	0.094	0.14	1.55	.12
Legal Advice	-0.590	0.433	-0.13	-1.36	.18
Attitude Toward Police	0.027	0.049	0.05	0.56	.58
Offence Seriousness	-0.011	0.405	0.00	0.03	.98

Footnotes

1. The police organizations responsible for conducting the interrogations were not revealed, as doing so was not relevant to the current study.¹ The current study attempts to model confession and cooperation outcome, and not to condone or scrutinize the practices of either police organization mentioned.²