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PEERING INSIDE A CANADIAN INTERROGATION ROOM

An Examination of the Reid Model of Interrogation, Influence Tactics, and Coercive Strategies

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This study sought to shed light on the interrogation process through analysis of 44 video-recorded police interrogations of suspects in criminal cases. Results showed that, on average, interrogators used 34% of the components composing the nine-step Reid model of interrogation. Approximately 27% of the interrogations met Leo's criteria for a coercive interrogation; minimization tactics were observed slightly more than maximization tactics; and most interrogations followed the guidelines, suggestions, and themes endorsed by Inbau, Reid, Buckley, and Jayne. In addition, confessions were positively associated with the proportion of core Reid components, the number of influence tactics, and the number of coercive strategies observed. Confessions were not associated with the number of discouraged denials but were positively associated with the number of alternative questions provided. The implications of these findings for interrogation practices and research are discussed.

Keywords: law enforcement; interrogation; Reid model of interrogation; confessions

Interactions between suspects and interrogators have long been an intriguing area of research for social scientists (see Lassiter & Ratcliff, 2004). Researchers have been particularly interested in the effect of interrogator tactics and coercive strategies on interrogation outcomes (e.g., Baldwin, 1993; Gudjonsson, 2003; Kassin, 2008a, 2008b; Kassin & Kiechel, 1996; Leo, 1996; Moston & Stephenson, 1993; Stephenson & Moston, 1994). Although the Reid model of interrogation (henceforth, Reid) is the most routinely taught and applied technique in North America for eliciting confessions, knowledge of the sorts of interrogator–suspect interactions that actually occur inside the interrogation room is somewhat limited (see Kassin et al., 2007; Leo, 1996; for a review of practices in England and Wales, see Bull & Milne, 2004). Moreover, the effectiveness of Reid for obtaining confessions has never been tested. The purpose of the current study is to shed some light on the relatively enigmatic interrogation process, through systematic observations of the inner workings of a Canadian interrogation room.

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The primary goals of a police interrogation are to obtain information to assist in a criminal investigation, elicit a confession, and seek the truth (Hartwig, Granhag, & Vrij, 2005; for review of the potency of confession evidence in legal proceedings, see Kassin, 1997; Kassin & Gudjonsson, 2004). As mentioned, the most widely used technique to achieve those goals is Reid, a social psychological process model of interrogation. This ubiquitous model has been taught to more than 300,000 investigators around the world (see <http://www.reid.com>; Inbau, Reid, Buckley, & Jayne, 2004, 2005). In fact, as far as we are aware, it is the only interrogation method taught to police officers in North America. Presently in its fourth edition, *Criminal Interrogation and Confessions* (Inbau, Reid, Buckley, & Jayne, 2004) continues to outline the procedures and assumptions underlying Reid.

Reid consists of two phases: the interview and the nine-step interrogation. The interview is nonaccusatory, and it allows the interviewer to gather investigative and behavioral information from an individual using a behavioral analysis interview (Inbau et al., 2004). The interviewing officer then uses the information obtained from the interview to assess the individual's guilt and decide if an interrogation is necessary. According to Inbau and colleagues, only people who are believed to be guilty are subsequently interrogated. The nine-step interrogation differs from the interview because it is accusatory and based on an assumption of guilt (for negative effects of presumption of guilt on interrogation practices, see Hill, Memon, & McGeorge, 2008; Kassin, Goldstein, & Savitsky, 2003). Moreover, the interrogation involves active persuasion, which is meant to increase the anxiety associated with denying involvement in the crime and to decrease the perceived negative consequences of confessing (Kassin, 1997; Ofshe, 1989; Ofshe & Leo, 1997).

THE REID MODEL OF INTERROGATION

Inbau et al. (2004) prescribe nine core steps and a variety of general suggestions and guidelines to persuade a suspect to confess. The various steps, suggestions, and guidelines that underlie Reid are outlined in the paragraphs below. Although the steps are organized numerically, their sequence is flexible, according to Inbau et al.

STEP 1

The initial step in Reid involves directly confronting suspects with a statement indicating the interrogator's belief in their guilt, which is then followed by a behavioral pause. Interrogators are encouraged to look through an evidence folder to communicate to the individual that the interrogator has evidence of his or her guilt. Step 1 also includes the presentation of a transition statement, whereby the interrogator provides a perceived benefit for telling the truth. The transition statement is meant to establish a reason for initiating an interrogation, other than to elicit a confession, because the interrogator wants the suspect to believe that his or her guilt is already known to be true by the interrogators. For example, the interrogator might state, "The only thing we have left to figure out is *why* you started the fire."

STEP 2

For the second step, Inbau et al. (2004) recommend developing a theme, or explanation, of why the crime transpired. According to Inbau and colleagues, interrogators should distinguish

between emotional offenders (i.e., those who express guilt or shame about their crime) and nonemotional offenders (i.e., those who do not express feelings of guilt or shame). For emotional offenders, the theme should provide a moral excuse or justification for criminal actions. Inbau et al. also suggest that the chosen theme reinforce the individual's rationalizations for committing the crime, which presumably makes it easier for the person to overcome any denial of criminal involvement. For nonemotional offenders, Inbau et al. suggest using themes that reason with the suspects and methodically persuade them to confess. If a particular theme continues to be rejected, different themes should be presented in an effort to find one that matches the suspect's identity. A number of examples of emotional and nonemotional themes are provided in their manual.

STEP 3

Step 3 involves handling denials. Inbau et al. (2004) assume that guilty suspects rarely confess after being directly confronted about their guilt and, instead, initially deny the offense. According to Inbau et al., the handling of denials is one of the most critical stages in an interrogation. Allowing denials of criminal involvement presumably reduces the likelihood that someone will confess at a later stage in the interrogation process. Thus, the primary goal of this third step is for the interrogator to prevent or discourage the suspects from denying involvement in the crime, by reconfirming one's belief in their guilt and reiterating the proposed theme after denials.

STEP 4

The purpose of this step is to overcome objections, which are reasons given by suspects regarding why they could not, or would not, have committed the crime. Objections can be emotional (e.g., "I'd be too nervous to do something like that"), factual (e.g., "I don't even own a gun"), or moral (e.g., "I wasn't brought up that way"). Because objections are presumed to be offered only by guilty suspects, a movement from denials to objections is argued to be a good indication of deception. Unlike denials, objections should be permitted because they can be used to further the development of a theme—namely, by providing the interrogator with an opportunity to turn the objection around to match the proposed theme (or to develop a new one). Inbau et al. (2004) therefore suggest that interrogators reiterate the proposed theme after objections.

STEP 5

Step 5 involves the procurement and retention of the suspect's attention. After being discouraged from expressing denials and having their objections turned around to support the interrogator's proposed theme, guilty individuals (not the innocent) may psychologically withdraw and ignore the interrogator. At this point, the interrogator must use techniques that maintain the suspect's attention—for example, by increasing physical proximity or using visual aids.

STEP 6

The purpose of Step 6 is to overcome passive moods. After the suspect's attention is successfully procured (Step 5), the suspect is presumed to be more willing to listen but may

appear depressed or start crying. At this stage, the interrogator should begin to concentrate on a specific theme, display understanding and sympathy, and urge the individual to tell the truth. Inbau et al. (2004) suggest that the use of such techniques should continue until the suspect shows signs of mentally considering whether to tell the truth (e.g., with nonverbal agreement such as nodding).

STEP 7

The presentation of alternative questions in Step 7 represents the culmination of theme development. An alternative question presents an individual with a choice between two explanations for commission of the crime. Typically, one of the explanations is usually face-saving and one more reprehensible, but both involve an admission of guilt. For example, an interrogator might ask, "Did you plan the rape or was it an accident?" Alternative questions allow an individual to save face while providing the interrogator with an incriminating admission. Although Inbau and colleagues (2004) suggest that alternative questions be primarily based on a presented theme, they state that the alternative questions do not necessarily have to focus on why the individual committed the offense. Instead, alternative questions can be related to some other detail of the offense. For example, in an interrogation of a potential arsonist, an appropriate alternative question might be "Did you use a match or a lighter?" In addition, Inbau and colleagues suggest that interrogators should offer reinforcing statements if the person accepts one of the alternatives; for instance, the interrogator might state, "Good, that's what I thought."

STEP 8

The penultimate step involves having the suspect orally verbalize various details of the offense. After a suspect makes an admission of guilt, the interrogator is encouraged to show signs of sharing the suspect's relief and to draw the individual into a conversation to fully develop the confession. When general acknowledgment of guilt is achieved, the interrogator is encouraged to return to the beginning of the crime and obtain information that can be corroborated.

STEP 9

Step 9 involves converting the oral confession into a written confession. According to Inbau et al. (2004), this final step is important because it reduces the possibility that an individual will retract the confession and, if he or she does, it helps to ensure the confession will stand up in court. Inbau and colleagues recommend converting the oral confession into a written and signed confession as soon as possible; it may be prepared in the form of questions and answers or as a narrative. When the written confession is complete, it should be read aloud, corrected for any errors, and then signed by the suspect in the presence of a witness.

In addition to outlining the aforementioned nine steps, Inbau et al. (2004) provide numerous other general guidelines for interrogating suspects. For example, they suggest that interrogators demonstrate high confidence and knowledge of the case details and avoid an evidence-based interrogation. Specific suggestions include avoiding the use of legal terms to describe the crime; using a plain room, one that does not contain ornaments,

pictures, small loose objects, or any other distracting items; and using straight-back chairs to avoid “psychologically undesirable” slouching. According to Inbau et al., following the aforementioned core Reid interrogation components and the additional guidelines and suggestions should improve one’s ability to elicit a confession.

Although Reid is a widely taught interrogation model in North America, the extent to which police officers actually use the nine-step model in practice, with its associated guidelines/suggestions, is limited. Granted, journalists and legal scholars have provided accounts of the happenings that occur inside interrogation rooms (e.g., Corwin, 2003; Simon, 1991; Skolnick, 1966). However, such accounts are not substitutes for empirical data derived from systematic observations of interrogator–suspect interactions. Some empirical data on current interrogation room practices have been provided from Kassin and colleagues’ survey (2007) of 631 police investigators about their interrogation beliefs and practices. Participants were asked to rate on a 5-point scale how frequently they used 16 types of interrogation techniques (1 = *never*, 5 = *always*), all of which are based on the Reid model. A majority of participants reported that they always isolated suspects from family and friends, conducted their interrogations in a small private room, identified contradictions in the suspect’s account, and attempted to gain trust by establishing rapport with the suspect. The interrogators indicated that they often confronted suspects with evidence of their guilt and appealed to the suspect’s self-interest. Interrogators sometimes offered the suspect sympathy, moral justifications, and excuses; interrupted denials or objections; implied or pretended to have evidence of guilt; minimized the moral seriousness of the offense; or appealed to the suspect’s religion or personal conscience. The police investigators indicated that they rarely showed suspects photographs of the crime scene or victim, expressed impatience or frustration with the suspect, threatened the suspect with consequences for being uncooperative, or had the suspect take a polygraph and subsequently told them they failed it. Nearly all the participants indicated that they never physically intimidated suspects.

In addition, the effectiveness of Reid in obtaining confessions (and avoiding false confessions) has never been tested (for concerns about the effect of Reid-based strategies on false confessions, see Kassin, 2008b). There is, however, some indication that the tactics and strategies used by interrogators are of little consequence. Researchers in the United Kingdom have shown that interrogators are generally unable to persuade suspects to change their initial inclinations (e.g., Baldwin, 1993; Stephenson & Moston, 1994). Most important, researchers have shown that confession rates have remained relatively constant despite a dramatic decline in the use of manipulative interrogation tactics, some of which are advocated in Reid. Since the adoption of a more ethically acceptable interrogation model known as PEACE (for overview of the model, see Milne & Bull, 1999), the confession rates in the United Kingdom have continued to hover around the 50% level (Pearse & Gudjonsson, 1996).

INFLUENCE TACTICS AND COERCIVE STRATEGIES USED IN INTERROGATIONS

Leo’s work (1986) provides most of what we know about the sorts of influence tactics and coercive strategies that are actually being used inside the modern North American interrogation room. Kassin and colleagues’ account (2007), while informative, was based on the interrogators’ self-reports, not on third-party observation. By contrast, Leo coded

182 interrogations (122 live and 60 video-recorded) according to a number of variables relating to suspect, interrogator, and interrogation characteristics (e.g., offender age, interrogator ethnicity, type of crime, strength of evidence against the individual, and length of interrogation). Leo also recorded the frequency with which interrogators employed 25 influence tactics, advocated by interrogation training manuals (including Reid-based tactics), and 10 coercive strategies.

Of the 25 interrogation tactics examined by Leo (1996), that of appealing to the suspect's self-interest was most frequently observed (88%). In addition, confronting suspects with existing evidence of guilt was observed in 85% of cases, and attempting to undermine the suspects' confidence in denial of guilt was observed in 43% of cases. Other tactics observed somewhat frequently included appealing to the importance of cooperation (37%), offering moral justification or psychological excuses (34%), and using praise or flattery (30%). Conversely, attempting to confuse the suspect (1%) and using the good cop–bad cop routine (1%) was observed infrequently. Interrogators were never observed touching suspects in an unfriendly manner. On average, interrogators used 5.62 tactics per interrogation. Leo also found that the following six variables were positively related to the likelihood of obtaining confessionary evidence: the total number of tactics used, interrogation length, identifying contradictions in the suspect's denial of criminal involvement, offering a moral justification or psychological excuse for the suspect's actions, using praise and flattery, and appealing to the suspect's conscience.

Leo (1996) classified an interrogation as *coercive* if it contained any of the 10 strategies operationally defined as coercion (e.g., the individual was not permitted to invoke his or her *Miranda* rights; the detective threatened the individual with physical or psychological pain).¹ Although Leo's definition of coercion was admittedly stringent and did not necessarily correspond to what the courts consider coercive, he reported that only 2% of observed cases were coercive. In all four of the interrogations that he classified as *coercive*, the strategies were psychologically based rather than physically based. Even among the psychologically coercive strategies, only a select few were ever observed. For example, interrogators never failed to read the *Miranda* warnings nor prevented people from invoking their rights, and no interrogation lasted an unreasonable amount of time (i.e., 6 hours or more). Despite the controversial nature of interrogations, Leo showed that few of them are coercive.

Leo's study (1996) was the first peer-reviewed empirical investigation of its kind published in North America in more than 20 years, and it represented an important step in closing the knowledge gap between the legal ideals and empirical realities of police interrogation. Although Feld (2006) conducted a noteworthy replication of Leo's study with a sample of juveniles, a much-needed replication with an adult sample has not been published in the intervening 13 years.

THE CURRENT STUDY

The goal of this study was to answer a series of rudimentary questions about what happens inside the interrogation room, to test two fundamental assumptions underlying Reid, and to explore various relationships between interrogation outcome and some of the variables coded in this study. We were specifically interested in answering the following questions:

What, and how frequently, are the components of the nine-step Reid model of interrogation being employed?

What, and how frequently, are the additional Reid guidelines and suggestions being employed?

What, and how frequently, are Leo's influence tactics (1996) being employed?

What, and how frequently, are the coercive strategies identified by Leo (1996) being used?

Is interrogation outcome related to the proportion of the nine-step model used or the number of additional guidelines and suggestions, influence tactics, or coercive strategies used?

In addition to answering these questions, we were interested in testing two fundamental assumptions made by Inbau and colleagues (2004):

Preventing denials leads to more confessions.

Providing an alternative question leads to more confessions.

METHOD

SAMPLE

A sample of video-recorded interrogations ($N = 44$) was obtained from a police organization in Atlantic Canada (henceforth, the pseudonym *Eastville police*). The videos were collected through requests made by an inspector for officers working in the Crimes Against Persons department to submit a sample of their interrogations. None of the officers were informed about the nature of the study. The submitted interrogations occurred between December 1996 and January 2008, with 7% ($n = 3$) occurring from 1996 to 2000, 43% ($n = 19$) from 2001 to 2005, and 50% ($n = 22$) from 2006 to 2008.

Eastville police typically video-record interrogations of those who are accused of crimes that are investigated by the Crimes Against Persons department. Reflecting this practice, 27% ($n = 12$) of the videos pertained to the investigation of robbery, 27% ($n = 12$) to sexual assault, 9% ($n = 4$) to homicide, 9% ($n = 4$) to assault, 5% ($n = 2$) to breaking and entering, 5% ($n = 2$) for failure to provide the necessities of life, 5% ($n = 2$) for criminal harassment, and 2% ($n = 1$) for each of the following offenses: attempted murder, arson, theft, drug trafficking, impaired driving causing bodily harm, and attempting to lure a child for sexual purposes. Of the 66% ($n = 29$) interrogations where a victim was clearly identifiable, 55% ($n = 16$) of victims were women, 38% ($n = 11$) were men, and 7% ($n = 2$) involved multiple victims of both sexes. Of the 28 interrogations where the relationship between the suspect and victim (or victims) was mentioned, the suspect and victim were family members in 39% ($n = 11$) of cases, acquaintances in 36% ($n = 10$), friends in 14% ($n = 4$), and strangers in the remaining 11% ($n = 3$) of cases.

The interrogations were between 8 and 270 min long, and most (52%, $n = 23$) lasted less than 60 min ($M = 62.36$, $SD = 47.56$). In 98% ($n = 43$) of the interrogations, the only people present were the interrogator (or interrogators) and the suspect. A lawyer was present during one interrogation. All interrogations were conducted in a small private room inside police headquarters. In sum, 27 officers were involved in the interrogations, and all had received Reid-based interrogation training (descriptive statistics are reported as if different individuals conducted each interrogation). All interrogators were Caucasian and 86% ($n = 38$) of primary interrogators were men. The average age of the primary and

secondary interrogators at the time of the interrogation was 41.57 ($SD = 3.01$) and 38.58 ($SD = 5.21$), respectively. The average years of experience for the primary and secondary interrogators at the time of the interrogation was 18.79 ($SD = 3.61$) and 16.00 ($SD = 6.05$) years, respectively. Of the 45% ($n = 20$) of interrogations in which secondary interrogators were present, 55% ($n = 11$) were men. Approximately 84% ($n = 37$) of primary interrogators were constables and 16% ($n = 7$) were sergeants. With the exception of a corporal, from a different police organization in Atlantic Canada, all secondary interrogators held the rank of constable.

The majority of suspects were men (91%, $n = 40$). The average age of the accused persons was 36.43 years ($n = 37$, $SD = 15.84$) and so ranged between 18 and 75 years. In 68% ($n = 30$) of cases, suspects were alleged to have committed an offense alone. Of the 30 suspects for whom it could be determined, 67% ($n = 20$) had a criminal record. All suspects but 2 (96%) were Caucasian.

PROCEDURE

A coding guide containing the following six broad categories of variables was created from the work of Inbau et al. (2004) and Leo (1996).

Demographic/background variables. Demographic/background variables ($n = 26$) pertain to characteristics of the interrogation (e.g., length, date), the primary and secondary interrogators (e.g., gender, rank, age, and experience), the suspect (e.g., gender, age, and previous record), the victim (e.g., gender, relationship to suspect), and the crime (e.g., type of crime).

Suspect behaviors. Suspect behavior variables ($n = 10$) pertain to the suspect's behavior during the interrogation (e.g., number of denials, number of objections, whether the individual withdraws from the interrogation).

Core Reid steps and endorsed themes. Core Reid steps and endorsed themes ($n = 29$) are variables that pertain to both the core components of the nine-step Reid model and the various interrogation themes endorsed by Inbau and colleagues (2004). Seventeen core Reid steps were coded (e.g., used transition statement, asked alternative question). Note that Step 9 of Reid was not included in this analysis, because written confessions were never recorded on the videos. Given that interrogations of the nature described in this study are video- and audiotaped, Eastville police do not usually seek written confessions. It is worth noting that Inbau et al. (2004) have historically been critical of electronically recording interrogations; the researchers believe that people are less likely to tell the truth under such circumstances (thus, all interrogations included in this study are guilty of violating a Reid suggestion). This position has subsequently been changed (see <http://www.reid.com>). Eleven interrogation themes were also coded (e.g., appealing to suspect's pride with flattery). A complete list of the core Reid steps and endorsed themes are presented in the tables that follow.

Other Reid guidelines and suggestions. Other Reid guidelines and suggestions ($n = 17$) are variables advocated by Inbau et al. (2004) as being additional interrogation components thought to improve the likelihood of obtaining a confession (e.g., a plainly decorated room,

interrogator's confidence, and interrogator's knowledge of case details; a list of the 13 dichotomous variables pertaining to the additional guidelines and suggestions to follow). Three variables were continuous and coded on a 5-point scale (1 = *very low*, 5 = *very high*): the perceived level of confidence exhibited by the primary interrogator, the perceived level of knowledge exhibited by the primary interrogator about the case, and the extent to which the interrogation was evidence based. The last continuous variable involved the number of legal terms used to describe the offense.

Influence tactics. Influence tactics ($n = 23$) were adopted from Leo's study (1996; a complete list of tactics is outlined later). Note that Leo's variable "Confront suspect with false evidence of guilt" was excluded from this study because of our inability to distinguish between false evidence and real evidence. Leo's influence tactic "Touch suspect in an unfriendly manner" was included in Leo's coercive strategies (following point).

Coercive strategies. Coercive strategies ($n = 10$) were adopted from Leo's study (1996; a complete list of the strategies to follow). The variable "The suspect's will appear to be overborne by some other factor or combination of factors" was difficult to operationally define and was thus excluded from the study.

Interrogations were viewed on a 60-inch digital wall display in the privacy of a windowless room within a locked laboratory at Memorial University. The coding of the interrogations was conducted entirely by the first author. Each video was watched a minimum of three times to complete the coding. A copy of the complete coding guide and content dictionary is available from the corresponding author.

Calculating the proportion of core Reid use. To assess the extent to which core Reid components were being used, we divided the total number of Reid components used by the primary interrogator (or, where appropriate, the secondary interrogator) by the total number of Reid components that could have been used. Only the core Reid components were used in this calculation given that they compose the nine-step Reid model of interrogation (see Table 1). The denominator (the total number of core Reid components that could possibly be used) often differed between interrogations because certain core Reid components could not be used in all interrogations. For example, although Inbau et al. (2004) recommend interrupting denials, some suspects never denied the offense; thus, that recommended Reid component would not be included in the denominator. Similarly, Inbau and colleagues recommend that interrogators positively reinforce a suspect if he or she accepts an alternative question. In interrogations where the suspect did not accept any alternative questions, that core Reid component was not included in the denominator. The purpose of calculating Reid use in this manner was to avoid faulting interrogators for not using particular components that were not even possible to use. However, if an interrogator did not use one specific component, he or she was faulted for not using additional connected components. For example, if an interrogator failed to provide any alternative questions, the connected component of positively reinforcing an individual after he or she accepted an alternative was still included in the denominator.

The number of core Reid components that an interrogator could use was contingent on the suspect's behavior; thus, the number ranged from 9 to 17. All components were

TABLE 1: Core Reid Components Observed in Interrogations

<i>Reid Component</i>	<i>Reid Step</i>	<i>Total Sample Size</i>	<i>Subsample Size</i>	<i>Percentage</i>	<i>Confidence Interval (95%)</i>
Changed theme if suspect continued to reject theme	2	13	11	85	65-100
Allowed suspect to voice objections	4	26	21	81	66-96
Returned to the beginning of the crime when suspect made a partial admission of guilt	8	20	16	80	62-98
Proposed at least one theme for the crime's commission	2	44	28	64	49-78
Gave transition statement	1	44	26	59	45-74
Looked through evidence folder	1	44	25	57	42-71
Provided sympathy if suspected cried	6	9	5	56	23-88
Used alternative questioning	7	44	17	39	24-53
Did not allow repetition of denial	3	36	12	33	18-49
Started interrogation with direct statement indicating certainty in guilt	1	44	12	27	14-40
Moved closer to suspect throughout interrogation ^a	5	44	10	23	10-35
Used visual aids to procure suspect attention	5	44	8	18	7-30
Reconfirmed belief in guilt after suspect denials ^b	3	36	5	14	3-25
Reiterated moral excuse/theme after suspect denials ^b	3	36	4	11	1-21
Reiterated theme after suspect objections ^b	4	27	3	11	0-23
Made statement of reinforcement after suspect alternative acceptances ^b	7	10	1	10	0-29
Behavioral pause after initial direct statement indicating certainty in suspect guilt	1	12	0	0	—

Note. The percentages were based on each component's being observed at least once in an interrogation; that is, the total number of times that each component was observed was not coded.

a. The interrogator moved closer to the suspect in 60% ($n = 3$) of the five cases where the suspect withdrew.

b. Interrogators were given credit for the behavior if it occurred more than 50% of the time after the suspect's noted behavior (i.e., denial, objection, or alternative acceptances). This 50% criterion was used because few officers exhibited the recommended Reid component after every single suspect response.

weighted equally such that one point was given for the use of each component. Components did not have to be carried out in any specific order to receive credit, with the exception of the variables "Interrogation initiated with direct statement indicating certainty in suspect guilt" and "Behavioral pause after initial direct statement indicating certainty in suspect guilt," because they had to occur at the beginning of the interrogation. A copy of the core Reid tally sheet, as well as the criteria used to determine the inclusion of a variable in the denominator, is available from the corresponding author.

Interrater reliability. Coding agreement of the variables was assessed by having an independent researcher code 14% of the sample ($n = 6$), which was selected randomly. The independent coder was provided with a 2-hr training session that covered not only the practical aspects of coding the videos but also the structure and content of the coding guide and the content dictionary. In addition, the coder practiced on two videos before the conducting the actual coding. Any confusions pertaining to the task were resolved before

interrater reliability commenced. The agreement for demographic variables was 96%, as measured using Yeaton and Wortman's statistic (1993). Percentage agreement was used because most demographic variables were continuous. As measured using Cohen's kappa (1960), the level of agreement was .75 for core Reid components, .98 for Reid guidelines, 1.00 for coercive strategies, and .78 for influence tactics. These Kappa values show excellent agreement between the coders (see Fleiss, 1981; Landis & Koch, 1977). Although suspect behaviors are reported separately in the results section, the variables composing the section are subsumed throughout the aforementioned four categories where Kappa was calculated.

RESULTS

SUSPECT BEHAVIOR

A full confession was given in 27% of interrogations ($n = 12$), a partial admission in 23% ($n = 10$), no comment in 11% ($n = 5$), and suspect denial in 39% ($n = 17$); that is, 50% confessed. Of the 35 suspects (80%) who were read their rights to silence and legal counsel (the equivalent of the *Miranda* warning in the United States), 74% ($n = 26$) waived those rights and 26% ($n = 9$) invoked them at some point during the interrogation. Few suspects cried (21%, $n = 9$) or withdrew mentally (11%, $n = 5$) during an interrogation. Of the 17 individuals (39%) presented with alternative questions, 59% ($n = 10$) accepted one of the alternatives at least once. Results of a chi-square analysis did not reveal any statistically significant association between the acceptance of an alternative and the interrogation outcome (full confession/partial admission versus no comment/denied), $\chi^2 = 1.04$, $df = 1$, $p = .59$, $V = .25$.

Approximately 82% of suspects ($n = 36$) made at least one denial while being interrogated. The average number of denials was 13.86 ($SD = 19.21$, range = 0-87). The average number of denials was 1.00 ($SD = 1.41$) for those who failed to comment on their involvement in the crime, 21.06 ($SD = 18.02$) for those who ultimately denied involvement in the crime, 18.20 ($SD = 28.43$) for those who provided a partial confession, and 5.42 ($SD = 7.60$) for those who fully confessed to the crime. Suspects who provided a full or partial confession made fewer denials ($M = 11.23$, $SD = 20.47$) than did those who denied the offense or made no comment ($M = 16.50$, $SD = 17.94$). Contrary to Inbau and colleagues' argument (2004) that discouraging denials leads to more confessions, an independent samples t test did not reveal any statistically significant difference between the average number of denials between those who confessed and those who did not, $t(42) = -0.91$, $p = .37$; furthermore, the effect size was small, $d = -0.27$.

Approximately 61% ($n = 27$) of suspects made at least one objection while being interrogated. The average number of objections was 3.84 ($SD = 5.57$, range = 0-21). The average number of objections for those who failed to comment on their involvement in the crime was 0.40 ($SD = 0.89$); for those who ultimately denied involvement in the crime, 5.71 ($SD = 5.94$); for those who partially confessed, 4.00 ($SD = 5.06$); and for those who fully confessed to the crime, 2.50 ($SD = 5.99$). Suspects who provided a full or partial confession raised fewer objections ($M = 3.18$, $SD = 5.51$) than did those who denied the offense or made no comment ($M = 4.50$, $SD = 5.67$). No statistically significant difference was found between the average number of objections raised by those who confessed and those who did not, $t(42) = -0.78$, $p = .44$, and the effect size was small, $d = -0.24$.

CORE REID COMPONENTS AND ENDORSED THEMES

Table 1 contains the percentages and associated 95% confidence intervals of core Reid components observed. Note that the sample sizes are contingent on the interactions between the suspect and the interrogator. For example, the percentage occurrence of the variable "provided sympathy if suspect cried" is based on nine cases because only nine individuals were observed crying. Thus, the interrogator could only have provided sympathy in these nine cases.

As can be seen in Table 1, interrogators tended to change a theme if it continued to get rejected (85%, $n = 11$), and most suspects were allowed (i.e., usually or always) to voice objections (81%, $n = 21$). In addition, interrogators usually returned to details relating to the beginning of the crime after a partial admission (80%, $n = 16$). Conversely, only 14% ($n = 5$) of the interrogators reconfirmed their beliefs in the suspects' guilt after denials, and only 11% ($n = 4$) reiterated a moral excuse or proposed theme after denials. Credit was given for the last two aforementioned behaviors if belief in guilt was reconfirmed and a moral excuse was reiterated for more than 50% of denials. This 50% criterion was used because no officer reconfirmed belief in guilt or reiterated a moral excuse after every single denial. A behavioral pause was never observed after an initial direct statement indicating certainty in the individual's guilt.

The mean proportion of core Reid components observed was .34 ($SD = .20$), with proportion of use ranging from .00 (i.e., no components observed at all) to .75. For interrogations ending with no comment, the average proportion of core Reid components was .21 ($SD = .16$); for those ending with denial, .27 ($SD = .19$); for those ending with a partial confession, .36 ($SD = .19$); and for those ending with a full confession, .48 ($SD = .16$). A greater proportion of Reid components was observed for interrogations ending with a full or partial confession ($M = .43$, $SD = .18$) than for those ending with a denial or no comment ($M = .26$, $SD = .18$); this difference was statistically significant, $t(42) = 3.08$, $p = .00$, and the effect size was large, $d = 0.94$.

The alternative question was observed at least once in 39% of interrogations ($n = 17$). Across all interrogations, the average number of alternative questions posed was 1.36 ($SD = 2.57$, range = 0-13). The mean number of alternative questions posed was 0.00 in interrogations ending with no comment, 0.53 ($SD = 0.94$) for those ending with a denial, 1.60 ($SD = 2.50$) for those ending with a partial confession, and 2.92 ($SD = 3.85$) for interrogations ending with a full confession. More alternative questions were observed in interrogations ending with a full or partial confession ($M = 2.32$, $SD = 3.30$) than in those ending with no comment or a denial ($M = 0.41$, $SD = 0.85$); this difference was statistically significant, $t(23) = 2.63$, $p = .02$, and the effect size was large $d = 0.79$, which is consistent with Inbau and colleagues' suggestion (2004) that the use of alternative questions is an important step in eliciting confessions.

Table 2 contains the percentages and associated 95% confidence intervals of Reid themes observed. The use of praise and flattery was observed in 57% of the interrogations ($n = 25$). Other themes were observed relatively frequently, such as playing one offender against the other (43%, $n = 6$ out of 15 interrogations) and minimizing the moral seriousness of the offense (36%, $n = 16$). By contrast, pointing out that the accuser or victim may be exaggerating the offense (7%, $n = 3$) and pointing out the consequences of continuing criminal behavior (5%, $n = 2$) were observed relatively infrequently. Interrogators were never observed exaggerating the nature and seriousness of the offense. The median number

TABLE 2: Reid Themes Observed in Interrogations (N = 44)

<i>Reid Theme</i>	<i>Subsample Size</i>	<i>Percentage</i>	<i>Confidence Interval (95%)</i>
Appeal to suspect's pride with flattery ^{a,b}	25	57	42-71
Play one offender against the other ^{c,d}	6 ^e	43	17-69
Minimize the moral seriousness of the offense ^{a,b}	16	36	22-51
Point out the futility of resisting telling the truth ^{c,d}	13	30	16-43
Sympathize with suspect by condemning others ^{a,b}	11	25	12-38
Use third person theme ^{a,b}	5	11	2-21
Anyone else under similar circumstances might have done the same ^{a,b}	4	9	1-18
Suggest noncriminal intent for the offense ^{a,d}	4	9	1-18
Point out the possibility of exaggeration on part of the accuser or victim ^{a,b}	3	7	0-14
Point out the consequences and futility of continuation of criminal behavior ^{b,c}	2	5	0-11
Exaggerate the nature and seriousness of the offense ^{b,c}	0	0	—

Note. The percentages are based on each of the themes being observed at least once in an interrogation; that is, the total number of times that each theme was observed was not coded.

a. Minimization tactics.

b. Emotional themes.

c. Maximization tactics.

d. Nonemotional themes.

e. Based on 14 interrogations where a co-offender was purportedly involved.

of Reid themes observed in an interrogation was 2 and ranged from 0 to 6 ($M = 2.02$, $SD = 1.86$). On average, 1.50 emotional Reid themes ($SD = 1.52$) and 0.52 nonemotional themes ($SD = 0.76$) per interrogation were observed.

REID GUIDELINES AND SUGGESTIONS

Table 3 contains the percentages and associated 95% confidence intervals of additional Reid guidelines and suggestions observed. As can be seen, most of the additional guidelines and suggestions were observed in the interrogations, such as never pacing the room (100%), making sure the suspect was not shackled or handcuffed during the interrogation (100%), having an evidence folder in hand upon beginning the interrogation (89%, $n = 39$), not having a telephone in the room (86%, $n = 38$), making sure small loose objects were not within reach (82%, $n = 36$), and making sure not to shake the individual's hand upon meeting him or her (80%, $n = 35$). In approximately half the interrogations, the following suggestions were observed: having the suspect alone in the room before the interrogator entered the room, using straight-back chairs, avoiding decorative ornaments, using a room that was plain in color, and seating the interrogator and suspect face-to-face. Two guidelines and suggestions were infrequently observed: offering a polygraph examination (9%, $n = 4$) and getting someone other than the primary interrogator to read the rights to silence and legal counsel (6%, $n = 2$). For interrogations ending with no comment, the average number of guidelines and suggestions followed was 9.80 ($SD = 2.17$); for those ending with denial, 7.88 ($SD = 1.50$); for those ending with a partial confession, 7.10 ($SD = 2.03$); and for those ending with a full confession, 8.75 ($SD = 2.22$). On average, slightly fewer guidelines and suggestions were followed in those interrogations ending with a full or partial confession ($M = 8.00$, $SD = 2.25$) and in those ending with a denial or no comment ($M = 8.32$, $SD = 1.81$); as such,

TABLE 3: Reid Guidelines and Suggestions Observed in Interrogations (N = 44)

<i>Guidelines and Suggestions</i>	<i>Subsample Size</i>	<i>Percentage</i>	<i>Confidence Interval (95%)</i>
Did not pace room	44	100	—
Suspect not handcuffed/shackled during interrogation	44	100	—
Has evidence folder in hand upon entry/beginning of interrogation	39	89	79–98
No telephone in room	38	86	76–97
No small loose objects within suspect's reach	36	82	70–93
No handshake between suspect and interrogator upon meeting	35	80	68–91
Suspect alone in interrogation room prior to entry of interrogator	27	61	47–76
Straight-back chairs	24	55	40–69
No decorative ornaments in room	23	52	38–67
Room plain in color	23	52	38–67
Interrogator and suspect seated to directly face each other	20	46	31–60
Polygraph offer made to suspect	4	9	1–18
Police caution given by someone other than primary interrogator ^a	2	6	0–13

Note. The Reid guidelines and suggestions are phrased in the direction advocated by Inbau and colleagues (2004).

a. Based on 35 interrogations where a caution was given.

no statistically significant difference was found, $t(42) = -0.52$, $p = .61$, and the effect size was small, $d = -0.16$.

The median rating (on a 5-point scale) of perceived self-confidence of the primary interrogator, perceived knowledge of case details, and evidence-based interrogation was 4, 4, and 3, respectively; there was no statistically significant relationship between any of these measures and interrogation outcome ($r = .06$, $r = .12$, $r = .02$, respectively).

Notwithstanding the need to explain the charges in legal terms, the average number of legal terms that the interrogators used to describe the offense (e.g., *steal/theft* versus *taking stuff*) was 6.05 ($SD = 10.20$, range = 0–44). The average number of legal terms observed in interrogations ending with no comment was 2.00 ($SD = 2.45$); for those ending with a denial, 6.06 ($SD = 9.63$); for those ending with a partial confession, 6.70 ($SD = 13.54$); and for those ending with a full confession, 7.17 ($SD = 10.51$). No statistically significant difference was found between the average number of legal terms observed in interrogations ending with a full or partial confession ($M = 6.95$, $SD = 11.68$) and those ending with no comment or a denial ($M = 5.14$, $SD = 8.65$), $t(42) = 0.59$, $p = .56$, and the effect size was small, $d = 0.18$. These results suggest that contrary to Inbau and colleagues' recommendations (2004), the use of legal terms does not deter suspects from providing confessional evidence.

INFLUENCE TACTICS

Table 4 contains the percentages and associated 95% confidence intervals of the influence tactics observed. The most commonly observed tactics involved confronting suspect

TABLE 4: Influence Tactics Observed in Interrogations (N = 44)

<i>Influence Tactic</i>	<i>Subsample Size</i>	<i>Percentage</i>	<i>Confidence Interval (95%)</i>
Confront suspect with existing evidence of guilt	36	82	70-93
Offer moral justifications/psychological excuses	28	64	49-78
Use praise and/or flattery	25	57	42-71
Identify contradiction in suspect's account	20	46	31-60
Appeal to suspect's conscience	18	41	26-55
Minimize the moral seriousness of the offense	16	36	22-51
Appeal to interrogator's expertise/authority	12	27	14-40
Appeal to the suspect's self-interest	11	25	12-38
Minimize the facts/nature of the offense	10	23	10-35
Undermine suspect's confidence in denial of guilt	10	23	10-35
Any behavioral analysis interview questions	9	21	9-32
Invoke metaphors of guilt	6	14	4-24
Touch suspect in friendly manner	6	14	4-24
Appeal to the importance of cooperation	4	9	1-18
Accuse suspect of other crimes	3	7	0-14
Refer to physical symptoms of guilt	3	7	0-14
Minimize the nature/purpose of questioning	2	5	0-11
Good cop—bad cop routine	1	2	0-7
Yell at suspect	1	2	0-7
Attempt to confuse the suspect	1	2	0-7
Exaggerate the facts/nature of the offense	0	0	—
Exaggerate the moral seriousness of the offense	0	0	—
Exaggerate the nature/purpose of questioning	0	0	—

SOURCE: Based on Leo (1996).

Note. The percentages were based on each of the tactics being observed at least once in an interrogation; that is, the total number of times that each tactic was observed was not coded.

with existing evidence of guilt (82%, $n = 36$), offering moral justifications/psychological excuses (64%, $n = 28$), and using praise and/or flattery (57%, $n = 25$). By contrast, tactics never observed included exaggerating the nature or purpose of questioning, the facts or nature of the offense, and the moral seriousness of the offense.

The median number of influence tactics observed per interrogation was 4 ($M = 5.05$, $SD = 3.57$), with a range of 0 to 14. For interrogations ending with no comment, the average number of influence tactics observed was 3.00 ($SD = 2.12$); for those ending with a denial, 4.35 ($SD = 3.59$); for those ending with a partial confession, 5.30 ($SD = 3.56$); and for those ending with a full confession, 6.67 ($SD = 3.68$). A greater number of influence tactics were observed in interrogations ending with a full or partial confession ($M = 6.05$, $SD = 3.61$) than in those ending with no comment or a denial ($M = 4.05$, $SD = 3.32$). Consistent with Leo's (1996) findings, this difference was statistically significant, $t(42) = 1.92$, $p = .06$, and the effect size was medium, $d = 0.58$.

COERCIVE STRATEGIES

Table 5 contains the percentages and associated 95% confidence intervals of coercive strategies observed. Coercive strategies were rarely observed, with the failure to read the suspect his or her rights to silence and legal counsel being the most frequent (21%, $n = 9$). Note, however, that providing the right to silence and legal counsel was coded only if it was

TABLE 5: Percentage of Coercive Strategies Observed in Interrogations (N = 44)

<i>Coercive Strategy</i>	<i>Subsample Size</i>	<i>Percentage</i>	<i>Confidence Interval (95%)</i>
Suspect was not read rights to silence and legal counsel	9	21	9-32
Interrogator threatened suspect with psychological pain	2	5	0-11
Interrogator touched suspect in an unfriendly manner	1	2	0-7
Interrogator's questioning manner was unrelenting, badgering, or hostile	1	2	0-7
Interrogator promised the suspect leniency in exchange for an admission of guilt	1	2	0-7
Suspect is not permitted to invoke his or her rights to silence of legal counsel	0	0	—
Suspect was in obvious physical pain	0	0	—
Interrogator deprived the suspect of an essential necessity	0	0	—
Suspect was in obvious psychological pain	0	0	—
Interrogation lasted longer than 6 hours	0	0	—

SOURCE: Based on Leo (1996).

Note. The reported percentages are based on each of the strategies being observed at least once in an interrogation; that is, the total number of times that each strategy was observed was not coded.

observed on the video. Providing rights to silence and legal counsel could have happened before the videotaping of the interrogation; thus, this percentage might be an overestimation. Other coercive strategies were observed: threatening the suspect with psychological pain (5%, $n = 2$); touching suspect in an unfriendly manner (2%, $n = 1$);² questioning in an unrelenting, badgering, or hostile manner (2%, $n = 1$); and promising leniency in exchange for an admission of guilt (2%, $n = 1$). The remaining five coercive strategies were never observed. Overall, at least one of these coercive strategies were observed in 27% of the interrogations ($n = 12$). The maximum number of coercive strategies observed within any interrogation was two, which this occurred in 2 interrogations; the remaining 10 interrogations contained only one coercive strategy.

The average number of coercive strategies observed in the interrogations was 0.32 ($SD = 0.56$). The average number of coercive strategies was 0.00 for interrogations ending with no comment, 0.18 ($SD = 0.39$) for those ending with a denial, 0.40 ($SD = 0.70$) for those ending with a partial confession, and 0.58 ($SD = 0.70$) for those ending with a full confession. Interrogations that ended with a full or partial confession contained more coercive strategies ($M = 0.50$, $SD = 0.67$) than did those that ended with no comment or a denial ($M = 0.14$, $SD = 0.35$). This difference was statistically significant, $t(31) = 2.25$, $p = .03$, and the effect size was large, $d = 0.67$.

DISCUSSION

There is a dearth of empirical data on the interactions that occur between interrogators and suspects. Specifically, few empirical investigations (particularly in North America) have examined the extent to which the nine-step Reid model of interrogation is being used, the sorts of social influence tactics and coercive strategies actually employed during interrogations, and the general effectiveness of Reid. Acquiring such knowledge is vitally important for ensuring that experimental research on interrogation processes is ecologically

valid and focused on the correct processes and, most important, for ensuring that interrogation practices are appropriate for policing ethos of the 21st century.

Our findings show that interrogators did not strictly adhere to the core components of the nine-step Reid model of interrogation. On average, the interrogators used about 34% of the Reid model. Specifically, officers did not frequently use 8 of the 17 core Reid components, such as reconfirming belief in guilt after denials, starting the interrogation with a confrontation of guilt, and following up the initial confrontation with a behavioral pause. By contrast, interrogators tended to follow Inbau and colleagues' suggestions (2004) to change the theme of the interrogation if a previous theme was rejected, to allow suspects to voice objections, and to return questioning back to the beginning of the suspects' account of their involvement in the crime after they made a partial admission of guilt. These findings show that interrogators are selective in the Reid components that they employ.

The selective use of the components of the nine-step Reid model could be attributed to at least four reasons. First, the time constraints associated with conducting interrogations may have prevented the interrogators from using all the recommended components. Second, because of the sheer number of components and recommendations, the officers may have forgotten to implement some of them. Third, we have no knowledge about the sorts of Reid training that the officers received. It might be the case that the officers were not trained on every microscopic detail contained in the work of Inbau et al. (2004). Fourth, the officers may have personal beliefs about the efficacy of the various components, thus causing them to use what they think works. Regardless of the reason, this finding suggests that the nine-step Reid model of interrogation is not being fully employed in the majority of interrogations.

Interestingly, the proportion of core Reid components used was related to interrogation outcome. Interrogations ending in partial and full confessions contained a greater proportion of core Reid component use than did those ending in no comment or denial. Similarly, interrogations ending in partial and full confessions contained more influence tactics and more coercive strategies than did those ending without a confession. This "more is better" effect suggests that the increased application of Reid and other influence and coercive strategies are effective in obtaining confessions. Of course, only through true experimental research can the relationship between the use of more Reid components, influence tactics, or coercive strategies and confessions (proportion of true and false) be determined.

As Leo (1996) alluded, the relationship may be spurious between amount of strategy used and confession outcome. Two somewhat-related alternative arguments may explain the aforementioned "more is better" effect. First, the ability to obtain a confession may simply be due to the amount of effort put into the interrogation. Leo suggested that the longer an interrogation lasts, the more techniques and tactics that an interrogator will try (i.e., more effort), thus increasing the likelihood of finding something that works. Some evidence for this possibility comes from a post hoc analysis showing a positive relationship between length of the interrogation (a crude estimate of effort) and interrogation outcome, $r(44) = .28$, $p = .04$ (one-tailed). Another explanation is that more components, influence tactics, and coercive strategies are employed in those interrogations that are perceived to have a promising outcome (e.g., where guilt appears certain, where there is strong evidence, where a confession is fully or partially made early into the interrogation). With a more promising outcome looming, more effort is expended to shore up the case against the suspect; in turn, more tactics are employed. This latter explanation is supported by research showing that the tactics employed by interrogators have little effect on interrogation outcome (Baldwin,

1993; Moston & Stephenson, 1993). Future investigation should examine the possibility of using preinterrogation variables to predict interrogation outcome.

Of particular importance in the present study is that Inbau and colleagues' rationale (2004) for handling denials (Step 3) was not supported. Inbau et al. stress that handling denials is critical because of the "fundamental principle of interrogation, which is that the more often a guilty suspect denies involvement in a crime, the less likely he will be to tell the truth" (p. 304). However, the number of denials made was unrelated to interrogation outcome. Perhaps this finding was due to the inability of our participants to successfully distinguish denials from guilty individuals and innocent individuals. However, such an argument is weak because the validity of these criteria for detecting deception has not been demonstrated (for research illustrating the difficulty of detecting deception, see Bond & DePaulo, 2006; Vrij, 2008; for the inability of Reid-trained individuals to detect deception, see Kassin & Fong, 1999; Meissner & Kassin, 2002). The handling-of-denials phase of Reid is disturbing because guilty and innocent individuals are being prevented from denying involvement in crimes (Hartwig et al., 2005). The lack of empirical support for its practice, along with the coercive nature of preventing denials, makes the continued use of Step 3 of the nine-step Reid model of interrogation questionable.

According to the analysis of the types of Reid themes and influence tactics used, interrogators employed, for the most part, various types of minimization (or soft sell) strategies and, to a lesser extent, various types of maximization (or hard sell) strategies. Such a finding is consistent with self-reports from interrogators about the types of techniques or tactics that they frequently use (e.g., Kassin et al., 2007). Although the use of soft tactics may appear comforting, research suggests that minimization strategies are often interpreted the same as direct promises of leniency and that the use of minimization strategies has the potential to cause false confessions (Kassin & McNall, 1991; Russano, Meissner, Narchet, & Kassin, 2005).

Despite some differences between our sample and Leo's sample (1996; e.g., ethnic diversity, age, and criminal record), we replicated a number of Leo's findings. In particular, we found that the number of individuals who waived their rights (ours, 80%; Leo's, 78%), and provided confessionary evidence (ours, 50%; Leo's, 64%) was similar; furthermore, interrogations in both studies tended to be an hour or less. In addition, the median number of influence tactics observed in the interrogations was similar (ours, 4; Leo's, 5), and the mean number observed differed slightly (ours, 5.0; Leo's, 5.6). The influence tactics frequently observed in Leo's sample were also frequently observed in the current study, such as confronting the suspect with evidence of guilt and identifying contradictions in the suspect's account. The use of the good cop-bad cop routine, yelling at suspects, accusing suspects of committing other crimes, attempting to confuse suspects, and exaggerating the moral seriousness of the offense were infrequently observed in both studies. As mentioned, the positive relationship found by Leo was replicated here between the number of tactics observed and the likelihood of obtaining confessionary evidence.

A finding by Leo (1996) that was not replicated here was the percentage of interrogations where at least one coercive strategy was observed. Leo found that 2% of the interrogations in his sample contained coercive strategies, compared with 25% in our sample. Assuming that the rights to silence and legal counsel were provided before the interrogation (i.e., off camera), 9% of the interrogations still contained at least one coercive strategy. Such findings raise concerns about the impact that those sorts of strategies have on confessions. Indeed,

many researchers have raised warning flags about the potential for coercive strategies to result in false confessions (for a review of these issues, see Kassin, 2008b).

The current study has at least three potential limitations. First, the use of a relatively small sample calls into question the representativeness of our findings. However, this is only the second peer-reviewed study in the past three decades to report on the happenings occurring inside a North American interrogation room. Thus, we believe that our findings contribute to the literature on this consequential issue. Until more empirical studies with larger samples are conducted, the precision of the estimates of the population parameters reported here will remain somewhat uncertain. Second, the videotapes were self-selected. Interrogators could have selected tapes for submission that they believed would be flattering, thus leading to an unknown degree of bias in the data. However, the interrogators were not informed about the exact nature of the study, and we received an equal number of video recordings of interviews with witnesses. That the officers did not ensure that the videotapes involved interrogations with suspects strengthens our belief that the tapes were not being vetted a priori. Third, the arguably impressionistic and selective nature of our analysis may be of some concern, one already been expressed by Inbau and colleagues (2004), who have argued that many of the components of Reid are not possible to code. However, claiming that various aspects of Reid cannot be falsified treads on pseudoscientific grounds (see Lilienfeld & Landfield, 2008). We expect that some Reid advocates will contend that we excluded some important variables. Indeed, we chose to not include some aspects of Reid because they were too subjective, such as the use of facial expressions or mannerisms during specific phases of an interrogation. Perhaps such variables are vital to conducting a proper Reid interrogation. Thus, we look forward to future studies that attempt to include such variables. As always, we emphasize the need for replication of the results presented in the current study.

With Reid-based interrogations playing such a vital role in the North American criminal justice system, surprisingly little is known about what actually happens inside interrogation rooms. Even more surprising is that a routinely used and consequential technique such as Reid has not received extensive empirical scrutiny. Also unnerving is the fact that there has been such little scientific investigation into the types of social influence tactics and coercive strategies being employed in police interrogations. Certainly, given our growing knowledge of the link between interrogation practices and false confessions (see Kassin, 2008b), much more observational research is sorely needed examining the link between interrogation processes and outcomes. Although much can be learned about the interrogation practices being conducted in England, Wales, and New Zealand (see Gudjonsson, 2003; Milne & Bull, 1999; Schollum, 2005), many more studies on the sorts of interactions that occur between interrogators and suspects in North America is required to determine whether or not Reid-based interrogation practices are appropriate or, more likely, in need of substantive reform.

NOTES

1. The case of *R. v. Oickle* (2000) provides the framework for determining a confession's voluntariness in Canada. Canadian judges are directed to consider all relevant factors in making such a decision, including "threats or promises, oppression, the operating mind requirement and police trickery" (§ 3). Having said that, most cases are not clear-cut. For instance, whereas direct threats of physical harm would render a confession inadmissible, veiled or implicit threats would not necessarily do so. In addition, judgments regarding the admissibility of police trickery are driven by the subjective guideline

of whether the trickery would appall or shock the community. Thus, Canadian judges have significant flexibility in their decision making regarding confession voluntariness and admissibility, and Canadian police officers have flexibility in the strategies that they are permitted to use. Also note that 7% of the cases examined in this research ($n = 3$) occurred before the *Oickle* ruling.

2. This variable was observed in one interrogation. Given the vagueness of this variable, we feel obliged to indicate that this incident was not assaultive.

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