

Running head: PERCEPTIONS OF CONFESSIONS AND EXPERT TESTIMONY

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Jurors Believe Interrogation Tactics Are Not Likely To Elicit False Confessions:

Will Expert Witness Testimony Inform Them Otherwise?

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Abstract

Situational factors – in the form of interrogation tactics – have been reported to unduly influence innocent suspects to confess. This study assessed jurors' perceptions of these factors and tested whether expert witness testimony on confessions informs jury decision-making. In Study 1, jurors rated interrogation tactics on their level of coerciveness and likelihood that each would elicit true and false confessions. Most jurors perceived interrogation tactics to be coercive and likely to elicit confessions from guilty, but not from innocent suspects. This result motivated Study 2 in which an actual case involving a disputed confession was used to assess the influence of expert testimony on jurors' perceptions and evaluations of interrogations and confession evidence. The results revealed an important influence of expert testimony on mock-jurors decisions.

Keywords: interrogations; confessions; jury; decision-making; expert testimony

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In a court of law, a confession is one of the most powerful pieces of evidence against a defendant (Davis & O'Donohue, 2004; Kassin, in press; Leo, 2008). Despite this significant influence, confession evidence is not always reliable; empirical research as well as high-profile DNA exoneration cases, have conclusively demonstrated that suspects can be led to confess to crimes they did not commit (Drizin & Leo, 2004; Kassin, in press; Leo & Ofshe, 1998). These false confessions may arise from a combination of factors, including powerful interrogation tactics strategically designed to psychologically manipulate suspects into admitting guilt (Ofshe & Leo, 1997). Unfortunately, false confessions are not easily discriminated from true confessions (Kassin, Meissner, & Norwick, 2005) and are routinely believed by jurors (Kassin & Sukel, 1997). The weighty influence of confession evidence on jurors may be due in part to a lack of knowledge or misconceptions about the contextual factors involved in obtaining confessions (Chojnacki, Cicchini, & White, 2008; Leo, 2008; Leo & Liu, 2009). If this is so, then educating jurors through expert witness testimony may render this type of evidence less prejudicial. The goal of the present study was to examine these questions.

Concerns over false confessions have escalated during the last two decades as DNA evidence has proven beyond doubt the innocence of individuals wrongfully convicted based on unreliable confession evidence (Garrett, 2008; Kassin & Gudjonsson, 2004; Meissner & Russano, 2003). The Innocence Project's website reports that 25% of DNA exoneration cases (a total of 218 in 2008) involved false confessions or admissions (<http://www.innocenceproject.org>). To determine what factors would influence people to act against their self-interest and confess to crimes they did not commit, researchers have conducted

a number of field and laboratory studies (see Kassin, Drizin, Grisso, Gudjonsson, Leo & Redlich, in press, for a review). These studies have identified two categories of factors, internal and external. Internal factors are personal characteristics such as age, suggestibility, compliance, intelligence, and mental illness that together or individually may induce false confessions. Indeed, studies show that false confessions are more likely in juvenile populations (Drizin & Leo, 2004; Owen-Kostelnik, Reppucci & Meyer, 2006), those determined to be highly compliant (Blair, 2007; Gudjonsson, 2003), highly suggestible (Gudjonsson, 1991, 2003) and of low levels of intelligence (Gudjonsson, 1991, 2003). Additionally, the risk for false confessions among the mentally ill is believed to be high as well (see Drizin & Leo, 2004; Clare & Gudjonsson, 1995; Redlich, 2004).

External factors are those from the interrogation context, which include tactics interrogators use to manipulate suspects into confessing. These tactics may include: isolation, long interrogation periods, repeated accusations, deception, presenting fabricated evidence, implicit/explicit threats of punishment or promises of leniency, and minimization or maximization of the moral seriousness or legal consequences of the offence (Davis & O'Donohue, 2004; Kassin & McNall, 1991; Ofshe & Leo, 1997). Laboratory studies show that these external factors can lead to false compliance and admissions to negligent norm violations, especially when combinations of factors are used. For example, in the classic study by Kassin and Kiechel (1996) two forensically relevant tactics were used: presenting false evidence and inducing vulnerability in participants-suspects. The results revealed that whereas the rate of signing a false confession was 35% in a no-tactic condition, the rate in a combined tactics condition was 100%. Subsequent laboratory studies have reported similar findings

(Horselenberg, Merkelbach, & Josephs, 2003; Horselenberg, et al., 2006; Redlich & Goodman, 2003; but see Blair, 2007 in which a similar paradigm resulted in lower false confessions rates).

More recently, Russano, Meissner, Narchet, and Kassin (2005) extended this research with a more elaborate and ecologically valid paradigm. They reported that explicit promises of leniency (those suggesting more attractive consequences if confession was made) and minimization tactics (those which provided a face-saving excuse for committing the alleged crime and thereby reducing its seriousness) significantly increased both true and false confessions over a no-tactic condition. A group of participants were induced by a confederate to cheat in a problem-solving exercise; the other group did not cheat. Upon reviewing the responses to problems, the experimenter accused all participants, innocent and guilty, of cheating and proceeded to use tactics in an attempt to pressure them into signing a confession. Overall the true confession rate was higher than the false confessions rate, and tactics had an additive effect on both types of confessions. Specifically, the rate of *true* confessions increased from 46% in the no-tactic condition, to an average of 77% with a single tactic, to 87% with the combined tactics. Similarly, the rate of *false* confessions increased from 6% with no tactics, to an average of 16% with a single tactic, to 43% with the combined tactics. Together these results experimentally demonstrate that interrogation tactics, especially a combination of them, lead to significant increases in the rate of false confessions (Meissner, Russano & Narchet, in press).

There are a number of safeguards in the criminal justice system to protect against miscarriages of justice induced by false confessions (Kassin & Gudjonsson, 2004). Among these are guidelines for trial judges and special jury instructions to encourage fact finders to assess the validity of a confession before other considerations are made. However, such safeguards may not always be effective. Kassin, Meissner, and Norwick (2005) reported that lay people as well as

police investigators were not able to accurately evaluate the veracity of confessions. In their study, college students and police officers were assigned the task of identifying true and false confessions made by a group of prison inmates. The overall accuracy rate was not significantly different from chance, and students were more accurate than police officers. Interestingly, although police officers were less accurate, they were significantly more confident in their judgments than college students. More troubling results were reported by Kassin and Sukel (1997). In their study, when a confession was presented as evidence, mock-jurors' conviction rates were high, even when the confession presented was purportedly obtained in a highly coercive manner (i.e., a gun was used during questioning of the suspect), and participants were clearly aware of this fact, and had the option to discount it. Together, these results suggest that people, even experienced legal agents, may not be able to identify a false confession if presented with one, and may not be able to discount it even when appropriate to do so (Kassin, et al., 2005, Kassin & Sukel, 1997). These findings indicate that safeguards at the trial level may not be effective, underscoring the need for more reliable procedures.

An additional safeguard that may add a layer of protection is expert witness testimony. Expert testimony may be offered to educate the jury on the scientific research of interrogations and confessions. This knowledge can provide a useful framework for jurors when making decisions about the reliability of confession evidence. Research on the impact of expert witness testimony on jury decisions and evaluations of confession evidence is lacking (but see Moffa & Platania, 2007). Despite considerable research on the impact of expert witness testimony in other domains (e.g., Leippe 1995), the question remains open as to whether jurors would be influenced by expert testimony on the specific topic of the psychology of interrogations and confessions. There are reasons to be optimistic about the potential impact of expert testimony in this domain.

First, other areas of psychology do show that expert witness testimony is helpful to jurors in their evaluation of evidence (for a representative review see Costanzo, Krauss, & Pezdek, 2007).

Second, case studies reveal a positive effect of expert witness testimony. For example, Gudjonsson (1999) presented a confession case from Northern Ireland in which he served as the expert witness. The case was that of PK who was arrested in 1988 on suspicion of participating in the murder of two British soldiers. During five interrogations, police officers repeatedly suggested details of the crime and presented PK with false evidence. Under this pressure PK confessed. Gudjonsson, an expert in forensic psychological assessment, evaluated PK and determined that his confession was unreliable because of his vulnerabilities of low intelligence, illiteracy, increased anxiety, and high compliance. The defense decided not to introduce the expert's evaluation at trial apparently because of the belief that it would not be admitted by the judge. PK was convicted for the alleged involvement in the murder. Seven years later, an appeals court saw the evaluation, requested the expert witness testimony and reversed PK's conviction. According to Gudjonsson (1999), this case clearly illustrates the impact that psychological expert evidence can have on judges' ruling. The judges found the expert testimony relevant to PK's case and weighted it heavily on their decision to reverse the conviction.

Expert testimony can be an important safeguard that may reduce bias in jurors' decisions. Researchers have explained the powerful effect of confession evidence on jurors as likely due to a fundamental attribution error (Costanzo & Leo, 2007; Davis & O'Donohue, 2004; Kassir, 2008). This error arises from people's tendency to focus more on dispositional factors and less on situational factors when making inferences about the causes of others' behaviors (Ross, 1977; Gilbert & Malone, 1995; Jones, 1990). In the case of jury decision-making, jurors may perceive a confession as the result of free will or a personal choice made to gain some outcome, rather

than the potentially coercive nature of the interrogation context that leaves an individual no choice but to confess. Based on this explanation it is possible to expect that expert witness testimony on the scientific understanding of contextual factors influencing confessions may encourage jurors to look at confession evidence more carefully and perhaps place a more balanced weight on situational factors.

In the United States, expert witnesses on confessions are increasingly being called to testify (Costanzo & Leo, 2007; Kassin, 2008; Leo, 2001). This appears to be the result of the courts' view that jurors may not be sufficiently informed on the coercive nature of the interrogation context that may place innocent people at risk (see Fulero, 2004; Ofshe, 2007; Soree, 2005 for a review). Thus, there is a need to empirically assess: (a) juror's perceptions of interrogation procedures and confessions and (b) the effect of expert witness testimony on jurors' evaluations of confession evidence. The current study explored these two issues. In Study 1, jurors at a courthouse in a metropolitan city were surveyed on their perceptions of interrogation tactics and the likelihood of eliciting confessions with those tactics. In Study 2, jury-eligible participants read a transcript of an actual murder case involving multiple interrogations, a disputed confession, and expert witness testimony on the psychological effects of interrogation tactics. Participants were then asked to make various pre and post expert judgments of the defendant's guilt and interrogation tactics. They also evaluated the expert and aspects of his testimony.

Study 1

In Study 1 we were mainly interested in assessing the extent to which interrogation techniques are perceived to be coercive by jurors, and whether they believed those techniques to differentially affect the likelihood of eliciting confessions from guilty and innocent suspects. By

assessing jurors; perceptions we can gain an insight into their commonsense knowledge of interrogation procedures and confessions. Based on previous confessions studies, we anticipate that jurors will not perceive most tactics to be coercive and influential in eliciting confessions from innocent suspects.

Methods

Participants. The sample consisted of 126 jurors from the Santa Ana branch of the Superior Court of California, County of Orange. The jury commissioner permitted the researchers to request from jurors, who were waiting in the jury room to be called for service, to volunteer to complete the survey. A few jurors failed to complete some questions, thus, the reported N for demographic variables varies. Although, this court services a diverse community, our sample was not optimally diverse. The mean age was 43.79 ($SD = 15.68$, $Med = 42.50$, $Range = 18-82$), and 64.5% ($n = 80$) were female. The ethnic composition was as follows: White 70.6% ($n = 89$); Asian 12.7% ($n = 16$); Hispanic 7.1% ($n = 9$); African American 3.2% ($n = 4$); American Indian .8% ($n = 1$); and other ethnicities 5.6% ($n = 7$). Seventy-three percent ($n = 91$) indicated that they had not served on a jury. For simplicity, type of education was divided into basic (some or completion of high school/ trade school) and higher education (college or graduate school completion). Thirty-four percent ($n = 43$) obtained basic education and 65.6% ($n = 82$) obtained a higher education level. Thus, more than half of our sample was female, White, relatively highly educated, and although involved in jury duty, most had not actually served. It is important to note that in a previous pilot test, we surveyed a more diverse jury-eligible sample ($N = 30$) from local shopping malls and the pattern of results was similar to those presented here. Thus, our findings represent the views of a metropolitan community.

Materials and Procedure. A six-page survey was administered to those who volunteered to participate¹. The survey had three main sections that requested information on: (a) demographic variables, (b) perceptions of various pieces of evidence and police procedures, and (c) perceptions of tactics sometimes used by detective during interrogations². The survey was constructed by the third author of this article, who has observed and analyzed many police interrogations. The third part of the survey consisted of 18 questions on perceptions of interrogation tactics; these are presented in Table 1. This part of the survey had three identical lists differing only in instructions and ratings scales. The first set of instructions indicated to jurors that the list was “*a list of interrogations tactics sometimes used by detectives when questioning individuals suspected of committing a crime.*” Their task was to rate the degree to which they believed each tactic was coercive (i.e., removes an individual’s perception of their freedom to make a meaningful choice during an interrogation) (Scale: 1 = not at all coercive to 5 = extremely coercive). The second set of instructions indicated to jurors to “*suppose that a suspect is guilty of committing a violent, felony crime*” and then to “*rate the likelihood that each of the tactics would elicit a true confession from the suspect during the interrogation*” (Scale: 1 = not at all likely to 5 = extremely likely). The final list in this part of the survey instructed jurors to “*suppose that a suspect is innocent of committing a violent, felony crime*” and then to “*rate the likelihood that each of the tactics would elicit a false confession from the suspect during the interrogation*” (Scale: 1 = not at all likely to 5 = extremely likely). After completing the survey jurors were thanked and debriefed on the purpose of the survey.

Results and Discussion

Study 1 includes three main types of ratings: perceptions of coerciveness, perceptions of likelihood of eliciting a true confession, and perceptions of likelihood of eliciting a false

confession. With these ratings the following four set of analyses were performed³. First, for simplicity, conceptually related questions were clustered into five subscales; these are presented in Table 1. Second, the distributions of the various responses to questions within subscales were screened for normality; the statistics for non-normal distributions are reported in the footnote section⁴ for the interested reader. Third, descriptive statistics were calculated for the responses to the various survey questions. The descriptives for the interrogation tactics questions are reported in Table 1 along with the percentage of participants who provided upper limit ratings (4 or 5) for each question. These latter ratings provide an interesting insight into the number of participants who share a more extreme view. Lastly, inferential tests were performed to assess differences in perceptions on the likelihood of eliciting true versus false confessions.

Subscale Development. As can be seen in Table 1, the subscales that were created with conceptually related questions have a high degree of face validity. Statistically, there was also a high degree of association among the questions within each subscale⁵, Cronbach's alphas ranged from: .74 to .94. Note that due to our sample size, factor analysis on these data was not deemed appropriate (see Tabachnick & Fidell, 2001, p. 588).

Descriptive Statistics. As can be seen in Table 1, second column from the left, there are three interesting findings in regards to the *coerciveness* ratings. First, ratings on questions in the two top subscales show means greater than 4.0, with the majority of jurors providing upper limit ratings of 4 or 5 on those tactics. It appears that most of our participants reasonably perceived that actual or threat of violence is coercive during interrogations; and although under the law, presentation of false evidence is allowed (Leo, 2008), our sample perceived this tactic to be coercive as well.

Second, questions within the Promise of Leniency and Accusation and Confrontation subscales yielded mid-range ratings and about 40% to 50% of jurors provided ratings of 4 or 5. It appears that our sample perceived these tactics to be somewhat coercive; in contrast, scholars believe that combination of these tactics are influential in eliciting false confessions (Davis & O'Donohue, 2004; Kassin, 2008; Ofshe & Leo, 1997), and promises of leniency are regarded as coercive in law and psychology (Kassin & McNall, 1991; Leo, 2008; White, 2003). That participants in our sample rated threats as highly coercive and promises of leniency as only slightly or somewhat coercive is consistent with Kassin and Whightsman's (1980, 1981) experimental demonstration of the *positive coercion bias* in which jurors have deemed promises of leniency as less coercive than threat of harm. The positive coercion bias has been demonstrated to be true when threats and promises are equivalent in the amount of behavioral compliance they produce (Wells, 1980).

Lastly, questions within the Request and Presentation of Evidence subscale showed means around 2.0 with a low percentage of participants providing ratings of 4 or 5. This latter result suggests that these seemingly more reasonable interrogation tactics do not appear coercive to our juror sample. However, as noted by Leo (2008), these tactics may become coercive when used as part of an orchestrated evidence ploy in which interrogators first present the polygraph as a scientific, sophisticated, and infallible technology, and then organize polygraph examination procedures that may last for several hours that often lead to failed results. These results, whether true or fabricated, are powerful tools used to pressure suspects into confessing. Most scholars agree that the polygraph is not a reliable tool, often resulting in high false positives (CRSEP, 2003). Given that our juror sample perceived the polygraph request and presentation of true

evidence of guilt as not coercive, they may not be aware of the fallibility of the polygraph and assume that evidence derived from it is always reliable.

In addition to the questions on interrogation tactics, jurors were asked a few questions about the importance of different pieces of evidence in solving crimes. Two sets of questions are relevant here. The first set asked: “*How important is it for the police to have [various pieces of evidence] to solve a crime?*” On a scale of 1 = not important to 5 = extremely important, *confession evidence* was rated as less important ($M = 2.61, SD = 1.10$) than, *eyewitness* ($M = 3.37, SD = 1.12$), $t = -7.32, p < .001, r = .32$, and *DNA evidence* ($M = 4.29, SD = .83$), $t = -17.09, p < .001, r = .64$. There was no statistical difference between the ratings of confession and *character* evidence ($M = 2.45, SD = 1.16$), $t = 1.67, p > .05, r = .08$. These are interesting results suggesting that jurors are likely to believe that confession evidence is less important than other evidence, yet research shows that confession evidence is very influential to jurors’ decisions of guilt (Drizin & Leo, 2004; Kassin & Neumann, 1997; Leo & Ofshe, 1998).

The second set of questions involved two separate aspects of the length of interrogations: *When detectives are investigating a crime, how long do they need / should be allowed per session (in hours) to interrogate a suspect to elicit a confession?* The mean response to the *need* portion of the question was 13.95 hours ($SD = 19.72, Med = 6, Range = 0-100$) and the *allowed* portion was 11.85 hours ($SD = 18.51, Med = 4.5, Range = 0-100$). These data revealed four univariate outliers, however. Excluding these outliers resulted in a *need* average of 11.99 hours ($SD = 15.78, Med = 5, Range = 0-72$) and *allowed* average of 10.36 hours ($SD = 14.61, Med = 5, Range = 0-72$). These interrogation length judgments are surprisingly high in light of the finding that jurors perceived coercion in some interrogation procedures. Although jurors correctly recognized that threats and other psychological pressure techniques may be highly or somewhat

coercive, they reported average required and allowed interrogation times that are many times the average observed interrogation length reported in field studies (Leo, 1996; Feld, 2006a, 2006b) as well as many times the average interrogation length reported by police interrogators themselves (Kassin, et al., 2007), and interestingly close to the average interrogation duration of 16.3 hours reported in the Drizin and Leo's study of 125 proven false confessions.

Differences in the Likelihood of Eliciting True versus False Confessions. An important purpose of our study was to assess whether there are differences in perceptions of interrogation tactics as a function of suspects' guilt. To this end we asked jurors to rate the likelihood that each of the interrogation tactics would elicit confessions from guilty suspects (true confessions) and innocent suspects (false confessions). The mean likelihood ratings and percentages of upper limit ratings are presented in the right two columns of Table 1. T-tests (and its non-parametric counterpart when relevant) on each of the subscales were performed to assess differences in perceptions of likelihood of eliciting true versus false confessions. Note that in both studies all tests are two-tailed, r effect sizes for differences between dependent groups were computed using procedures specified in Dunlap, Cortina, Vaslow, and Burke (1996), and because some participants left a few questions blank, degrees of freedom may vary for some tests.

Participants' perceptions of the likelihood that the interrogation tactics of Actual or Threat of Violence would elicit true confessions ($M = 3.17$, $SD = 1.32$) did not statistically differ from perceptions of eliciting false confessions ($M = 3.02$, $SD = 1.21$), $t(119) = 1.32$, $p > .05$, $r = .12$. However, the same analyses resulted in significant differences for the other four subscales. Participants rated False Evidence tactics more likely to elicit true confessions ($M = 3.47$, $SD = 1.09$) than false confessions, ($M = 2.50$, $SD = 1.16$), $t(117) = 7.58$, $p < .001$, $r = .57$. Leniency tactics to more likely elicit true ($M = 3.65$, $SD = .93$) than false confessions ($M = 2.42$, $SD =$

1.05), $t(119) = 10.14, p < .001, r = .68$. Accusation and Confrontation tactics to more likely elicit true ($M = 3.02, SD = .99$) than false confessions ($M = 2.27, SD = 1.08$), $t(118) = 5.65, p < .001, r = .46$. Finally, Request and Presentation of Evidence tactics were rated more likely to elicit true ($M = 3.13, SD = 1.03$) than false confessions ($M = 2.01, SD = .96$), $t(111) = 9.39, p < .001, r = .67$ (Wilcoxon Sign Rank test for dependent group: $Z = -7.18, p < .001, r = .68$).

Together these results show that, except for actual or threat of violence – techniques widely recognized to elicit unreliable information (Leo, 2004) – participants rated the likelihood of eliciting true confessions as significantly higher than eliciting false confessions in all interrogation categories, even for those perceived as highly coercive. For example, with regard to presenting false evidence, participants rated this technique as highly coercive, but not necessarily likely to elicit false confessions. In direct contrast to participants' beliefs, controlled laboratory research indicates that false evidence plausibly increases a participant's compliance with investigators as well as the likelihood of eliciting false admissions to experimentally-induced non-crimes such as mistakenly striking a computer key when told not to do so as part of a learning time experiment (Horselenberg, Merckelback & Josephs, 2003; Kassin & Keichel, 1996; Redlich & Goodman, 2003). Analysis of real world interrogations and confessions also contrasts with our participants' beliefs: Ofshe and Leo (1997) found that false evidence plausibly lead to a perception of hopelessness, a necessary condition for the giving of false confessions from innocent suspects (Leo, 2008). Virtually every reported police-induced false confession has contained false evidence plausibly (Drizin & Leo, 2004; Kassin, 2008; Leo & Ofshe, 1998).

It is interesting to note as well that whereas tactics within the violence and false evidence categories were rated as highly coercive, the likelihood of eliciting true and false confessions from them was rated lower. This pattern of results suggests that participants may believe that

even though harming the suspect and presenting false evidence are highly coercive tactics, they can be resisted to some degree by guilty suspects and to a greater extent by innocent suspects.

Another example of this disconnect between participants' beliefs and empirical research is that both laboratory studies (Russano et al., 2005) and archival studies of real-world interrogations and confessions (Ofshe & Leo, 1997) indicate that implicit promises of leniency as well as explicit offers of leniency increase the likelihood of both true and false confessions. Participants in the current study recognized that these techniques increased the risk of the former but not the latter, again demonstrating that potential jurors do not understand the link between coercive interrogation and false confessions. The lack of understanding is critical. Jurors are in the unique position of not only evaluating the coerciveness of particular interrogation tactics, but also the veracity of the confession that was the product of those tactics. The apparent disconnect between participants' beliefs may well affect their judgments regarding a confession and, as a result, the decisions they render in a given case.

Study 2

The results of Study 1 presents compelling evidence for the need to educate jurors about the potential risks associated with various interrogation tactics. These results, along with those from previous confession studies, suggest that jurors may not possess commonsense knowledge to make informed decisions on the reliability of confession evidence. The purpose of Study 2 is to assess whether informing jurors via expert testimony would inform their decisions. In Study 2, jury-eligible participants were presented with a condensed transcript of a real legal case (*People v. Gonzalez*) involving the murder of a police officer. The main piece of evidence presented in this version of the case was the confession of the defendant which was disputed on the grounds that it was obtained in a coercive manner. Defense-only expert witness testimony

was offered at trial. Judgments of the defendant's guilt and the coerciveness of the interrogation tactics were assessed before and after the testimony. We predict that post testimony: (a) the conviction rate will be lower and (b) the interrogators' tactics will be perceived as more coercive than prior to the testimony.

Methods

Participants. The sample consisted of 147 participants from colleges located in a metropolitan area of Los Angeles, California. To qualify for this study participants had to be considered jury-eligible. That is, they had to meet the following criteria: (a) citizens of the United States, (b) able to read and understand English, (c) resident of the County of Los Angeles, (d) at least 18 years old, and (e) not have been convicted of a felony. Because this study involved an actual case from Los Angeles we wanted to ensure that our participants were not previously aware of the case; four who reported they had were not included in the analyses. The mean age was 21.20 ($SD = 5.08$), and 78.9% ($n = 116$) were females. Ethnicity was as follows: White 31.5% ($n = 46$), Asian 26.0% ($n = 38$), Hispanic 22.6% ($n = 33$), African American 2.1% ($n = 3$), American Indian .7% ($n = 1$), and multiethnic 17.2% ($n = 25$) – one response was missing. Admittedly, this is a sample of convenience, but given similar characteristics (e.g., gender, ethnicity, and jury eligibility) between the samples in Study 1 and 2, the results of this study can be considered generalizable.

Procedure. Participants were provided with a study packet that included instructions, the trial transcript, and questions (both before and after expert testimony). The instruction stated that participants had to assume the role of a juror, read the trial transcript carefully, take notes if necessary, and answer questions about the various aspects of the case. Although participants worked independently, they participated in groups of 10 to 15 in a large classroom. It took an

average of one hour to read the transcript and answer all questions. In the transcript section of the packet, the case and interrogation procedures were presented first, followed by questions about guilt and interrogation procedures. Next, participants read the expert witness testimony and answered questions about guilt, interrogation procedures, and expert testimony (see below for more details on this aspect of the procedure).

Materials

The Case. In this case, Gonzalez, 20 years old, and an alleged gang member, was suspected of fatally shooting a police officer. Gonzalez was submitted to three interrogations, one of which was apparently conducted after a night without food and sleep. He was also persuaded to take a polygraph test on the promise that if it proved he was telling the truth he would be released. Although unclear as to what the actual results were, Gonzalez was told that he failed the polygraph test. He eventually confessed, but shortly after he retracted the statements. Gonzalez was charged of first degree murder and the case went to trial. The case was complex with various pieces of circumstantial evidence and an alleged violation of the defendant's rights. The strongest piece of evidence, however, appeared to be the confession and this is the focus our study. Before trial, the defense moved to suppress the confession on the grounds that it was the product of coercion. After a pre-trial hearing on the matter, the judge allowed an expert Witness to testify at trial. The expert witness was one of the authors of this article, a scholar who has conducted empirical work and written extensively on the psychological effects of interrogation tactics. The expert testimony focused only on scientific research; opinions as to the actual reliability of the confession in question were not offered.

The Trial Transcript. The transcript of the Gonzalez's case was condensed to 29 pages and only included the aspects of the case that were relevant to the purposes of this study. The

transcript was divided into two parts. Part 1 included opening statements by the prosecution and defense, which introduced their respective cases and purported evidence available. This was followed by a summary of the events that transpired during each of the three interrogations. Whenever possible we included aspects of the actual conversations between the interrogators and the defendant. To isolate the impact of confession evidence, we simplified the trial by excluding two aspects of the real case, eyewitness evidence and an alleged violation of the Miranda Warning. Part 1 of the transcript was followed by a questionnaire which will be discussed in the next section. Part 2 of the transcript was the expert witness testimony, and it included: direct, cross, and re-direct examinations of the expert witness. The expert discussed the research on interrogation tactics, the coercive effects they can have on suspects, and the potential for false confessions. In some instances, prompted by the attorney, he made connections between the research and aspects of Gonzalez's interrogations that he found troubling. These included techniques such as: maximization (implying that the suspect would be perceived as a cold-blooded murderer of a police officer) and minimization (stating that the suspect only intended to scare the officer but not kill him), convincing the suspect to take the polygraph by implying custodial release if the test was passed, convincing the suspect that the polygraph is a reliable machine, and then informing him that he failed the polygraph test. Other general aspects of the expert witness testimony focused on: the potential coercive nature of popular interrogation tactics (specifically the Reid technique), fabricating evidence including polygraph results, convincing suspects that there is strong evidence against them whether it's real or made up (evidence ploy), and implicitly promising harsher or lenient sentences (pragmatic implications) – all of which may suggest to suspects that there is no way out of the interrogation room but to confess. In short, the content of the testimony was primarily focused on situational factors

involved in the interrogation context. It also reflected many of the aspects we surveyed in Study 1, particularly those in the categories of “promises of leniency”, “accusation and confrontation”, and “requests and presentation of evidence.”

Questionnaires. There were two questionnaires, one after Part 1 (pre-expert testimony) of the transcript and the other after Part 2 (post-expert testimony). All of the rating questions were on a scale of 1 (low on the target dimension) to 5 (high on the target dimension). In the *pre-expert* questionnaire, participants were asked to: (a) judge whether the defendant was guilty or not, and how confident they were of this assessment, (b) rate the extent to which they perceived the confession as truthful, influential, and voluntary, (c) rate the extent to which they perceived the various interrogation tactics as coercive, and (d) whether they perceived any implied messages in the interrogation procedures. In the *post-expert* questionnaire, participants were asked to (a) provide a second verdict and confidence assessment, (b) provide second ratings on the perceived coerciveness of interrogation tactics, and (c) provide ratings on their perceptions and influence of the expert witness and aspects of his testimony. It is important to note that one aspect of our study does not follow the typical trial circumstances; participants provided guilty verdicts at two different points in the trial transcript. Because it has been established that confession evidence is very powerful to jurors -- influencing their verdicts regardless of the reliability of the confession -- we were interested in determining whether expert testimony would educate jurors and prompt them in this context to carefully consider the evidence. To answer this question it is necessary to apply the current design. Functionally though, this aspect of our design compares a no-expert versus an expert condition with the benefit of reducing between-group contextual bias (see Brimbaum, 1982, 1999 for a review of this issue).

The dependent measures were dichotomous verdicts (guilty/not-guilty) and perception ratings on various aspects of the case as well as expert witness testimony. In addition, to obtain a more sensitive measure of verdicts and to test for main effects, a scalar variable was created by combining verdict and confidence ratings (Scale: 1 = not at all confident: 5 = very confident) (Kassin & Sukel, 1997). This was computed by assigning confidence ratings a positive value when the verdict was “guilty” and a negative value when the verdict was “not guilty.”

Results and Discussion

The following four set of analyses were conducted in Study 2.⁶ First, the distributions of the various responses were screened for normality.⁷ Second, descriptive statistics were calculated for the *pre*-expert verdicts and perceptions of confession evidence and interrogation tactics. The main results of these descriptives are presented in Tables 2 and 3. Third, inferential tests were performed to test for differences in guilty verdicts and perception of interrogation tactics as a function of expert witness testimony. Finally, inferential tests were performed to assess if various aspects of expert testimony were influential in changing participants’ perceptions.

Pre-Expert. Before the expert witness testimony, 89.7% (CI: .83-.94) of participants found the defendant guilty (confidence: $M = 3.90$, $SD = .80$) (based on 136 participants who provided both pre and post expert guilty ratings). To determine at this point if various aspects of the case influenced verdicts, we asked a number of questions regarding evidence and interrogation procedures. These can be seen in Table 2. On the question of whether the confession evidence was influential on guilt decisions (1= not at all influential: 5 = very influential), most participants (74.1%) gave a rating of 4 or 5 with an overall mean of 3.87 ($SD = .91$). This perceived influence of confession correlated with the guilty-confidence scalar measure, $r = .28$, $CI = .13 - .43$, $p < .01$. Most participants also gave 4/5 ratings on the questions

about the importance of knowing the suspect's gang affiliation (78.2%) and history of past arrests (82.3 %) ($M = 4.16$, $SD = 1.03$ and $M = 4.29$, $SD = 1.05$, respectively). However, correlation between the scalar measure and importance of gang affiliation ($r = .12$, $CI = -.05 - .28$) and arrest history ($r = .12$, $CI = -.05 - .27$) were small and not statistically significant, $p > .05$. Thus, it appears that although other factors were rated to be important in making decisions about guilt, the confession evidence was actually the most important factor.

On the questions of how truthful (1= not at all truthful: 5 = definitely truthful) and voluntary (1= involuntary: 5 = voluntary) the confession appeared, the means were in the mid-range ($M = 3.04$, $SD = .96$; $M = 3.26$, $SD = 1.12$, respectively) and only a minority of participants provided 4/5 ratings (34.7% and 42.8% respectively). On the question regarding the perceived pressure exerted by the police to obtain the confession (1= no pressure at all: 5= a great deal of pressure), the majority of participants perceived a great deal of pressure (76% provided 4/5 ratings with a mean of 4.02, $SD = .77$). Finally, the interrogation tactics were rated as relatively fair (1= not at all fair: 5= very fair) (54.4% provided 4/5 ratings with a mean of 3.58, $SD = 1.16$). Together these results suggest that although participants perceived the confession to be influential in their decision to convict, many participants did not perceive it to be fully truthful and voluntary.⁸ And although most participants perceived a great deal of pressure by the police to obtain the confession, the interrogations tactics were believed to be relatively fair.

Participants were also asked a series of question about the interrogation conditions in this case. On the question as to whether the suspect had a choice in confessing, over three-quarter of participants (77.6%) noted that he did have a choice. On the questions of any perceived implied messages, 76.9% perceived leniency if confession was made, and 59.2% perceived a message of harsher punishment if no confession was made. Finally, 88.4% responded "yes" to the question

of whether it was necessary to use the tactics to elicit the confession. These are interesting results because they suggest that most participants believed that the suspect chose to voluntarily confess, presumably in response to implied promises of leniency, which was perceived to be a necessary tactic. This finding is consistent with other experimental (Davis, Leo, & Follette, 2008; Kassin & McNall, 1991) and archival research (Ofshe & Leo, 1997).

For each interrogation tactic used in this case, participants provided ratings as to how coercive (1= not coercive: 5 = very coercive) they perceived them to be. For clarity, these were organized in clusters as in Study 1. As can be seen in the pre-expert column of Table 3, the mean ratings are similar to the ratings on related tactics in Study 1. This suggests that jurors' perceptions of coerciveness of interrogation tactics are consistent whether they are used in a hypothetical situation (Study 1) or in an actual case (Study 2).

Differences in Responses as a Function of Expert Testimony. The main question of Study 2 is whether informing jurors by means of expert witness testimony would influence their perceptions of the suspect's guilt, confession evidence, and the interrogations tactics used to elicit the confession. The results showed that testimony did have a significant, but modest, influence on mock-jurors. On the question of guilt, there was a significant decrease in the proportion of participants who found the defendant guilty after expert witness testimony (pre = 89.7% and post = 76.47%, CI: .69-.83, McNemar, $p < .01$). Similar results were found on the scalar measure, guilty-confidence ratings significantly decreased from the pre-expert testimony ($M = 3.35$, Med = 4.00, $SD = 2.18$) to post-expert testimony ($M = 1.87$, Med = 3.00, $SD = 3.20$), $Z = -5.43$, $p < .001$, $r = .47$.

In terms of perceptions of interrogation tactics, a 2 (session: pre vs. post expert) by 8 (tactics)⁹ within-subjects ANOVA showed a main effect of session; overall, tactics were rated as

significantly more coercive after the expert testimony ($M = 3.65$, $SE = .07$) than before ($M = 3.43$, $SE = .07$), $F(1, 142) = 21.83$, $MSE = 1.29$, $p < .001$, $\eta_p^2 = .13$. There was also a main effect of tactics, some tactics were perceived as more coercive than others, $F(7, 142) = 17.77$, $MSE = 1.19$, $p < .001$, $\eta_p^2 = .11$. Refer to the middle columns in Table 3 for means on each tactic. Finally, there was a session by tactics interaction, $F(7, 142) = 3.54$, $MSE = .50$, $p < .01$, $\eta_p^2 = .02$. As can be seen in the right most column of Table 3, post-hoc tests revealed that five of the eight tactics included in the ANOVA received significant increases in coerciveness ratings after the expert testimony. Specifically, *informing suspect of failed polygraph test*, *repeatedly accusing suspect*, *offering an ultimatum to confess before polygraph*, *asking suspect to take polygraph test*, and *magnifying the seriousness of the crime*, were all perceived as significantly more coercive after the expert testimony than before his testimony. Note that although not included in the ANOVA, the tactic *suggesting release if polygraph was passed*, showed a similar pattern of being perceived as significantly more coercive after the expert testimony.

Influence of Aspects of Expert Testimony. To determine which aspects of the expert testimony (see Table 4) may have influenced changes in perceptions of guilt and coerciveness of interrogation tactics, we conducted three analyses. First, we computed correlations between self-reported influence of each of 9 aspects of expert testimony (1 = no influence on my decision; 5 = very influential on my decision) and the scalar (guilty-confidence, -5 = not guilty, +5 = guilty) measure. These were significant, although they ranged from small to medium. *Minimization*, $r = -.26$, CI: $-.41$ - $(-).10$, $p < .01$; *Maximization*, $r = -.26$, CI: $-.41$ - $(-).10$, $p < .01$; *Reid Technique*, $r = -.20$, CI: $-.35$ - $(-).03$, $p < .01$; *Themes*, $r = -.24$, CI: $-.40$ - $(-).08$, $p < .01$; *Improper Polygraph*, $r = -.38$, CI: $-.51$ - $(-).22$, $p < .001$; *False Evidence*, $r = -.23$, CI: $-.39$ - $(-).07$, $p < .01$; *Pragmatic Implications*, $r = -.43$, CI: $-.55$ - $(-).28$, $p < .001$; *Evidence Ploy*, $r = -.29$, CI: $-.43$ - $(-).07$, $p < .01$.

).12, $p < .01$; *One Way Out*, $r = -.37$, CI: $-.51$ - $(-.22)$, $p < .001$. These results indicate that “not guilty” verdicts were associated with increased influence of each aspect of the expert witness testimony.

Second, we divided our sample into those who changed their verdicts ($n = 28$) (23 changed from “guilty” to “not guilty” and 5 in the reverse direction) and those who did not change their verdicts ($n = 108$). Next we performed a two-group MANOVA on self-reported influence of the nine aspects of expert testimony. This analysis showed a significant difference between the groups, $F(9, 113) = 2.50$, $p < .01$, $\eta_p^2 = .17$. As can be seen in the upper panel of Table 4, the mean influence ratings on eight of the nine aspects of the testimony were significantly lower for the group that did not change their verdicts than those who did change.

Finally, an analysis of perceptions of the expert witness himself also revealed some differences between the groups. As can be seen in the lower panel of Table 4, compared to those who did not change their verdicts, those who did, reported a higher overall influence of expert on their verdict, believed they would have been less likely to have reached this conclusion without the testimony, and found the expert to be persuasive. There were no significant differences between the groups in terms of perceived expert’s clarity, informativeness, and objectiveness. Together these results suggest that for those who made changes in their guilty verdicts, it was not simply because of an expert-induced skepticism of the reliability of the confession, but rather because of a valid understanding of the various pieces of information presented by the expert.

In conclusion, Study 2’s results showed that before expert witness testimony the majority of mock-jurors found the defendant guilty, primarily due to the influence of the confession evidence. Despite this, the confession was not viewed by many mock-jurors as fully truthful and voluntary. Except for one interrogation tactic, all others tactics in this case were rated as mildly

or somewhat coercive. Most mock-jurors also perceived the interrogation procedures as relatively fair, and noted a great deal of pressure and implied promises of leniency in those procedures. Most believed the suspect had a choice on whether or not to confess. All of these data suggest that mock-jurors experienced some doubts as to the reliability of the confession and perceived a certain level of coercion in the interrogation tactics used, but voted guilty anyway. After the expert witness testimony there was a 13% decrease in guilty verdicts and an overall increase in coerciveness ratings in the tactics used, indicating that the testimony influenced mock-jurors perceptions of the case. This influence was meaningful, as indicated by the higher influence ratings given to the specific aspects of the expert testimony by those who changed their verdict.

General Discussion

To our knowledge, this study is the first to (a) survey actual jurors on their perceptions of interrogation tactics and confessions, and (b) test whether expert witness testimony in the confession domain informs jury decision-making. To date, there has been only two published studies (Chojnacki et al., 2008; Henkel, Coffman, & Dailey, 2008) and one unpublished study (Leo & Liu, 2009) of potential jurors' perceptions of interrogations and confessions, and only one experimental study of the effect of expert witness testimony on mock jury perceptions of a confession (Moffa & Platonis, 2007). There were two key aspects of our findings. First, jurors appear to recognize the coercive effect of many interrogation tactics. The jurors in Study 1 viewed tactics that involve manipulating the perception of harm and false evidence as highly coercive, and to some extent promises of leniency and confrontation tactics as mildly coercive, exhibiting the positive coercion bias first experimentally demonstrated by Kassin and Wrightsman (1980, 1981). This finding directly demonstrates that innocent defendants may not

be afforded the necessary protections at the trial level because the average citizen may not understand the link between psychologically coercive interrogation and false confession. These results also complement Kassin and Sukel's (1997) findings in which jurors showed an awareness of the coercive procedures used in the elicitation of a confession, but voted guilty anyway. This suggests that the powerful influence of confession evidence on jurors may arise from an underlying belief that suspects who are innocent will not be manipulated into confessing, therefore a confession when made, is likely to be true. Leo (2001) has described the popular belief that innocent individuals do not falsely confess unless they are tortured or mentally ill as the "myth of psychological interrogation." The findings from Study 1 offer empirical support for this myth. Clearly, there is a need to better safeguard against this bias in jury decision-making.

The second key aspect of our finding was that expert testimony on the psychology of confessions had a significant, although modest, effect on mock-jurors' verdicts and perceptions of interrogation tactics. Based on previous observations (Costanzo & Leo, 2007; Davis & O'Donohue, 2004; Kassin, 2008), we hypothesized that attribution errors play a role in jurors' decisions. When participants were presented with an actual case in Study 2, most believed the defendant was guilty before the expert testimony. This rate of guilty verdicts was high, even though some situational factors affecting the reliability of the confession were identified by participants. Specifically, before the testimony participants perceived a great deal of pressure from the police to elicit the confession, they rated some interrogation tactics as coercive and perceived implied messages of leniency in the interrogation procedures. Given that the majority of participants also reported that the suspect had a choice in confessing, it appears that they believed that even under increased pressure in the interrogation room the suspect had the option

to remain silent. All of these data support the conclusion that when making decisions about defendants' guilt, jurors place lower weights on situational factors than dispositional factors.

Encouragingly, the expert witness testimony seemed to have helped reduce this bias in our study. After the expert testimony, guilty verdicts were reduced and interrogation tactics were perceived as more coercive. As compared to those who did not change their verdicts, those who did, found specific aspects of the expert testimony to be influential in their decisions. This is an important finding because the testimony in this study was framed around the issue of situational factors that may unduly influence suspects' decisions to confess. As such, the influence of the expert witness was not simply in the form of raising skepticism in the reliability of the confession, but rather it seems to have been in the form of an informational value. Together these results suggest that the expert testimony may help reduce attribution errors by highlighting the influences situational factors can have on behavior. This can lead to a more careful evaluation of confession evidence by jurors.

These results, while informative, should be viewed in light of a few limitations. First, our juror sample was not as diverse as would be expected from a metropolitan city. Most jurors also reported to have never served on a case. To obtain a more complete picture, it would be important to gather perception ratings from a more diverse sample and from those who have served on actual cases. Second, although the within-subjects design was used because it fits the research question in Study 2, the difference in judgments may be stronger when using a between-subjects design in which jurors provide judgments only after hearing a case with or without expert testimony. It is possible that in some cases in this study, mock jurors were strongly committed to their initial opinion about guilt and as a way to avoid dissonance were reluctant to change after expert testimony.¹⁰ This could have been a reason for the modest effect of expert.

Third, this study involved the testimony of a single expert. Potentially our results are limited to this expert and his style of testimony. Moreover, although we found that various aspects of expert testimony were perceived to be influential by mock-jurors who changed their verdicts, which presumably influenced their perception of interrogation tactics and guilty judgments, this does not directly test for an increased sensitivity to unreliable confessions. It is possible that this group did not truly understand the mechanisms by which false confessions occur. Finally, because the case involved the murder of a police officer, it is possible that this elicited strong reactions that affected verdicts more so than if the victim had been a civilian accused of another crime. Future studies should address these potential limitations.

These limitations notwithstanding, our results are important in that they inform us on aspects of jurors' perceptions that have not been widely surveyed to date. We know from these findings that although most jurors recognize that interrogation techniques can be coercive and elicit true confessions from guilty suspects, they do not appear to recognize that those same coercive techniques can elicit false confessions from innocent suspects. In other words, potential jurors do not appear to understand the link between psychologically coercive interrogation and false confessions. Our findings also indicate that expert witness testimony on interrogations and confessions may have an important impact on jury decision-making. Expert witnesses may effectively inform jurors about how and why interrogation techniques can lead to false confessions from the innocent.

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Footnotes

1. All materials from this study are available from the first author.
2. This survey was conducted before the widely publicized controversy of tactics used by the CIA to interrogate suspected terrorists.
3. The pattern of results was the same when gender was used as a variable. The exception was for coerciveness ratings in the Request and Presentation of Evidence category; overall males ($M = 2.43$, $SD = 1.29$) found the tactics in this category to be more coercive than females ($M = 1.96$, $SD = .97$), $t(115) = 2.25$, $p < .05$, $r = .21$. This indicates that, for the most part, males and females perceived interrogation tactics and confessions in similar ways.
4. Some of the distributions of *coerciveness* ratings showed significant Kurtosis and/or Skewness. Specifically, the Actual or Threat of Violence subscale showed significant Kurtosis (5.50, $SE = .43$) and positive Skewness (-2.47, $SE = .22$). Likewise, False Evidence showed significant Kurtosis (1.81, $SE = .43$) and positive Skewness (-1.50, $SE = .22$). Finally, the Request and Presentation of Evidence subscale showed a significant degree of negative Skewness (.95, $SE = .22$). These non-normal distributions of coerciveness ratings are not surprising given that a high percentage of jurors gave extreme coerciveness ratings (4/5) on tactics comprising the Actual or Threat of Violence ($M = 85.33\%$) and Fabricated Evidence subscales ($M = 76.95\%$), and only a small percentage gave the extreme ratings on the Request and Presentation of Evidence subscale ($M = 17.47\%$). The *likelihood ratings* on eliciting *true* and *false* confessions were normally distributed, except for one distribution: the Request and Presentation of Evidence subscale showed a degree of negative Skewness (.96, $SE = .22$) on likelihood of eliciting a false confession.

5. A table with inter-correlation is available from the first author.
6. The pattern of results was the same when race (white vs. non-whites) was used as a variable. This indicates that, race of participant did not influence perceptions in this case.
7. Only the scalar (guilty-confidence) measure showed significant departures from normality. Pre-expert testimony ($M = 3.35$, $Med = 4.00$, $SD = 2.18$) a significant degree of Kurtosis (3.56, $SE = .40$) and positive Skewness (-2.13, $SE = .20$) were revealed on this scalar measure. Post-expert testimony ($M = 1.87$, $Med = 3.00$, $SD = 3.20$) only a significant positive Skewness was revealed (-.93, $SE = .21$). These results are not surprising given that the majority of participants found the defendant guilty both pre- and post- expert testimony (see later sections). Because of this departure from normality, a Wilcoxon Sign Rank test was used to test for differences between means, and confidence intervals for correlations are provided where relevant (see Howell, 2002, pp. 691-718).
8. It is important to note that we do not want to imply that truthful and voluntary processes always co-occur; in many cases a confession is truthful but involuntary as when elicited because of coercion.
9. Only tactics numbers 1-4 and 7-10 were included in the ANOVA because of missing data on tactics numbers 5 and 6. This was due to a printing error that led to the omission of these two tactics from some post-expert questionnaires and as a result only partial data was obtained.
10. We thank an anonymous reviewer for suggesting this point.

Table 1.

Mean Responses in Study 1 to Survey Questions Clustered within Subscales.

Questions	Coerciveness [†]			Likelihood of Eliciting True Confession ^{††}			Likelihood of Eliciting False Confession ^{††}		
	Mean	SD	Rating (4-5) %	Mean	SD	Rating (4-5) %	Mean	SD	Rating (4-5) %
Actual or Threat of Violence									
1. Explicitly threatening suspects with physical harm.	4.48	(1.08)	85.7	3.23	(1.38)	48.4	2.84	(1.26)	33.3
2. Implicitly or indirectly threatening suspects with physical harm.	4.16	(1.20)	77.8	3.03	(1.28)	34.9	2.79	(1.24)	31.7
3. Threatening suspects with physical violence.	4.48	(1.20)	89.0	3.10	(1.43)	42.8	3.07	(1.37)	39.6
4. Physically beating or assaulting the suspect.	4.63	(1.0)	88.8	3.36	(1.53)	50.8	3.38	(1.46)	50.0
Presentation of False Evidence^a									
5. Giving suspects a lie detector test and <u>falsely</u> telling them that the results indicate they are lying.	4.39	(1.02)	84.9	3.23	(1.24)	42.1	2.40	(1.18)	19.9
6. Confronting the suspect with false video surveillance camera evidence.	4.05	(1.22)	71.4	3.45	(1.22)	50.8	2.53	(1.27)	23
7. Confronting the suspect with false DNA evidence.	4.20	(1.14)	76.1	3.64	(1.17)	59.5	2.63	(1.30)	29.3
8. Confronting the suspect with false fingerprints evidence.	4.12	(1.13)	75.4	3.64	(1.18)	61.1	2.49	(1.26)	9.5
Promise of Leniency^a									
9. <i>Explicitly</i> promising a more lenient charge if suspect confesses.	3.44	(1.21)	50.8	3.65	(1.06)	61.9	2.42	(1.14)	19.1
10. <i>Explicitly</i> promising a more lenient sentence if suspect confesses.	3.47	(1.22)	50.8	3.74	(1.06)	64.3	2.40	(1.11)	18.3
11. <i>Implicitly</i> suggesting a more lenient charge if suspect confesses.	3.24	(1.17)	46.0	3.60	(1.01)	58.0	2.38	(1.12)	15.1
12. <i>Implicitly</i> suggesting a more lenient	3.19	(1.19)	42.9	3.63	(1.01)	58.8	2.40	(1.14)	16.7

<i>sentence</i> if suspect confesses.									
Accusation and Confrontation ^a									
13. Repeatedly accusing a suspect of committing the crime.	3.13	(1.24)	40.5	2.99	(1.05)	29.3	2.29	(1.14)	16.7
14. Repeatedly telling the suspect that his/her alibi is false.	3.15	(1.17)	42.1	3.15	(1.13)	39.7	2.30	(1.13)	15.9
15. Repeatedly cutting off the suspect's denials of guilt.	3.17	(1.14)	39.7	2.95	(1.10)	28.5	2.30	(1.10)	14.3
Request and Presentation of Evidence ^a									
16. Asking the suspect to take a lie detector test.	2.17	(1.42)	17.5	3.37	(1.31)	47.4	1.82	(1.06)	7.2
17. Giving suspects a lie detector test and truthfully telling them that the results are inconclusive.	1.97	(1.28)	15.9	2.41	(1.34)	22.2	1.82	(1.04)	7.2
18. Giving suspects a lie detector test and truthfully telling them that the results indicate they are lying.	2.22	(1.35)	19.0	3.57	(1.25)	58.7	2.32	(1.19)	16.7

[†] Scale: 1 =not at all coercive: 5 =extremely coercive

^{††} Scale: 1 =not at all likely: 5 =extremely likely

^a Subscale: significant difference between likelihood of eliciting true versus false confessions, $ps < .001$.

Table 2.

Mean Responses to Evidence Questions in Study 2.

Questions[†] <i>Pre-Expert</i>	Rating (4-5)		
	Mean	SD	%
Confession Evidence			
1. Influence of confession on verdict.	3.87	(.91)	74.1
2. Truthfulness of Confession.	3.04	(.96)	34.7
3. Voluntariness of Confession.	3.26	(1.12)	42.8
Interrogation Procedures			
4. Police pressure to elicit confession.	4.02	(.77)	76.0
5. Fairness of interrogation procedures.	3.58	(1.16)	54.4
Evidence About Suspect			
6. Importance of gang membership.	4.16	(1.03)	78.2
7. Importance if past history of arrests.	4.29	(1.05)	82.3

[†]Scales for each question in the order presented in the table: 1=not at all influential: 5 =very influential; 1=not at all truthful: 5=definitely truthful; 1=involuntary: 5=voluntary; 1=no pressure at all: 5=a great deal of pressure; 1=not at all fair: 5=very fair; 1=not important: 5=very important (for questions on suspect's evidence).

Table 3.

Mean Changes in Perceptions of Tactics' Coerciveness in Study 2 as a Function of Expert Witness Testimony.

Tactics Used in the Present Case	Pre-Expert [†]		Post-Expert [†]		t	r
	Mean	SD	Mean	SD		
Presentation of Evidence						
1. Informing suspect that he failed the polygraph test.	3.56	(1.27)	3.99	(1.08)	-4.49**	.17
Accusation and Confrontation						
2. Repeatedly accusing the suspect of committing the crime.	3.33	(1.13)	3.65	(1.16)	-4.02**	.14
3. Repeatedly affirming suspect's guilt.	3.75	(1.15)	3.90	(1.11)	-1.88	.07
4. Offering an ultimatum to set record straight before the polygraph.	3.58	(1.18)	3.86	(1.17)	-2.81**	.12
5. Suggesting custodial release if polygraph test is passed.	3.50	(1.40)	3.96 ^a	(1.28)	-3.13 ^a **	.27
6. Asserting polygraph is an infallible machine.	3.63	(1.30)	3.71 ^a	(1.16)	-.62	.04
7. Reminder of the physical confinement.	3.34	(1.24)	3.30	(1.24)	.54	.02
Request						
8. Asking suspect to take the polygraph.	2.85	(1.43)	3.22	(1.34)	-3.81**	.14
Minimization						
9. Suggesting a face-saving excuse for the offense.	3.69	(1.18)	3.73	(1.07)	-.52	.02
Maximization						
10. Magnifying the seriousness of the crime.	3.34	(1.23)	3.54	(1.14)	-2.15*	.08

[†] Scale: 1=not coercive: 5=very coercive.

^a Means and t-tests are based on 24/26 participants who completed these questions both before and after Expert testimony.

* $p < .05$

** $p < .001$

Table 4.

Mean Responses to Expert Witness Testimony Questions in Study 2.

Questions [†]	Group				t	r
	No Change in Verdict		Changed Verdict			
Aspects of Expert Testimony	Mean	SD	Mean	SD		
1. Use of Minimization.	2.90	(1.11)	3.46	(.95)	-2.32*	.20
2. Use of Maximization.	3.06	(1.14)	3.65	(.89)	-2.41*	.20
3. The Reid Technique.	3.28	(1.08)	3.46	(.81)	-1.03	.09
4. Development of “Themes.”	2.80	(1.10)	3.23	(.77)	-2.26*	.19
5. Improper application of Polygraph.	3.26	(1.30)	4.12	(.71)	-3.66**	.30
6. Use of Fabricated Evidence.	3.04	(1.16)	3.96	(.92)	-3.39**	.28
7. Pragmatic Implications (Implicit Threats or Leniency).	3.16	(1.23)	4.19	(.80)	-4.28**	.35
8. Evidence Ploy.	3.15	(1.30)	3.92	(.94)	-3.17*	.27
9. Suggesting only one way out: confession.	3.41	(1.28)	4.35	(1.02)	-3.56**	.29
The Expert Witness						
1. Influence of expert on verdict.	3.01	(1.06)	4.00	(.98)	-4.46**	.36
2. Likelihood of reaching same verdict without expert.	2.66	(1.29)	3.64	(1.30)	-3.67**	.30
3. Expert’s persuasiveness.	3.20	(1.06)	3.86	(.76)	-3.07*	.26
4. Expert’s clarity.	3.77	(.97)	3.79	(.63)	-.09	.01
5. Expert’s informativeness.	3.88	(.88)	4.18	(.67)	-1.67	.14
6. Expert’s objectiveness.	3.47	(.96)	3.75	(.80)	-1.41	.12

[†]Scale for each question in the order presented in the table: 1= no influence on my decision: 5=very influential on my decision (for questions on aspects); 1=no influence at all: 5=a great deal of influence; 1=very likely: 5=very unlikely; 1=not at all persuasive: 5=very persuasive; 1=very unclear: 5=very clear; 1=not all informative: 5=very informative; and 1=not at all objective: 5=very objective;.

* $p < .05$

** $p < .001$