

On the General Acceptance of Confessions Research: Opinions of the Scientific Community

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Eighty-seven experts on the psychology of confessions—many of whom were highly published, many with courtroom experience—were surveyed online about their opinions on 30 propositions of relevance to deception detection, police interrogations, confessions, and relevant general principles of psychology. As indicated by an agreement rate of at least 80%, there was a strong consensus that several findings are sufficiently reliable to present in court. This list includes but is not limited to the proposition that the risk of false confessions is increased not only by explicit threats and promises but by 2 common interrogation tactics—namely, the false evidence ploy and minimization tactics that imply leniency by offering sympathy and moral justification. Experts also strongly agreed that the risk of undue influence is higher among adolescents, individuals with compliant or suggestible personalities, and those with intellectual impairments or diagnosed psychological disorders. Additional findings indicated that experts set a high standard before judging a proposition to be sufficiently reliable for court—and an even higher standard on the question “Would you testify?” Regarding their role as scientific experts, virtually all respondents stated that their primary objective was to educate the jury and that juries are more competent at evaluating confession evidence with assistance from an expert than without. These results should assist trial courts and expert witnesses in determining what aspects of the science are generally accepted and suitable for presentation in court.

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In recent years, numerous cases have been documented involving people wrongfully convicted on the basis of confessions to crimes they did not commit. Within the database of the Innocence Project, false confessions contributed to 28% of the first 347 postconviction DNA exonerations in the United States; in the broader population of 1,927 cases identified by the National Registry of Exonerations, false confessions have contributed to 13% of all wrongful convictions (these numbers were current as of November 24,

2016). Although it is not possible to determine a precise prevalence rate of the problem, research has shown that certain police interrogation techniques are psychologically potent, especially when used in excess; that false confessions occur with some degree of regularity, not only in the United States but all over the world and throughout history; and that the risk is increased by certain factors inherent in vulnerable suspects as well as the conditions of their custody and interrogation (for overviews, see Gudjonsson, 2003; Kassir, 2015; Kassir et al., 2010; Kassir & Gudjonsson, 2004; Lassiter & Meissner, 2010).

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Historical Overview

The scientific study of police interrogations and confessions is grounded both in basic principles of social, cognitive, clinical, and developmental psychology and in actual case studies in which innocent individuals had confessed to crimes they did not commit. In 1908, Harvard psychologist



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Hugo Münsterberg published his classic treatise *On the Witness Stand: Essays in Psychology and Crime*, in which he included a chapter titled “Untrue Confessions.” Münsterberg’s precocious insights did not inspire research within psychology or concern within the law—even in the wake of *Brown v. Mississippi* (1936), a U.S. Supreme Court opinion that banned the use of third-degree interrogation tactics, thereby igniting the development of psychological approaches to interrogation. The shift toward a psychological approach featured the Reid technique, first developed in the 1940s by criminologist Fred Inbau and Chicago Police Officer John Reid. The first edition of their manual, titled *Criminal Interrogations and Confessions*, was published in 1962 (Inbau & Reid, 1962; for an early critique, see Kamisar, 1963; the most recent edition was published by Inbau, Reid, Buckley, & Jayne, 2013; for a historical overview, see Leo, 2008).

Almost 60 years after Münsterberg’s (1908) book, coincident with the U.S. Supreme Court’s landmark opinion in *Miranda v. Arizona* (1966), Bem (1966) published an article in the *Journal of Personality and Social Psychology* titled “Inducing Belief in False Confessions,” in which he reported on a laboratory experiment supporting his self-perception hypothesis that saying (induced confession) can lead to believing (feelings of guilt). Shortly thereafter, Zimbardo (1967) offered a social–psychological analysis of police interrogation tactics in the inaugural issue of *Psychology Today*; Driver (1968) linked the confession-taking process to the psychology of coercion in a *Harvard Law Review* article; and Foster (1969) wrote “Confessions and the Station House Syndrome,” in which he likened police interrogation to a trancelike state of hypnosis.

Following a series of mock jury studies suggesting that juries did not sufficiently discount confession evidence even when it was legally and logically appropriate to do so (Kassin & Wrightsman, 1980, 1981), Kassin and Wrightsman (1985) distinguished three types of false confessions—voluntary, coerced-compliant, and coerced-internalized (also see Kassin, 1997; Wrightsman & Kassin, 1993). Several years later, Kassin and McNall (1991) distinguished between maximization tactics, a technique by which the interrogator exaggerates the strength of the evidence and magnitude of the charges, and minimization tactics, which imply leniency by mitigating the crime and seriousness of the offense. Kassin and Kiechel (1996) then introduced the first ethical laboratory paradigm for experimentation on false confessions. Other laboratory paradigms were soon to follow to study both true and false confessions (e.g., Russano, Meissner, Narchet, & Kassin, 2005) and the extent to which laypeople and police can distinguish true and false confessions and denials (Kassin & Fong, 1999; Kassin, Meissner, & Norwick, 2005; Meissner & Kassin, 2002). These literatures have been viewed within conceptual frameworks drawn from social psychology (Davis & Leo, 2012; Kassin, 2015; Madon, Guyll, Scherr, Greathouse, & Wells, 2012).

In addition to the research rooted in social psychology, scholarly interest in confessions emerged on three other fronts. The first was inspired by *Miranda v. Arizona* (1966), where the U.S. Supreme Court required police to inform suspects of their rights to silence and counsel and to obtain a waiver of these rights “voluntarily, knowingly, and intelligently” (for an overview, see Smalarz, Scherr, & Kassin, 2016, p. 455). Psychologists were concerned that some suspects—for example, because of youth or limited intellect—lacked the capacity to understand and apply these rights. As described in two books, Grisso (1981, 1998) developed four instruments for measuring *Miranda*-related comprehension. Using these measures, research showed that young adolescents do not comprehend their rights (also see Oberlander & Goldstein, 2001; Zelle, Romaine, & Goldstein, 2015).

This *Miranda* research later morphed into a broader set of concerns about the interrogation of juveniles and the developmental risk of false confessions (Grisso et al., 2003; Owen-Kostelnik, Reppucci, & Meyer, 2006; Redlich & Goodman, 2003); the variability in the language, content, and format of *Miranda* warnings (e.g., Rogers, Harrison, Shuman, Sewell, & Hazelwood, 2007; Rogers, Hazelwood, Sewell, Harrison, & Shuman, 2008); stress and other situational factors that can undermine comprehension (Rogers, Gillard, Wooley, & Fiduccia, 2011; Scherr & Madon, 2013); the tactics police routinely use to gain waivers (Leo, 1996; Leo & Thomas, 1998); and the effects of innocence on a suspect’s waiver decision (Kassin & Norwick, 2004; Moore & Gagnier, 2008; Scherr & Franks, 2015).

A second other front in this emerging field originated in Great Britain, where Professor Gisli Gudjonsson and others



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pioneered a clinical, individual-differences approach. During the 1980s, he served as an expert in some high-profile false confession cases in England. Gudjonsson and MacKeith (1982) introduced the term *memory distrust syndrome* to help explain the cognitive changes in suspects that often accompanied their false confessions (for a historical perspective, see Gudjonsson, 2014). Gudjonsson (1989, 1997) also devised a compliance scale and the popular Gudjonsson Suggestibility Scale to measure susceptibility to influence. This research focused on individual differences in personality, mental health, and the tendency to confess or resist confession (for reviews, see Gudjonsson, 1992, 2003). Of importance, this early work played a role in the reform of interrogation practices in England and Wales (Home Office, 1985). These reforms served as a precursor to a current and highly influential approach known as *investigative interviewing*, which developed through a collaboration of police officers, lawyers, and psychologists (for reviews, see Bull, 2014; Williamson, 2006).

The third added development sprang from the work of lawyers, law professors, criminologists, and social scientists studying actual cases. This tradition can be traced to law professor Edwin Borchard's (1932) classic treatise *Convicting the Innocent*. In an important early study of this genre, focused on confessions, Leo and Ofshe (1998) used case materials and secondhand sources to describe 60 cases involving individuals who had confessed and were convicted—and whose innocence was proven, highly probable, or probable (for a critique, see Cassell, 1999; for a rejoinder, see Leo & Ofshe, 2001). Drizin and Leo (2004) then analyzed a larger sample of 125 U.S. cases of *proven* false confessions. A number of important findings were presented—for example, the sample contained a

disproportionate number of juveniles and the interrogation times were excessive.

Perhaps the culminating milestone of this case study approach was born with the 1992 founding of the Innocence Project by Barry Scheck and Peter Neufeld. The purpose of the Innocence Project was to use emerging DNA technology to test biological evidence and reinvestigate prisoners' claims of innocence (Scheck, Neufeld, & Dwyer, 2000). Since that time, nearly 350 people in the United States alone have been exonerated by DNA, including some in high-profile cases—such as the Central Park Jogger Five (Burns, 2011) and the recently overturned conviction of Brendan Dassey (Demos & Ricciardi, 2015).

As noted earlier, false confessions are a contributing factor in 28% of DNA exonerations (www.innocenceproject.org/). This sample has provided an invaluable resource for archival research. In one study, Garrett (2010) found that 95% of false confessions contained accurate details about the crime that were not in the public domain—indicating that these statements were “contaminated” during the process of interrogation (see also Garrett, 2015; Appleby, Hessel, & Kassin, 2013). In another study, Kassin, Bogart, and Kerner (2012) found that most false confessions were followed by one or more other errors, such as invalid forensic science, mistaken eyewitnesses, and informants who lied—suggesting that these statements can corrupt other evidence (see Kassin, 2012). Founded in 2012 at the University of Michigan, the National Registry of Exonerations archives a broader sample of wrongful convictions exposed by any form of evidence, including DNA testing. As of November 24, 2016, the National Registry listed 1,927 wrongful convictions in the United States since 1989 (<http://www.law.umich.edu/special/exoneration/Pages/about.aspx>).

Current Status

Founded in basic psychology, the current research literature is vast, multidisciplinary, and global in reach. Psychologists in this area have drawn on theories and research from numerous areas of specialization, such as the effects of reward and punishment, human decision-making, memory and forgetting, self-regulation, social influence, social perception, childhood and adolescence, personality, and psychopathology. The study of confessions also involves a wide range of methodologies. In addition to examining individual and aggregated case studies, researchers have used naturalistic observations of live and videotaped police interrogations; analyses of archival records; surveys, interviews, and other self-report methods; correlational studies; and laboratory and field experiments.

Spanning over 100 years, and primarily published in books and peer-reviewed journals, there is now a voluminous web of scholarly research surrounding the psychology of confessions. Much of this work examines what *causes*



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people to confess. These studies thus focus on how police make preliminary judgments of truth and deception, a process by which innocent suspects are often misidentified for interrogation, as well as the effects of personal and situational factors that help to induce compliance during the process of interrogation. Other studies examine the *consequences* of confession evidence on juries, judges, witnesses, forensic examiners, and other actors within the legal system. Regarding both causes and consequences, a list of recent studies is presented in [Table 1](#). This literature is not readily accessible to the average person or even to judges and others in the legal system. Hence, there is a long-recognized need for experts to educate triers of fact.

Confession Experts in Court

On March 30, 1988, social psychologist Elliott Aronson testified as an expert on behalf of a Berkeley student named Bradley Page who was tried in California for killing his girlfriend (see [Davis, 2010](#); [Fulero, 2004](#); [Tavris & Aronson, 2007](#)). The only evidence against Page was a police-induced confession—which he immediately recanted, saying he became confused during a lengthy and emotional interrogation, which lasted through the night; in which he was told he had failed a polygraph exam and that his fingerprints were found at the scene, which was not true; in which he was prompted to imagine what happened; and in which he gave four taped statements, culminating in a confession.

Serving as a model for general “framework” testimony ([Faigman & Monahan, 2005](#)), Aronson cited research on conformity, compliance, obedience to authority, and

other forms of social influence to explain how someone like Page might be induced to confess to a crime he did not commit. At his first trial, the jury acquitted Page of first- and second-degree murder but hung on the charge of voluntary manslaughter. Retried on this lesser charge, he was later convicted (for a description of this case and Aronson’s testimony, see [Davis, 2010](#); [Fulero, 2004](#); [Tavris & Aronson, 2007](#)).

Since that time, and with increasing frequency, psychologists and other social scientists in the United States, Canada, and elsewhere have served as expert witnesses in trials that contain disputed confessions. The precise number of these instances is not known. Despite a large body of current research, however—grounded in fundamental principles of psychology and amply illustrated by wrongful convictions (for a three-tiered framework of expert testimony, see [Kassin, 2007](#))—U.S. courts have proved inconsistent in their willingness to admit expert testimony on the psychology of confessions. Some courts had ruled that such testimony is admissible, at least under certain circumstances—as when prosecution hinges solely on the confession. Yet other courts have excluded confession experts—in some instances ruling that their testimony is within the ken of the jury and hence not useful; in other instances ruling that such testimony is not reliable and valid or is not generally accepted (see [Cutler, Findley, & Loney, 2014](#); [Fulero, 2004](#); [Soree, 2005](#)).

Over the years, U.S. courts have regulated expert testimony according to an evolving set of criteria. As enunciated in *Frye v. United States* (1923), the Supreme Court ruled that an expert’s testimony is admissible to the extent that it is generally accepted within the relevant scientific community. Sixty years later, in *Daubert v. Merrell Dow Pharmaceuticals, Inc.* (1993), the Court replaced the *Frye* test in the federal system. Citing Rule 702 of the *Federal Rule of Evidence* (1975; that a qualified expert may testify if such testimony will assist the trier of fact), the *Daubert* Court sought to engage trial judges as more active gatekeepers of scientific evidence by ascertaining whether the proffered testimony is also reliable and valid. Although the Court did not provide a fixed checklist of criteria for making this determination, it offered as factors to consider whether the expert’s propositions are testable, whether they have been tested, whether the methods are valid, whether there is a known error rate, whether the results were published through a process of peer review, and whether it was generally accepted. In *Kumho Tire Co. v. Carmichael* (1999), the Supreme Court extended this gatekeeping function to nonscientific experts as well who offer technical or other specialized knowledge.

Within psychology, a number of criteria favor admissibility. The theories, methods, and statistics used in the study of confessions, as noted earlier, are drawn from basic psychological science. The journals in which much of the research is published are not only peer- and blind-reviewed but selective (as measured by rejection rates) and are high in impact (as



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measured by citation metrics). Indeed, some of this research is funded by the National Science Foundation, the Department of Homeland Security, and other agencies in which peer review is used to make high-stakes funding decisions.

Prima facie indicators of general acceptance within the scientific community also favor expert testimony in this domain. First, this literature is sufficiently mature that it has served as the basis of a recent White Paper of the American Psychology-Law Society (Division 41 of the American Psychological Association [APA]), only the second in its history (Kassin et al., 2010; for a description of the vetting process, see Thompson, 2010). Second, the APA has submitted six amicus curiae briefs to state supreme courts on the subject of confessions. Collectively, these briefs assert that innocent people can be induced to confess to crimes they did not commit; that juries have difficulty assessing confession evidence, which is counterintuitive; and that the research is based on generally accepted methods (*Floyd v. Cain*, 2010; *Michigan v. Kowalski*, 2012; *New York v. Thomas*, 2013; *Rivera v. Illinois*, 2011; *Warney v. New York*, 2010; *Wright v. Pennsylvania*, 2008; see <http://www.apa.org/about/offices/ogc/amicus/index-issues.aspx>). These points were reiterated in APA's (2014) "Resolution on Interrogations of Criminal Suspects."

The Present Research

Although the literature as a whole is generally accepted in the scientific community, the admissibility of confession experts in court remains a source of controversy. Moreover, some propositions are more generally accepted than others, providing a sounder basis in law for expert testimony.

Several years ago, in the context of a similar controversy concerning the admissibility of eyewitness experts, Kassin, Ellsworth, and Smith (1989) surveyed 63 experts for their opinions on 21 statements. As indicated by an 80% level of agreement, nine of these statements were deemed reliable enough for expert testimony. After more than a decade of additional research and courtroom activity, a follow-up survey of 64 experts indicated that 16 of 30 statements tested were deemed reliable enough for expert testimony (Kassin, Tubb, Hosch, & Memon, 2001). By providing empirical evidence of general acceptance, these surveys have proved useful to judges who rule on the admissibility and scope of expert testimony, psychologists determining the appropriate contents of their testimony, and attorneys seeking to discredit experts who misrepresent the field. The net effect, it was hoped, was to yield expert testimony that more accurately reflects the state of the science.

In light of a recent surge in research and practice, the time has come to survey experts in the psychology of confessions to discern the general acceptance of various empirical propositions. We identified a population of experts who had a Ph.D. and who had published on confessions or had testified in court as a confession expert. We then generated a Qualtrics survey instrument online and directed respondents via a link to indicate their opinions on 30 relevant items. These items consisted of forensic-specific statements pertaining to deception detection, interrogations, and confessions, as well as general principles of psychology relevant to these issues. In addition to characterizing each item for how reliable it is, whether it is reliable enough for experts to present at trial, and whether they would personally be willing to testify to that item, respondents indicated whether they think most jurors believe the item to be true as a matter of common sense. Afterward, we asked general questions concerning each respondent's educational background, nationality, area of specialization, publications, and courtroom experiences, as well as perceptions of the role of a confession expert and whether his or her testimony would assist the trier of fact.

Method

The Experts

A total of 131 experts from the scientific community were identified as having fulfilled two sets of objective criteria: (1) holding a Ph.D. in psychology, sociology, criminology, criminal justice, or another empirical social science, and (2) having published during the previous 15 years, in a peer-reviewed journal, with the subject "interrogations" and/or "confessions" in the title ("Miranda," "interviews," and "deception detection" alone were not sufficient; on their own, these areas of research often do not intersect with the subject matter of confessions) or (3) they had testified as an expert witness on the issue of police interrogations and

Table 1
Current Research on the Causes and Consequences of Confession: List of Topics and Citations

Topic	Recent citations
Causes of confessions	
Generalized police bias to view others as deceptive	Masip et al. (2016)
Approaches to improve lie detection	Granhag et al. (2015); Hartwig & Bond (2014); Vrij et al. (2017)
Interrogation tactics used with juvenile suspects	Cleary (2014); Cleary & Warner (2016); Feld (2013)
Interrogation tactics used with adult suspects and witnesses	Kelly et al. (2016), (2013), (2015); Luke et al. (in press); Moore et al. (2014); Trainum (2016)
Effects of interrogation tactics on true and false confessions	Meissner et al. (2014)
Effects of interrogation tactics on perceptions of police	Arndorfer et al. (2015)
Uses of rapport during interrogation	Alison et al. (2013); Vallano & Schreiber Compo (2015)
Mimicry of language style	Richardson et al. (2014)
Human intelligence (HUMINT) collection	Evans et al. (2014); Goodman-Delahunty et al. (2014); Granhag et al. (2015); Oleszkiewicz et al. (2014); Redlich et al. (2014); Russano et al. (2014); Tekin et al. (2015)
The effects of video recording on police interrogator behavior	Kassin et al. (2014, in press)
Effects of chronotype asynchrony and sleep deprivation on false confessions	Frenda et al. (2016); Scherr et al. (2014)
Voluntary false confessions by juveniles intended to protect others	Malloy et al. (2014); Pimentel et al. (2015)
Rich false memories for crimes	Scoboria et al. (2017); Shaw & Porter (2015)
The phenomenology of innocence	Guyll et al. (2013); Scherr & Franks, (2015); Scherr et al. (2016)
Cognitive processes underlying the decision to confess	Madon et al. (2012), (in press); Yang et al. (2015), (2017)
Consequences of confessions	
Social and emotional consequences of partial confessions	Peer et al. (2014)
Juror perceptions of coerciveness, credibility, and guilt	Appleby & Kassin (2016); Greenspan & Scurich (2016); Henderson & Levett (2016); Palmer et al. (2016); Shaked-Schroer et al. (2015); Woestehoff & Meissner (2016); Woody et al. (2014)
Secondary confessions	Wetmore et al. (2014)
Effects of confessions on alibi witnesses	Marion et al. (2016)
Effects of confessions on perceptions of forensic evidence	Kukucka & Kassin (2014); Kassin et al. (2013)
Factors influencing guilty pleas	Dervan & Edkins (2012); Malloy et al. (2014); Redlich & Shteynberg (2016)
The postexoneration stigma of having confessed	Clow & Leach (2015)

confessions. Experts were thus identified by virtue of either their research or courtroom experience.

All respondents identified by these criteria were e-mailed links to our online survey (five requests bounced back; for three of these, we could not locate a forwarding address). To help ensure the “purity” of our sample, we preceded the questionnaire by an opt-out option that enabled objectively eligible respondents to decline participation if they did not self-identify as experts. Five individuals opted out at this stage. Among the remaining 123 eligible respondents, 87 submitted surveys (84 completed; three partial), yielding a 70.73% response rate.¹

Consistent with our eligibility criteria, all but one respondent who reported on their educational background had a Ph.D. (the one lone exception had a Psy.D.); three also had a J.D. For those within psychology who answered the question, primary areas of specialization included social–personality ($n = 25$), cognitive ($n = 11$), developmental ($n = 9$), clinical ($n = 9$), neuroscience ($n = 1$), and “other” ($n = 19$). Within the latter category, 17 identified their area of specialization as some variant of psychology and law (e.g., forensic or legal psychology, clinical forensic). The others self-identified as “experimental” and as “social and cognitive.”

In other ways, the demographic makeup of our sample was diverse. Whereas 47 of all respondents (61%) were

employed in the United States, others were employed in the United Kingdom ($n = 10$); Canada ($n = 8$); Australia ($n = 4$); Sweden ($n = 3$); and Japan ($n = 2$); and for the Netherlands, Spain, and Cyprus, $n = 1$ (10 respondents did not answer this question). In a separate question, we also asked respondents for their country of origin. Whereas the United States was the most frequently cited homeland among those who answered this question ($n = 45$), others included the United Kingdom ($n = 13$); Canada ($n = 6$); Sweden ($n = 3$); Japan ($n = 2$); and the Netherlands ($n = 2$); and for Germany, Greece, Nicaragua, South Africa, Spain, and Sri Lanka, $n = 1$.

Procedure

To each prospective respondent, the first two authors sent an e-mail containing a link to a Qualtrics-generated survey. Approximately two weeks later, we sent out a reminder. This e-mail read as follows:

¹ Immediately upon submitting their survey, four participants contacted the authors to ask whether they could retake the questionnaire in light of confusion on one or more answers (the instrument did not enable respondents to toggle back and forth). These requests were automatically granted, and initial responses were deleted.

In view of the controversy surrounding the use of experts on police interviews, interrogations, and confessions, we are conducting a survey of what researchers think about various relevant phenomena. Some pertain to general principles of psychology; others are specific to the forensic domain. It is our hope that the results will provide the Courts with a much-needed measure of general acceptance within the scientific community. With that as our objective, we would very much like to include your opinions in this survey.

Prospective respondents were informed that they were invited to complete this survey because they had met the eligibility criteria (Ph.D. in a relevant field and one or more relevant publications during the past 15 years or relevant experience as an expert witness). At that point, we noted the following:

Although you have been selected according to these criteria, it is possible that you do not think of yourself as an expert in this area. We respect that. In that case, please email us to opt out of the survey. Or, you may opt out anonymously by clicking on the link and answering an initial question about your knowledge of the literature.

Those who continued were presented with an informed consent statement. For confidentiality purposes, we did not ask respondents who continued to identify themselves on the questionnaire.

The Questionnaire

Modeled after eyewitness surveys (Kassin et al., 1989, 2001), our questionnaire consisted of two parts: Part 1 sought respondents' opinions of the confessions literature. This task was preceded by the following instruction:

You will find 30 single-sentence propositions of relevance to the psychology of interviews, interrogations and confessions. Please read each statement carefully. Then answer the questions that follow based on your knowledge of the research literature (i.e., case studies, archival analyses, basic psychology, and laboratory and field studies).

The 30 propositions tested concerned the topics of *deception detection* (e.g., "Trained police can distinguish between truths and lies at high levels of accuracy"), *police interrogation techniques* (e.g., "Minimization tactics that communicate sympathy and moral justification for a crime lead people to infer leniency upon confession"), *confessions* (e.g., "Compared to adults, adolescents who are interrogated are at greater risk to confess to a crime they did not commit"), and relevant *general principles of psychology* (e.g., "In decision making, people are influenced more by immediate outcomes than by longer term consequences"). Items from these four categories were interspersed throughout the questionnaire. The full list appears in Table 2.

For each proposition, respondents answered four questions. The first asked them to characterize the empirical evidence: "In your opinion, how empirically reliable is this

proposition?" A continuum of six response options followed: (1) the evidence suggests that the reverse is probably true, (2) the evidence does not support it, (3) the evidence is inconclusive, (4) the evidence tends to favor it, (5) the evidence is generally reliable, and (6) the evidence is very reliable. A seventh "I don't know" response option was also included. This question was followed by three yes-no questions. Specifically, "Do you think this proposition is reliable enough for experts to present in trial testimony?" "Under the right circumstances, would *you* be willing to testify at trial that this proposition is reliable?" and "In your opinion, do most jurors believe this proposition to be true as a matter of common sense?"

In Part 2 of the survey, respondents reported on their own relevant experiences. To assess their experiences in court, we asked them to estimate the number of times they were asked to testify, agreed to testify, and actually testified (1) *for the prosecution* at a criminal hearing or trial; (2) *for the defense at a criminal hearing or trial*; (3) *for the plaintiff* at a post-exoneration *civil hearing or trial*; and (4) *for the defendant* at a post-exoneration *civil hearing or trial*. To assess their scholarly achievements, we asked respondents to estimate their total number of publications in peer-reviewed journals or law reviews; books; edited book chapters; articles in newspapers, newsletters, and magazines; blog posts; and other types of publications.

Finally, we assessed beliefs on three questions of relevance to expert testimony. The first was, "In your opinion, are juries better equipped to evaluate confession evidence with or without the aid of a competent expert?" (the option no difference was also included). Second, we asked, "What do you see as a primary role of a confession expert: To educate the judge and jury, to assist a particular party, or something else?" Third, we asked respondents to list any confession-related topics about which they had testified that were not covered in the survey.

Results

The Experts

The experts in our sample were a prolific group in their scholarly productivity (the numbers that follow are totals, not strictly limited to the psychology of confessions). Every respondent reported having at least one publication. Over types of outlets, respondents reported a mean of 68.14 publications ($SD = 71.41$). The range being substantial on this measure and others, it is perhaps more appropriate to note that the median was 43. Broken down by type of publication, we found that the total was based on a mean of 43 journal articles ($SD = 49.82$, median = 25), broken down by type of publication as follows: $M = 2.12$ law reviews ($SD = 6.09$, median = 0), $M = 3.13$ books ($SD = 5.99$, median = 1), $M = 14.08$ edited book chapters ($SD =$

Table 2
Confession-Relevant Topics and Statements Tested in the Survey

Topic	Statement
1. Lie detection (general)	In general, laypeople are highly accurate judges of truth and deception.
2. Adolescence	Compared to most adults, adolescents exhibit “immaturity of judgment” in their decision-making.
3. False evidence ploy	Presentations of false incriminating evidence during interrogation increase the risk that an innocent suspect would confess to a crime he or she did not commit.
4. <i>Miranda</i> waivers (innocence)	Compared to guilty suspects, innocent ones are more likely to waive their <i>Miranda</i> rights.
5. Reward and punishment	In general, people’s behavior is strongly influenced by their expectations of reward and punishment.
6. Lie detection (police)	Trained police can distinguish between truths and lies at high levels of accuracy.
7. Sleep deprivation	Sleep deprivation lowers people’s resistance to influence and impairs complex decision-making.
8. Explicit promises	Explicit promises of leniency or immunity during interrogation can lead an innocent person to confess to a crime he or she did not commit.
9. Minimization	Minimization tactics that communicate sympathy and moral justification for a crime lead people to infer leniency upon confession.
10. Delay discounting	In decision-making, people are influenced more by immediate outcomes than by longer term consequences.
11. Misinformation effect	Misinformation about an event can alter a person’s memory for that event.
12. Intellectual impairment	Individuals who have intellectual disabilities are particularly vulnerable to the pressures of social influence.
13. Fundamental attribution error	As a general rule, observers tend to underestimate the effects of situational factors on the behavior of other people.
14. “Normal” false confessions	Innocent adults without special vulnerabilities (e.g., mental impairments) cannot be induced to give false confessions.
15. Camera perspective	Videotaped statements recorded from a suspect-focus camera perspective are perceived as more voluntary than those shown from an equal-focus perspective.
16. Personality traits	Individuals with compliant or suggestible personalities are particularly vulnerable to influence during an interrogation.
17. Juvenile confessions	Compared to adults, adolescents who are interrogated are at greater risk to confess to a crime they did not commit.
18. Behavioral symptoms	People can be trained to distinguish between truths and lies at high levels of accuracy by observing nonverbal symptoms of anxiety.
19. Obedience to authority	Authority figures can produce illicit acts of obedience from people through a process of gradual escalation.
20. Microexpressions	People can be trained to distinguish between truths and lies at high levels of accuracy by learning how to detect microexpressions in the face.
21. Psychological disorders	Individuals with diagnosed psychological disorders are particularly vulnerable to influence during an interrogation.
22. Explicit threats	Threats of physical violence and punishment during interrogation can lead an innocent person to confess to a crime he or she did not commit.
23. Public setting	Conducting an interview in a public place, as opposed to an interrogation room, will increase the risk that an innocent suspect would confess to a crime he or she did not commit.
24. Confession details	Confessions can be verified as true by the details that they contain about the crime.
25. Voluntary false confessions	Innocent people never give false confessions “voluntarily” – without pressure from police.
26. <i>Miranda</i> as a safeguard	<i>Miranda</i> rights to silence and to counsel provide an adequate safeguard against coercive interrogations.
27. Common sense	The notion that someone can be induced to confess to a serious crime he or she did not commit is well known to laypeople as a matter of common sense.
28. Enhanced interrogations	Enhanced interrogation techniques (i.e., torture) can lead an innocent person to confess or otherwise provide unreliable information.
29. Investigative interviewing	Investigative interviewing (e.g., PEACE) elicits more diagnostic outcomes from suspects than does a highly confrontational approach to interrogation (e.g., the Reid technique).
30. Distinguishing confessions	In the absence of other evidence, people can distinguish between true and false confessions at high levels of accuracy.

Note. PEACE = Preparation and Planning, Engage and Explain, Account, Clarify and Challenge, Closure, Evaluation.

19.90, median = 6), $M = 5.20$ news or magazine articles ($SD = 8.05$, median = 2), and $M = .86$ blog posts ($SD = 3.88$, median = 0).

Many respondents were also quite actively involved as expert witnesses in the legal system. Table 3 shows that within our sample of 87 respondents, 87.3% were asked to testify as experts on at least one occasion. The total estimated number of requests was 3,889, the vast majority (95.83%) of which were in criminal versus civil cases. More specifically, 87.40% of all estimated requests came from criminal defense lawyers. Overall, respondents said that they agreed to testify an estimated 57% of the time.

It is interesting to note that the self-reported agreement rate was significantly lower when the requests came from criminal defense lawyers ($M = 53%$), which were more numerous, than when they came from prosecutors ($M = 84%$; $z = 10.84$, $p < .0001$), civil plaintiffs ($M = 88.9%$; $z = 7.66$, $p < .0001$), or civil defendants ($M = 73.3%$; $z = 2.71$, $p = .01$; see Table 3). Finally, respondents estimated that they actually testified in 74.4% of all cases in which they had agreed. Likely reflecting the fact that postexoneration civil suits often settle without trial, the actual testimony rates were substantially higher when respondents had agreed to testify in criminal cases ($N =$

Table 3
Estimated Number of Times Respondents Were Asked to Testify, Agreed to Testify, and Actually Testified in Court

Variable	Criminal				Civil				Total	
	Prosecution		Defense		Plaintiff		Defense			
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Asked	328		3,399		117		45		3,889	
Agreed	276	84.1	1,802	53.0	104	88.9	33	73.3	2,215	57.0 ^a
Actual	246	89.1	1,354	75.1	30	28.8	17	51.5	1,647	74.4 ^b
Yield		75.0		39.8		25.6		37.8		42.4 ^c

Note. Respondents who provided only partial data were removed to avoid distorting the percentages.
^a Agreement rate (percentage of times experts agreed to testify when asked). ^b Actual rate (percentage of times experts testified after having agreed to do so). ^c Total yield (percentage of times experts who were asked ultimately testified in court).

1,600, or 97.15%; *Ms* = 89.1% and 75.1% for the criminal prosecution and defense, respectively) than in civil cases (*N* = 47, or 2.85%; *Ms* = 28.8% and 51.5% for civil plaintiffs and defendants, respectively; *z* = 11.08, *p* < .0001).

To sum up: Collectively, the experts in our sample estimated that they had testified in 1,647 cases. The lion’s share of this activity occurred in the criminal domain—and far more often on behalf of the defense than the prosecution. It is clear, however, that this latter difference is attributable to the disparate number of requests for expert testimony, primarily for the criminal defense, and not the agreement rate once requests were made. Indeed, Table 3 shows that the *Total Yield*—as measured by the percentage of experts asked who ultimately testified—was higher, not lower, when the requests were made by criminal prosecutors (yield = 75%) than by all other parties (39.8% for requests made by criminal defendants, *z* = 12.28, *p* < .0001; 25.6% by civil plaintiffs, *z* = 9.44, *p* < .0001; and 37.8% by civil defendants, *z* = 5.13, *p* < .0001).

Judgments of Confession-Relevant Propositions

For each of the propositions listed in Table 2, we asked respondents to (1) characterize the empirical reliability of the phenomenon described, (2) make the all-important judgment as to whether that phenomenon is sufficiently reliable to present in court, (3) indicate whether they would personally be willing to testify as to its reliability, and (4) indicate whether they thought jurors were aware of the phenomenon as a matter of common sense. The forensically significant binary responses to these propositions—beginning with the all-important threshold judgment of whether the phenomenon was sufficiently reliable to present in court—are presented in Table 4.²

The courts have never quantified the minimum consensus needed to constitute “general acceptance” and what it means to pass or fail the *Frye* test (conceptualizing general acceptance as a “pass” or “fail” steady state is also not compatible with the evolution of knowledge in the sciences). Using as

a precedent the 80% criterion set in prior eyewitness expert surveys (Kassin et al., 1989, 2001), our results showed a high level of agreement for many propositions. Rank-ordering the 30 statements according to the all-important judgment of reliability, Table 5 shows that 16 statements elicited at least an 80% level of agreement that they were sufficiently reliable for expert testimony. Three statements elicited a sub-20% rate, thus indicating a high level of agreement that these propositions are not sufficiently reliable. The remaining 11 statements yielded more variable responses, suggesting a relative lack of consensus.

Turning to the specific propositions, it is noteworthy that extremely high levels of consensus were exhibited for the confessions-relevant *basic principles of psychology* that we had tested. In particular, experts were in strong agreement with regard to the misinformation effect on memory (100%), the effects of sleep deprivation on decision-making (98%), the susceptibility of people with intellectual impairments to social influence (95%), the fundamental attribution error (94%), the effects of reward and punishment expectations on behavior (89%), the effects of gradual escalation on obedience to authority (86%), the relative power of immediate versus delayed consequences on decision-making (84%), and the immaturity of judgment exhibited by adolescents relative to adults (79%). As illustrated by Aronson’s 1988 expert testimony in the California trial against Bradley Page described earlier (e.g., Davis, 2010), the principles of psychology of relevance to confessions are amply supported by the scientific community.

Shifting from basic psychology to the empirical propositions on police interrogations and confessions, we found that some important results emerged. Consistent with both the law of the land and common sense, respondents identified explicit promises of leniency, explicit threats of physical violence or punishment, and “enhanced” interrogations as risk factors for false confessions (99%, 95%, and 92%,

² The full distribution of 6-point responses to the reliability assessment question is available in the online supplemental materials.

Table 4
Percentage of Respondents Who Judged Each Proposition as Sufficiently Reliable for Expert Testimony, Were Willing to Testify on It, and Believed Jurors Were Already Informed via Common Sense

Topic	Reliable enough?	Would you testify?	Common sense?
Misinformation effect	100	87	16
Explicit promises	99	88	14
Sleep deprivation	98	82	68
Explicit threats	95	82	65
Intellectual impairment	95	81	66
False evidence ploy	94	87	11
Fundamental attribution error	94	83	03
Juvenile confessions	94	80	37
Enhanced interrogations	92	80	65
Minimization	91	79	16
Personality traits	91	74	37
Reward and punishment	89	76	78
Obedience to authority	86	70	17
Investigative interviewing	85	76	03
Psychological disorders	85	68	66
Delay discounting	84	67	22
Adolescence	79	70	79
<i>Miranda</i> waivers-innocence	73	66	21
Camera perspective	73	60	04
"Normal" false confessions	38	33	59
Lie detection-police	35	31	73
Lie detection-general	33	25	71
Voluntary false confessions	26	16	70
Common sense	26	21	25
<i>Miranda</i> as adequate safeguard	25	17	74
Distinguishing confessions	28	20	63
Behavioral symptoms	23	20	71
Confession details	19	18	83
Microexpressions	12	09	65
Public setting	09	06	06

Note. Items are listed in descending order according to the percentage of "yes" responses on the "Reliable Enough?" question.

respectively). It is noteworthy, however, that in sharp contrast to U.S. case law that sanctions police use of these tactics, respondents also endorsed as reliable the proposition that the false evidence ploy increases the risk of false confessions (94%) and that minimization leads people to infer leniency upon confession (91%). Because the false evidence ploy and minimization are staples of an American-style interrogation, it is therefore not surprising that most respondents were of the opinion that investigative interviewing elicits more diagnostic outcomes than does the confrontation-based Reid technique (85%). In light of the common practice of isolating suspects in a private interrogation room, it is also not surprising that few respondents (9%) agreed with the counterproposition that conducting interrogation in a public space increases the risk of a false confession.

From personality, clinical, and developmental perspectives, four items addressed individual differences in suspect vulnerabilities. Paralleling the research literature, respondents agreed that the risk of undue influence during inter-

rogation was higher among adolescents than adults (94%), among individuals with compliant or suggestible personalities (91%), and among individuals with diagnosed psychological disorders (85%). Respondents also strongly agreed that individuals with intellectual impairments in general are highly susceptible to social influences (95%). In light of these accepted propositions, it is important to note that respondents did not subscribe to the proposition that innocent adults without special vulnerabilities cannot be induced to give false confessions (38%).

Two items pertained to *Miranda* requirements. Overall, reflecting a nascent literature on the phenomenology of innocence (Kassin & Norwick, 2004; Moore & Gagnier, 2008; for an overview, see Kassin, 2005; for other implications, see Gyll et al., 2013; Perillo & Kassin, 2011; Scherr & Franks, 2015), 73% of respondents endorsed the proposition that innocent suspects are more likely than are guilty suspects to waive their rights. In light of the landmark significance of *Miranda v. Arizona* (1966; for an overview of 50 years of research, see Smalarz et al., 2016), it is noteworthy, too, that only 25% of experts saw as reliable the proposition that *Miranda* rights to silence and to counsel provide an adequate safeguard against coercive interrogations.

On propositions addressing lay perceptions of confessions, respondents exhibited little confidence in the notion that people can evaluate confession evidence. Consistent with research on intuitive beliefs (Blandón-Gitlin, Sperry, & Leo, 2011; Henkel, Coffman, & Dailey, 2008; Leo & Liu, 2009), only 26% of experts believed that false confessions are known to the average person as a matter of common sense. In a similar way, consistent with published studies involving not only college students but experienced investigators (Honts, Kassin, & Craig, 2014; Kassin et al., 2005), only 28% believed that people can accurately distinguish between true and false confessions.

No doubt familiar with published research indicating that many false confessions were contaminated by the process of interrogation, as indicated by the fact that they contain

Table 5
Across Topics, Percentage of Experts Who Characterized Propositions in Varying Ways to Be Sufficiently Reliable and Would Themselves Testify

Characterization	Reliable enough?	Would you testify?
Reverse probably true	25.4	22.1
Evidence does not support	27.2	20.1
Evidence is inconclusive	8.5	7.5
Evidence tends to favor	72.5 _a	53.6 _b
Evidence is generally reliable	94.0 _a	72.4 _b
Evidence is very reliable	94.0	93.0

Note. Within each row, different subscripts indicate that the judgments were significantly different ($p < .05$).

accurate crime facts that were known to police but were not in the public domain (Garrett, 2010, 2015), only 19% of respondents endorsed as reliable the proposition that confessions can be verified as true by the crime details they contain. Regarding videotaped confessions and informed by a good deal of research (Lassiter & Irvine, 1986; for a review, see Lassiter, Geers, Munhall, Handley, & Beers, 2001), 73% saw as sufficiently reliable the proposition that videotaped statements are perceived as more voluntary when the camera is focused on only the suspect—as opposed to an equal focus on both the suspect and interrogator.

Finally, we tested for aspects of deception detection. In training and in practice, police often commence interrogation after forming an impression that a suspect is lying. Authors of the Reid technique have claimed police can be trained to use nonverbal demeanor cues to make highly accurate judgments of truth and deception (Inbau et al., 2013). Yet scientific research has cast serious doubt as to the efficacy of these methods (Kassin & Fong, 1999; Masip, Herrero, Garrido, & Barba, 2011; Meissner & Kassin, 2002; Vrij, Mann, & Fisher, 2006; for a review, see Vrij & Granhag, 2012; for a defense of the Reid technique, see Buckley, 2012). We asked respondents four questions of relevance to this issue. Paralleling the research literature, they exhibited a low level of consensus for the proposition that people in general can accurately distinguish truth and deception (33%), no significant increase to the notion that trained police can do the same (35%), and no acceptance of the Reid technique's reliance on behavioral symptoms (23%). Inspired by unverified claims concerning the use of microexpressions in deception detection (e.g., Ekman & Matsumoto, 2011), we included an item on the effectiveness of training in this approach and found strong agreement for the opinion that it is not sufficiently reliable (12%).

What Constitutes Sufficient Reliability?

In determining the substance of their testimony, psychologists and other scientific experts invariably must decide in relation to some personal threshold which conclusions in their respective fields are sufficiently reliable and which are not. How clear and convincing must a body of research be for experts to see it as eligible for presentation in court and be willing to testify to it themselves? To answer these questions, we associated each respondent's 6-point estimates of reliability on each item with that same respondent's yes–no judgments of whether that item was sufficiently reliable and whether they would themselves testify on it. We then combined these data across respondents and across items, yielding the distribution shown in Table 5.

Overall, our findings replicated two patterns observed in surveys of eyewitness experts. First, regarding sufficiency judgments, almost no respondents judged as reliable enough for expert testimony propositions for which they had

deemed the data *inconclusive* (8.5%). A larger percentage judged as sufficient propositions for which the *reverse is probably true* (25%) or the *evidence does not support it* (27%)—presumably to say just that. At the upper end of the continuum, respondents were more likely to judge propositions as sufficiently reliable when the evidence *tends to favor* (73%), is *generally reliable* (94%), or is *very reliable* (94%).

A second interesting pattern concerns the differences in respondents' judgment of whether a proposition is sufficiently reliable and whether they themselves would testify on it. Table 5 shows that “Is it reliable enough?” and “Would you testify?” yielded similarly negative results for propositions that lacked empirical support: Respondents set more stringent standards for when they would testify than for when there was a sufficient basis for testimony. When indicating that the evidence only *tends to favor*, 73% said the proposition was sufficient in general for expert testimony, but only 54% said that they themselves would testify ($p < .0001$). When indicating that the evidence is *generally reliable*, 94% said it was sufficient, but only 72% said they would testify ($p < .0001$). Only when characterizing the evidence as *very reliable* did this disparity vanish—94% to 93%, respectively ($p = .21$). That respondents set more stringent standards for when they personally would testify can also be seen in Table 5, which shows that the “reliable enough” question elicited a higher proportion of *yes* responses than did the “Would you testify?” question across all 30 propositions ($M = 19.55$, $SD = 3.59$, and $M = 16.69$, $SD = 5.52$, respectively), $t(48) = 3.87$, $p < .0001$.³

Finally, we examined individual differences in the willingness to testify to the various propositions. As noted earlier, our respondents constituted a prolific group of confession-relevant scholars in terms of both their research publications and courtroom experience (total number of publications and courtroom appearances were positively but not significantly correlated; $r = .17$, $p = .15$). We correlated these metrics of productivity with the number of propositions out of 30 to which respondents said they would be willing to testify. Neither individual differences metric correlated with this latter measure ($r = .02$, $p = .86$, and $r = .10$, $p = .49$, for publications and courtroom appearances, respectively).

³ Respondents with missing data were excluded from this analysis. To include all participants, we examined the proportion of *yes* responses to all items answered. The pattern of results was the same: Participants judged 66.7% of the items to which they responded as reliable enough for court ($SD = .132$), but they were willing themselves to testify to only 55.8% of these items ($SD = .204$). This difference was significant, $t(86) = 5.10$, $p < .001$, $d = .55$. Regarding this disparity, it is important to note the possibility that an expert might not testify to a proposition not because it lacks reliability but because of a perceived lack of expertise.

Perceptions of Common Sense

For each item, respondents were asked for their opinion of whether most jurors believe the proposition to be true as a matter of common sense. Across items, Table 4 shows that this question elicited a great deal of variability. On the one hand, a majority of respondents believed that jurors, like experts, are aware that adolescents in general lack maturity of judgment (79%); that human behavior is influenced by expectations of reward and punishment (78%); that sleep deprivation impairs decision-making (68%); that people with intellectual disabilities are vulnerable to social influence (66%); and that the risk of false confessions is increased by psychological disorders (66%), enhanced interrogation tactics (65%), and explicit threats of harm and punishment (65%)—and not by interrogating suspects in a public setting (6%).

On the other hand, relatively few respondents believed that jurors were aware of the high-consensus propositions that people in general are more responsive to consequences that are immediate rather than delayed (22%); that innocent suspects are more likely than perpetrators to waive their *Miranda* rights (21%); that authority figures can produce illicit obedience (17%); that misinformation can alter a person's memory (16%); of importantly, that the risk of false confessions is increased by minimization (16%), explicit promises (14%), and the presentation of false evidence (11%); and that investigative interviewing elicits more diagnostic outcomes than does the confrontational approach to interrogation (3%). Within our list, respondents saw as the least intuitive proposition social psychology's fundamental attribution error (3% vs. 94% among experts).

In addition to indicating the degree to which jurors are purportedly aware or not aware of generally accepted propositions, our survey revealed a number of ways in which jurors may harbor erroneous beliefs and misconceptions. At the top of the list is the misconception that confessions can be validated by the details they contain (83% vs. 19% among experts). Aware of findings indicating the presence of crime details in proven false confessions, most respondents characterized as not reliable, while recognizing as counterintuitive, the proposition that "Confessions can be verified as true by the details that they contain about the crime." It is important to note that detailed confessions sometimes provide new information—as when a suspect leads the police to a body, a weapon, a victim's belongings, or other new evidence that convincingly corroborates his or her admission of guilt. As worded, however, the confession details item did not invoke these latter instances.

Other items as well exposed possible lay misconceptions. Specifically, respondents saw as erroneous common sense the propositions that *Miranda* serves as an adequate safeguard (74%); that police and laypeople are accurate judges of truth and deception (73% and 71%, respectively); and

that deception detection accuracy is increased by training in the use of behavioral symptoms, as seen in the Reid technique (71%; this result is consistent with research showing that this approach merely echoes common sense; see Masip et al., 2011) or by microexpressions in the face (65%; despite the claim often made—e.g., Ekman & Matsumoto, 2011—this link has not been supported by scientific research).

The Role of a Confession Expert

What is the proper role of a confession expert? According to Rule 702 of the *Federal Rules of Evidence* (1975), a principle criterion for the admission of expert testimony is that it assists the trier of fact. In Bayesian terms, this would suggest that expert testimony be admitted to the extent that it revises what jurors already believe via common sense. In the ideal, then, one might argue that confession experts, like other scientific experts, should adopt an impartial posture, aiming to educate the judge and jury about the relevant science. Practically speaking, however, experts are almost always hired by one party in a dispute—seldom serving as neutral court-appointed experts. To assess the extent to which experts subscribe to these contrasting perspectives, we asked whether the primary role of a confession expert is to educate the judge or jury or assist a particular party (an *other* option was also provided). Among those who answered the question, 79 (99%) selected the educational role. One respondent selected the *other* option and essentially described the same function: "To inform on the state-of-the-art of science in the field of confession research."

Finally, we asked respondents to speculate on whether they believed that a confession expert's testimony would assist the jury. Our item-by-item commonsense results reveal a number of confession-related propositions that experts see as (1) highly reliable but unknown to the general public or (2) unreliable but erroneously believed by the general public. These areas of mismatch—due to ignorance or misconception—can be taken to suggest that expert testimony on confessions would prove informative. We also specifically asked respondents "Are juries better off with or without a competent expert?" Among those who answered, 75 (96%) said that juries were better off with a competent expert (one said without; two said it makes no difference).

Discussion

At present, eight states use the *Frye* test as a standard for admitting scientific evidence; most other states have adopted *Daubert*, in whole or in part (three states use their own standards of admissibility). Either way, directly or by proxy, the consensus of opinions within the scientific community is a key metric. In light of these standards, and Federal Rule of Evidence 702, and in the context of mixed

rulings within U.S. courts, the present study surveyed the opinions and practices of confession experts. Hence, we sought to determine who they are, their assessments of relevant principles of basic psychology and more focused applied research, and their views about testifying in court. This being the first expert study of its kind, the results are illuminating.

To begin with, it is clear that our sample represents a diverse blue-ribbon panel of Ph.Ds., mostly in areas of psychology from several countries. Reflecting on both our qualifying eligibility criteria and a high response rate of over 70%, our sample consisted of highly productive researchers, some of whom also have courtroom experience. Although most of this latter activity occurred on behalf of criminal defendants, that concentration reflects more on the source of the requests for expert testimony than on a selective willingness to testify in criminal cases over civil or for defendants rather than prosecutors.

Our approach was based on the position that general acceptance should be considered not for the science as a whole but rather on a proposition-specific basis. Toward this end, we tested opinions on 30 propositions. The contents of these findings were informative. Table 5 shows that a heterogeneous total of 16 items were judged reliable enough for presentation in court by at least 80% of respondents. In order of their endorsement rates, these items pertained to the misinformation effect, explicit promises, sleep deprivation, explicit threats, intellectual impairment, the false evidence ploy, the fundamental attribution error, juvenile confessions, enhanced interrogations, minimization, compliant and suggestible personality traits, reward and punishment, obedience to authority, investigative interviewing, psychological disorders, and delay discounting. An additional three statements were judged to be not sufficiently reliable by at least 80% of respondents. These items—worded in ways that contradict the research literature—pertained to conducting interrogations in a public setting, use of microexpressions in deception detection, and the diagnostic value of confession crime details. By a lesser two thirds majority, respondents also saw as reliable the propositions concerning adolescence, innocent waivers of *Miranda*, and camera perspective biases. At least two thirds also saw as not sufficiently reliable the propositions concerning behavioral symptoms in deception detection, *Miranda* as a safeguard, voluntary false confessions, false confessions as common sense, the distinguishability of true and false confessions, and people's deception detection abilities.

Two sets of findings that elicited high levels of agreement are noteworthy. Both pertain to risk factors associated with false confessions. Mirroring the law, respondents identified explicit promises of leniency, threats of harm or punishment, and “enhanced” interrogation as factors that put innocent people at risk. In addition, however, and in sharp

contrast to U.S. courts that have sanctioned these types of trickery and deception (see *Frazier v. Cupp*, 1969), our experts judged the tactic of presenting suspects with false evidence (e.g., outright lies about DNA, fingerprints, witnesses, bogus polygraph results) as equally perilous. They also judged at a high level of agreement that the common use of minimization themes—by which interrogators suggest to the suspect moral justification for the crime (e.g., suggesting that it was an accident or provoked)—can lead people to infer leniency upon confession. Because these tactics are staples of the Reid technique (Inbau et al., 2013), the results indicate that the scientific community is critical of this approach to interrogation. The second noteworthy set of findings concerns the consensus among experts concerning the types of people most vulnerable in an interrogation setting. Paralleling research on individual differences, experts strongly agreed that the risk of undue influence is higher among adolescents, individuals with compliant or suggestible personalities, and those with intellectual impairments or diagnosed psychological disorders. As such, it appears that psychological assessments and testimony on these issues—often proffered by clinical, personality, and developmental psychologists—is also generally accepted.

By establishing an empirical basis for consensus within the scientific community—as opposed to the mere proclamations of individual experts—these results should assist trial courts in determining which propositions are generally accepted and which are not. Similarly, these results should help shape the contents of how experts testify and the cross-examination of those whose opinions stray into areas not generally accepted. In short, we believe that the present survey will encourage expert testimony that more accurately represents the underlying science. These results may also prove useful to courts that see fit to draft a jury instruction in lieu of expert testimony, modeled perhaps after a recently suggested eyewitness instruction by the New Jersey State Supreme Court (*State v. Henderson*, 2011; with regard to confessions, see *Commonwealth v. DiGiambattista*, 2004).

Although the present findings are based exclusively on self-report, various results suggest that participants, as expert witnesses, are discriminating in terms of the cases in which they get involved and the testimony they are willing to give. In particular, we note that (1) respondents agreed to testify only an estimated 57% of the times they were asked (they actually testified only 42% of the times they were asked, but this lesser number reflects additional factors at work such as charges dropped, case settled, testimony excluded); (2) they adopted a high standard of reliability before indicating a willingness to testify on the various propositions (they had a 93% willingness rate for propositions seen as *very reliable* and only a 72% willingness rate for propositions seen as *generally reliable*); and (3) they consistently judged more propositions as sufficiently reli-

able than they were willing to testify about ($M_s = 19.55$ vs. 16.69 , respectively, $p < .0001$).

The question of whether experts were discriminating in accordance with published research, though evident from the cross-item variability of their opinions, raises a question of whether they were motivated by self-interest to cast the literature in a positive light. To explore this possibility, we divided the sample into those who had previously testified in court and those who had never done so ($n_s = 33$ and 40 , respectively, among those who answered this question). We then compared the two groups on the proportion of items that they had responded to that were judged *reliable enough* for expert testimony. This analysis did not support a motivated self-interest hypothesis: Respondents who had testified in the past, compared to those without such experience, were not more likely to judge the statements as reliable enough for presentation in court ($M_s = 64.9\%$ and 64.8% of the propositions, respectively), $t(71) = .06$, $p = .95$. Nor did they express a significant willingness to testify on more propositions ($M_s = 58.9\%$ and 52% , respectively), $t(71) = 1.65$, $p = .10$.

Finally, we should note two limitations of the present study. The first pertains to the possible transient nature of some findings. Research on the psychology of confessions has exploded in recent years, and the literature is still active and dynamic. When Kassin et al. (1989) surveyed eyewitness experts, they conceded that as more data are published—possibly resulting in the identification of new factors and revision of old factors—expert opinion would likely change as well. Sure enough, when Kassin et al. (2001) updated that survey 12 years later, they found that although there was a high level of test–retest consistency, two key propositions were judged significantly more reliable on the second survey, reflecting developments in the literature. In our survey, we would not expect changes to opinions on basic psychology, which has remained stable over time and across venues (e.g., the misinformation effect, the fundamental attribution error). It is conceivable, however, that opinions will shift in response to new findings that are currently the focus of active programs of research (e.g., juvenile interrogations, investigative interviewing).

A second limitation concerns the propositions we tested. In light of the forensic relevance to confessions of basic psychology, we believed it was important to assess “general acceptance” of core principles—as seen in Aronson’s expert testimony in 1988, described earlier (Davis, 2010). By scanning the research literature, we also identified a number of more specific findings that pertain to police interviewing, interrogation, deception detection, confessions, and perceptions of confession evidence. Still, one could argue that we neglected to include certain factors in our survey. At the end of the questionnaire, we asked participants to list in their own words any factors they had testified to that we had missed. Of importance, four respondents listed the effects of

culture and language; two said they had testified specifically about the Reid technique. Other noted topics included the excessive length of interrogation; Canada’s controversial “Mr. Big” technique, also used in New Zealand (see Smith, Stinson, & Patry, 2009); internalized false confessions and the pseudomemories that may be planted; diagnosticity differences among cues to deception; the value of recording interrogations; juror attitudes; confirmation biases; the prevalence of false confessions in DNA exonerations and other wrongful convictions; how confessions can be “contaminated” by secondhand exposure of suspects to crime details; defendants’ competency to waive their *Miranda* rights; and the validity of various psychological instruments (e.g., the Gudjonsson Suggestibility Scale).

Finally, we note two directions for future research. The first pertains to the use of generally accepted propositions in drafting jury instructions on the psychology of confessions. Although we designed our survey to inform the courts as to the appropriate contents of expert testimony, the results may also prove useful to courts looking to draft cautionary instructions. At this point, it remains to be seen whether such instructions would increase juror sensitivity to the factors that elicit confessions.⁴ The second issue concerns the matter of common sense. Research has shown that lay people intuitively trust confessions, find it hard to believe that an innocent person might confess, and lack knowledge of the factors that increase this risk (Blandón-Gitlin et al., 2011; Henkel et al., 2008; Leo & Liu, 2009; for an overview, see Kassin, 2012). We asked respondents to speculate on whether most jurors believe each proposition to be true as a matter of common sense. No doubt aware of the foregoing studies of lay beliefs, experts provided informative opinions. These estimates are merely speculative, indirectly derived from an interpretation of past research. A necessary next step, therefore, would be to assess directly what eligible lay jurors believe regarding our 30 propositions. Apropos of the Federal Rule of Evidence 702 requirement that scientific testimony should assist the trier of fact, it is necessary to identify those generally accepted propositions in our survey that are not intuitive or otherwise known to the average person.

⁴ The efficacy of jury instructions for this purpose remains open to question. In *State v. Henderson* (2011), the New Jersey State Supreme Court recommended such instructions with regard to eyewitness identifications. Thus far, however, researchers have failed to observe reliable curative effects (e.g., Jones, Bergold, Berman, & Penrod, 2015).

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