No. 55217-1

COURT OF APPEALS OF THE STATE OF WASHINGTON

DIVISION ONE

STATE OF WASHINGTON,

Respondent,

v.

GLEN SEBASTIAN BURNS AND ATIF AHMAD RAFAY,

Appellants.

BRIEF OF *AMICUS CURIAE* THE INNOCENCE NETWORK

James Lobsenz, WSBA # 8787
Carney Badley Spellman
701 Fifth Avenue
Suite 3600
Seattle, WA 98104
(206) 622-8020

Thomas H. Golden
Willkie Farr & Gallagher LLP
787 Seventh Avenue
New York, NY 10019
(212) 728-8000

Counsel for Amicus Curiae *The Innocence Network*

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Page

Cases

Other Authorities

Rules

INTRODUCTION

The Innocence Network has identified dozens of cases in which innocent people were convicted based, at least in part, on false confessions, only to be later exonerated by scientific evidence. Innocent people falsely confess under a variety of circumstances, including due to complex psychological factors. Because those factors—many of which are highly counterintuitive—are often beyond the understanding of most lay people, juries tend to accord inordinate weight to out-of-court confessions, even when the defendant asserts his innocence at trial and exculpatory evidence contradicts the confessions. Consequently, it is essential that trial courts allow expert testimony to explain the counterintuitive phenomenon of false confessions and to allow juries properly to weigh such confessions against other evidence in the case.

The Innocence Network respectfully submits this brief, amicus curiae, to assist the Court in its consideration of Glen Sebastian Burns's and Atif Rafay's appeals of their murder convictions. The Innocence Network, an association of more than sixty organizations dedicated to providing pro bono legal and investigative services to convicted individuals seeking to prove their innocence, seeks amicus curiae status because it is greatly troubled by the Trial Court's refusal to allow testimony about false confessions by an expert whose methods are widely accepted in the relevant scientific community.[1] Many courts,

---

[1] The Innocence Network is also troubled by the coercive nature of the techniques used to elicit the confessions in this case and the Trial Court's willingness to

including in the State of Washington, have recognized that expert testimony of the type proffered by Burns and Rafay can help juries place out-of-court confessions in their proper context, and have therefore admitted such evidence. As discussed more fully below, the Innocence Network respectfully submits that the Trial Court abused its discretion in failing to do so.

STATEMENT OF THE CASE

Under unrelenting pressure from Royal Canadian Mounted Police ("RCMP") officers posing as members of a violent criminal gang, and having been told that their failure to do so would jeopardize their liberty and safety, Atif Rafay and Sebastian Burns eventually capitulated and claimed responsibility for the killings of Mr. Rafay's parents and sister. These "confessions"—which Mr. Rafay and Mr. Burns contend were false—became critical pieces of evidence in the State's prosecution of them. At the conclusion of that trial, Mr. Rafay and Mr. Burns were convicted and each sentenced to three consecutive life terms. Why would innocent people falsely confess to heinous, violent crimes, certain to carry long prison sentences and possibly the death penalty? Have scientific studies identified situations where individuals are more likely falsely to confess? How do the contexts in which the incriminating statements were made impact their reliability?

---

admit the confessions into evidence. In light of the briefing on that issue by the parties, the Innocence Network will not address that issue here.

A renowned expert who has extensively studied the phenomenon of false confessions, and whose testimony has been admitted in a number of other cases around the country, could have provided valuable information in these areas to assist the jury's assessment of Mr. Burns's and Mr. Rafay's confessions. But the Trial Court excluded any such testimony. In doing so, it left the jury to evaluate the truthfulness of defendants' incriminating statements without the benefit of scientific analysis and study. Contrary to the Trial Court's explicit assumption, jurors' knowledge and life experiences could not equip them to understand the complex social psychology of police interrogations that leads to false confessions even in standard custodial police interrogations, much less in sophisticated undercover sting operations. The Trial Court's decision was an abuse of discretion, especially in light of the questionable tactics employed to elicit the purported confessions in this case.

To obtain them, the RCMP used a so-called "Mr. Big" operation—an undercover scheme in which law-enforcement officers pose as members of a violent criminal organization, entrap suspects into the phony criminal organization, and then, using highly coercive techniques, induce the targets to "confess" to crimes of which they are suspected. This technique has been heavily criticized because of its reliance on direct and implied threats of harm and its tendency to elicit false confessions, and for that reason it is not used by U.S. law-enforcement agencies.

In this case, the RCMP, posing as members of a ruthless criminal gang, methodically ensnared Mr. Burns in their organization by

exposing him to a series of staged criminal acts. During the operation, the RCMP made clear to Mr. Burns, whom they later acknowledged was nervous and uncomfortable, that their organization was capable of extreme violence against those deemed disloyal to it. And they employed a typical "Mr. Big" ploy by telling Mr. Burns that he had to admit to the Rafay killings to prove to them his loyalty and trustworthiness. Instead, Mr. Burns repeatedly asserted his innocence, despite his belief that his doing so could expose him to violent reprisals. Consequently, the RCMP turned to even more pernicious techniques to draw a "confession" from Mr. Burns. First, using a fabricated Bellevue Police memorandum—another tactic expressly forbidden by many American courts—the RCMP convinced Mr. Burns that he and Mr. Rafay would soon be arrested and indicted for the killings. Next, after implying that the organization had murdered a disloyal witness in the past, the undercover officers shared with Mr. Burns their fear that, once he was arrested (which, they assured him, was only a matter of time), he would expose their wrongdoing in order to curry favor with the prosecutor. Mr. Burns understood the implication to be that if he continued to maintain his innocence (thereby demonstrating his untrustworthiness), he would be murdered in order to silence him. Finally, the undercover RCMP officers told Mr. Burns that if he admitted to killing the Rafays, the organization would destroy the supposed evidence linking him and Mr. Rafay to the killings—evidence Mr. Burns believed was fabricated by the police.

The RCMP thus provided Mr. Burns with a choice: (1) continue asserting his innocence to the purported criminals, risk being arrested based on fabricated evidence, and possibly be killed by a paranoid criminal organization, or (2) tell the criminals that he committed the crime, avoid arrest, and be brought into the closer embrace of his new "friends." Mr. Burns finally relented and told the RCMP that he killed the Rafays. Mr. Rafay, at the urging of Mr. Burns, claimed that he helped plan the killings.

At their trial, Mr. Burns and Mr. Rafay sought to call an expert witness to explain the psychological factors that contribute to false confessions and the unique pressures of a Mr. Big operation: Dr. Richard Leo, Ph.D., J.D., an expert in false confessions who was at that time an associate professor of Criminology, Law and Society, and Psychology and Social Behavior at the University of California, and who has given similar testimony in a number of other cases. Dr. Leo would not have opined on the truthfulness of the incriminating statements in this case. Nonetheless, the Trial Court excluded the testimony because it assumed that the jurors could understand, based on their own knowledge and experiences, why someone would lie (a misunderstanding of Dr. Leo's proposed testimony and of the science regarding false confessions), and because it wrongly believed that Dr. Leo would testify as to whether the particular "confessions" in this case were coerced.[2]

---

[2] Defendants also sought to call Mr. Michael Levine, formerly of the United States Drug Enforcement Agency and an expert in undercover operations. Mr. Levine

DISCUSSION

In Washington, expert testimony is admissible where "scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence." Wash. Evid. R. 702. Under this standard, expert testimony is admissible if "it concerns matters beyond the common knowledge of the average lay-person and does not mislead the jury." State v. SaintCalle, No. 53560-9-I, 2005 Wash. App. LEXIS 2579, at *4 (Wash. Ct. App. Oct. 3, 2005). A wealth of scientific evidence shows that the psychology of false confessions exceeds the reasonable understanding of jurors. Thus, where a disputed confession is admitted into evidence, expert testimony ought to be admitted to help jurors understand why and under what circumstances people may falsely confess, and to help them appreciate that a false confession can be more than just a typical, calculated lie.

In this case, the Trial Court ignored the vast science demonstrating that a false confession is motivated by complex psychological factors that are well beyond the understanding of laypeople, and it incorrectly assumed that jurors could adequately assess the veracity of a disputed confession based solely on their knowledge that, in far less complicated settings, people "tell lies, little lies and big lies." Thus, the

---

would have educated the jury about undercover police practices and standards, and how the Mr. Big operation deviated from U.S. standards for non-custodial interrogations. The Innocence Network respectfully submits that the exclusion of Mr. Levine's testimony was also an abuse of discretion, but it will not undertake to brief those issues here.

Innocence Network respectfully submits that this Court should conclude that the Trial Court abused its discretion in excluding Dr. Leo's testimony.

I. SCIENCE SHOWS THAT POLICE INTERROGATION TACTICS CAN CAUSE INNOCENT PEOPLE TO CONFESS TO CRIMES THEY DID NOT COMMIT.

Contrary to the widespread assumption among laypeople that an innocent person would not confess to a crime he did not commit, history provides numerous examples of false confessions that have led to the conviction and imprisonment of the innocent. In fact, the Innocence Network has documented 56 convictions involving false confessions where the defendants were later exonerated by DNA evidence. See App. Ex. A. Social scientists have extensively studied false confessions, and there is a wealth of empirical data explaining the seemingly illogical reasons why a person would confess to a crime he did not commit.

A. Innocent People Confess To Crimes For Social And Psychological Reasons That Police Interrogation Techniques Exploit.

People claim responsibility for crimes they did not commit under a variety of circumstances. Innocent people who confess may be motivated by, for example, "a wish to be released from police custody, an inability to cope with police pressure, a failure to distinguish fact from fantasy, a desire for notoriety, [or] a desire to protect someone else." Saul M. Kassin & Gisli H. Gudjonsson, The Psychology of Confessions: A Review of the Literature & Issues, Psychol. Sci. Pub. Int., Nov. 2004, at 55. Furthermore, behavioral psychology has long shown that people will

trade future punishment for immediate benefit. Saul M. Kassin et al., Police-Induced Confessions: Risk Factors and Recommendations, 34 Law & Hum. Behav. 3, 15 (2010). In that regard, human decision-making focuses on short-term, rather than long-term, consequences and people prefer delayed punishment in the future—even if more severe—to immediate adverse consequences. Id. Therefore, people will confess to a crime they did not commit—even one that carries a lengthy sentence—to prevent immediate harm or discomfort.

To elicit confessions from suspects, police often use techniques that exploit the social and psychological factors that cause a person to confess, whether truthfully or not. Many of these techniques—isolating the suspect, presenting false evidence, threatening him, minimizing the alleged criminal act, making implied promises of leniency—can contribute to false confessions. Kassin & Gudjonsson, supra, at 60. These tactics can cause innocent suspects to make a seemingly *rational choice* to confess: "[b]y continually manipulating the suspect's perception of the situation and his available alternatives, the interrogator labors to persuade the suspect that he has few options except confession and that the act of admitting culpability is the most optimal, and thus, the most sensible course of action." Richard A. Leo, False Confessions: Causes, Consequences and Solutions, in Wrongly Convicted: Perspectives on Failed Justice 38 (Saundra D. Westervelt & John A. Humphrey eds., 2001).

Among the most dangerous techniques used by police to elicit confessions is the presentation of fabricated evidence that purports to tie the suspect to the crime.[3] Research reveals that the reliability of such confessions is especially suspect because the trickery and manipulation involved implicates forceful psychological and social principles. Kassin et al., supra, at 17. Indeed, in many cases where the suspect confessed to a crime, was convicted, and later exonerated with DNA evidence, the police used fabricated evidence to elicit the confession. Id.

The social and psychological causes of false confessions are not limited to custodial interrogations. In custody, the suspect is acutely aware of the consequences of confession, as he is already in the hands of the police. Steven M. Smith et al., Using the "Mr. Big" Technique to Elicit Confessions: Successful Innovation or Dangerous Development in the Canadian Legal System?, 15 Psychol. Pub. Pol'y & L. 168, 181 (2009). In non-custodial interrogations, by contrast, the consequences are abstract: "the motivation to confess is overwhelming and that the drawbacks of doing so are nearly nonexistent." Id.; see also Timothy E. Moore et al., Deceit, Betrayal and the Search for Truth: Legal

---

[3] Indeed, some courts find this technique so offensive that they refuse to admit confessions that flow from them. See, e.g., State v. Chirokovskcic, 860 A.2d 986, 991 (N.J. Super. Ct. App. Div. 2004) ("police-fabricated tangible evidence inevitably undercuts our confidence in the voluntariness of a confession"); State v. Patton, 826 A.2d 783, 794 (N.J. Super. Ct. App. Div. 2003) ("the use of police-fabricated evidence to induce a confession that is then used at trial to support the voluntariness of a confession is per se a violation of due process"); State v. Cayward, 552 So. 2d 971,974 (Fla. Dist. Ct. App. 1989) ("the manufacturing of false documents by police officials offends our traditional notions of due process").

and Psychological Perspectives on the "Mr. Big" Strategy, 55 Crim. L.Q. 348, 378 (2010) ("The engineering of a new social world and the orchestration of the target's action for months at a time may constitute, in psychological terms, quintessential 'control.' . . . [I]t is quite conceivable that the risk of a false confession may be even greater under such circumstances because the suspect does not appreciate the adverse consequences of his admissions."). Moreover, non-custodial interrogations lack the fundamental procedural protections required of custodial interrogations—police do not notify suspects of their constitutional rights to counsel and silence—and they are free to use "inducements and quid pro quo of leniency, which are restricted and at times render any confession inadmissible for in-custody interrogations." Smith et al., supra, at 181.

During an interrogation, whether in a custodial situation or undercover, police are not specially equipped to determine whether a confession is truthful. Indeed, the singular purpose of police interrogation techniques is to elicit an incriminating confession, not to discover the truth. Steven A. Drizin & Richard A. Leo, The Problem of False Confessions in the Post-DNA World, 82 N.C. L. Rev. 891, 910 (2004). Police "frequently become so zealously committed to a preconceived belief in a suspect's guilt or so reliant on their interrogation methods that they mistakenly extract an uncorroborated, inconsistent, and false confession." Richard J. Ofshe & Richard A. Leo, The Social Psychology of Police Interrogation: The Theory and Classification of True and False

Confessions, 16 Stud. L. Pol. & Soc'y 189, 193 (1997). Studies show that police-induced false confessions play a role in 15–20% of convictions of innocent people who are subsequently exonerated by DNA evidence. Kassin et al., supra, at 3 (citing studies). Moreover, the primary cause of most false confessions is the investigator's use of improper, coercive techniques. Drizin & Leo, supra, at 918–19.

B. Mr. Big Operations Are Particularly Likely to Induce False Confessions.

The psychological and social factors that cause people falsely to confess are particularly strong in so-called "Mr. Big" operations. Such operations are highly dangerous because they employ "carrots and sticks" forces that can cause a suspect to succumb to the pressures of the interrogation not just out of fear of reprisal, but also out of a compact desire to be accepted. As a prominent Canadian psychologist has explained:

> [A] new enhanced and promising social world is created for the suspect, with tentacles that affect much of his behavior (and thought) even when he is not in direct contact with his new found companions. An important feature of this contrived social dynamic is that the suspect is manipulated by his new friends to perceive them as skilled, knowledgeable, powerful, well-connected and successful—and of course as the key to his continued social and financial vitality. As such, they are influential social agents.

Moore et al., supra, at 381. Dr. Moore further explained how the "added and critical dimension of fear" influences a suspect's tendency to comply

with the requests of his new "friends," and how "[t]hese tendencies are systematically exploited by Mr. Big operatives." Id. at 381-82. Mr. Big operations also often involve hundreds of hours of deceptive and fear-inducing tactics and repeated threats of death or great bodily harm to the unknowing suspect.

Indeed, the non-custodial aspect of a Mr. Big operation may actually contribute to its tendency to elicit false confessions. "While the target of a Mr. Big investigation may not perceive himself to be subject to the coercive power of the state, the fact remains that the state is engaging in highly invasive behavior and exercising a significant degree of control over the suspect through creation and manipulation of the scenarios." Moore et al., supra, at 359. A Mr. Big operation's "combination of enticements and fear constitutes an almost irresistible degree of psychological influence and control," thereby creating a situation ripe for false confessions. Id. at 381.

Given their propensity to induce false confessions, Mr. Big interrogations have been widely criticized by legal scholars and Canadian courts.[4] See, e.g., Smith et al., supra, at 168–93; Gisli H. Gudjonsson, The Psychology of Interrogations and Confessions, 581 (2003) ("[Mr. Big] operations are open to abuse, because police in Canada know from legal judgments that normal procedural standards relevant to custodial

---

[4] Mr. Big operations seem not to have been the topic of substantial discussion in U.S. courts, presumably because U.S. law enforcement agencies do not use the Mr. Big technique. Kouri T. Keenan & Joan Brockman, Mr. Big: Exposing Undercover Investigations in Canada 24 (2010).

interrogations do not apply and that the courts almost invariably rule confessions so obtained as admissible."); R. v. Mentuck, 2000 W.C.B.J. 515636 (Manitoba Queen's Bench 2000) (acquitting defendant who falsely confessed during a Mr. Big operation, stating, "as the level of inducement increases, the risk of receiving a confession to an offense one did not commit increases, and the reliability . . . diminishes").[5]

II. EXPERT TESTIMONY IS NEEDED TO HELP JURIES UNDERSTAND THE FACTORS THAT CONTRIBUTE TO FALSE CONFESSIONS.

A. Studies Show That Jurors Do Not Understand The Social And Psychological Factors That Lead To False Confessions.

Social-science research has amply demonstrated that, without the aid of expert testimony, jurors are ill-equipped to appreciate the social and psychological factors leading to false confessions. For example, people generally (and incorrectly) assume that innocent people would not confess to crimes, except under "strenuous interrogation pressure." See Danielle E. Chojnacki et al., An Empirical Basis for the Admission of Expert Testimony on False Confessions, 40 Ariz. St. L.J. 1, 39-40 (2008). Also, the social psychology principle known as the "fundamental attribution error"—whereby people "are predisposed to overlook or underestimate the social circumstances that are operating, and tend to attribute the causes of behaviours or decisions to internal motives,

---

[5] An additional problem with Mr. Big operations is that evidence of the defendant's participation in the Mr. Big "criminal enterprise" presents character evidence that is otherwise inadmissible, and which may color a juror's view. Smith et al., supra, at 174.

if not 'character flaws.'"—can prevent a juror from fully understanding the defendant's behavior. Moore et al., supra, at 383. As a result, jurors are unlikely to recognize a confession as false.[6] Id.

Research has also shown that jurors' lack of knowledge and biases regarding police interrogation techniques and lie-detection abilities may improperly bolster disputed confession evidence. For example, in a 2010 study, 53 percent of mock jurors "believed that police interrogators are better than ordinary people at identifying lies (only 25 percent disagreed)," and "60 percent believed that interrogators' ability to detect lies improves with experience (only 17 percent disagreed)." See Costanzo et al., supra, at 244. These assumptions are misplaced; research reveals that "[p]olice [are] no better than laypeople at distinguishing truthful from deceptive statements, and police training does not appear to improve their performance." Id. This overestimation of the ability of police officers to ferret out the truth may cause jurors to give too much credit to police judgments about a suspect's veracity. Id.

---

[6] The dangerous effect attributional error may have on jurors' evaluations of disputed confession evidence was documented by a 2010 study conducted on 461 jury-eligible men and women matching the demographic characteristics of jury pools in several geographic locations. See Mark Costanzo et al., Juror Beliefs About police Interrogations, False Confessions and Expert Testimony, 7 J. of Empirical L. Stud. 231, 234 (2010). Of participating mock jurors, 92 percent disagreed with the statement: "If interrogated by the police, I would falsely confess to a crime I did not commit." Id. at 243. That participants "could understand how *others* might be vulnerable to interrogation" but the vast majority believed they "were personally immune" is consistent with scientific research indicating that people discount how "behavior might be shaped by strong situational pressures." Id.

Additionally, jurors fail to appreciate fully the spectrum of interrogation tactics police employ to manipulate suspects into confessing, such as lying to them about supposed evidence. See Chojnacki et al., supra, at 42-43; Costanzo et al., supra, at 244. And even if jurors understand that police use coercive interrogation tactics, they do not actually believe that these tactics lead to false confessions. Kassin et al., supra, at 24. Statistics disprove this belief: "[w]hen proven false confessors pleaded not guilty and proceeded to trial, the jury conviction rates ranged from 73% to 81%." Id. (citing studies). Consequently, even if jurors are uncomfortable with police interrogation methods, they are likely to assume that a resulting confession was reliable.

Because jurors often do not understand police interrogation techniques or the factors that cause innocent people to confess to crimes, expert testimony can help juries properly weigh a confession that a defendant claims is false. In disputed-confession cases, expert testimony (i) educates jurors about the general findings of scientific research on interrogation and confession, (ii) provides them with an understanding of the psychological principles and practices of modern interrogation, and (iii) enables them to discriminate more accurately between true and untrue confessions. See Leo, supra, at 50.

Moreover, jurors tend to place undue emphasis on a defendant's confession, often to the exclusion of other evidence presented in the case and even if a confession is uncorroborated and inconsistent with the facts of the crime. Jacqueline McMurtrie, The Role of the Social

Sciences in Preventing Wrongful Convictions, 42 Am. Crim. L. Rev. 1271, 1280 (2005). "[C]onfession evidence has more impact in court proceedings than eyewitness testimony, alibis, and other forms of evidence. Even when it is logical and appropriate to discount a confession, people tend to be overwhelmed by the presence of a confession in their deliberations regarding guilt or innocence." Chojnacki et al., supra, at 15; see also Richard J. Ofshe & Richard A. Leo, The Decision to Confess Falsely: Rational Choice and Irrational Action, 74 Denv. U. L. Rev. 979, 984 (1997). In a study of proven false confessions, 81 percent of false confessors who went to trial were wrongfully convicted, despite a lack of other evidence. Drizin & Leo, supra, at 958. Because of the well-documented tendency of jurors to overemphasize confessions, a trial court must ensure that the jury has complete information so it can evaluate the reliability of a confession. Only expert testimony can achieve this objective.

Finally, the reliability of a confession made in the context of a Mr. Big operation is particularly difficult for a jury to evaluate. For one thing, jurors in the United States are not familiar with Canadian Mr. Big operations. Also, the "difficulty [of distinguishing truth from deception] is exacerbated in Mr. Big operations where the jury is exposed to a 20-minute video of a 'confession that is the culmination of hundreds of hours of artifice, deceit and contrived interactions with the defendant,'" and "[j]urors are inherently disinclined to consider the context,

circumstances and the background events preceding the confession." Moore et al., supra, at 390.

B. Numerous Courts And Commentators Have Recognized The Value Of Expert Testimony Regarding False Confessions.

Scholars who study the psychology of false confessions and have analyzed Mr. Big interrogation tactics urge courts and practitioners to allow expert testimony about the counterintuitive principles of false confessions, particularly in light of how compelling a confession is to jurors. See, e.g., Moore et al., supra, at 402–03; Steven Smith, et al., Confession Evidence in Canada: Psychological Issues and Legal Landscapes, 1 Psych., Crime & L. 1, 13 (2010).

Recognizing the value of expert testimony regarding interrogation tactics and false confessions, courts around the country have admitted testimony of the type excluded below. See, e.g., Miller v. State, No. 15279-1-III, 1997 Wash. App. LEXIS 960, at *23 (Wash. Ct. App. June 17, 1997) ("[Ms. Miller's] entire defense rested on her ability to convince jurors the statement was untrue despite her signature. Dr. Ofshe's testimony would have helped jurors to understand why she may have done this, and thus would have been a significant aid to her defense."); United States v. Belyea, 159 Fed. App'x 525, 529 (4th Cir. 2005) ("The phenomenon of false confessions is counter-intuitive and is not necessarily explained by the general proposition that 'jurors know people lie.'"); United States v. Hall, 93 F.3d 1337, 1345 (7th Cir. 1996) (concluding that trial court erred by excluding expert testimony about the

phenomenon of false confessions because the "ruling overlooked the utility of valid social science"); People v. Lucas, No. C057593, 2009 WL 2049984, at *6 (Cal. Ct. App. July 15, 2009) (finding an abuse of discretion where trial court refused to allow expert testimony on false confessions because it deprived the jury of "valuable expert opinion on a subject with which most laypersons are unfamiliar"); Callis v. Indiana, 684 N.E.2d 233, 239 (Ind. Ct. App. 1997) (affirming trial court's decision to admit expert testimony on the "phenomenon of coerced confessions").

Indeed, according to an Innocence Network survey (the "Survey"),[7] expert testimony about false confessions has been admitted approximately 350 times in at least 37 states.[8] At least 55 professionals from over 10 countries have qualified as false-confession experts by virtue of their research and/or publications about interviewing, interrogations, and confessions. Survey Results, App. Ex. B. Dr. Leo is among them. Dr. Leo has testified about false confessions more than 100 times—in 28 states—in state and federal courts and in military tribunals.[9] Id.

Trial courts throughout the nation have already determined that the methods underlying false-confession research qualify it for

---

[7] To quantify what is happening "in the field," the Innocence Network surveyed dozens of prominent social scientists who study interrogation and confessions ("Survey"). See Survey Results, App. Ex. B.

[8] These statistics represent a conservative estimate, since there are many lesser-known false confession experts who have also testified.

[9] See Appendix Exhibit C for a list of 21 decisions that we have located discussing Dr. Leo's expert testimony, either where Dr. Leo testified or the appellate court found an abuse of discretion where his testimony was excluded.

admission into evidence, and that the psychology of false confessions is helpful to juries. False-confession testimony has earned its place in the courtroom and is essential to aid the jury in balancing contested incriminating statements against other evidence.

III. THE TRIAL COURT ABUSED ITS DISCRETION BY ASSUMING THAT THE JURY COULD HAVE APPRECIATED, WITHOUT THE AID OF EXPERT TESTIMONY, THE REASONS WHY MR. RAFAY AND MR. BURNS MAY HAVE FALSELY CONFESSED.

The standard for admitting expert testimony in Washington is clear: a qualified expert may testify to assist the jury in understanding matters beyond the common knowledge of the average layperson. Wash. Evid. R. 702; State v. SaintCalle, No. 53560-9-I, 2005 Wash. App. LEXIS 2579, at *4 (Wash. Ct. App. Oct. 3, 2005). As demonstrated above, the psychological and social factors leading to false confessions, particularly in the context of a Mr. Big operation, are beyond the understanding of the average juror.

Here, the proffered expert testimony of Dr. Leo would have helped the jury evaluate the disputed confessions that were integral to the State's case. If permitted to testify, Dr. Leo would have educated the jury on (i) the "highly counter-intuitive phenomenon of false confessions" by introducing findings of social-science research, information that is decidedly beyond the common knowledge of the ordinary juror; (ii) police interrogation techniques and the social and psychological impact of those techniques on criminal suspects; and (iii) the potential indicators of

unreliable confessions, providing jurors with a framework to evaluate the confessions. He would not have opined about the truthfulness of the confession of either Mr. Burns or Mr. Rafay.

Despite all this, the Trial Court excluded Dr. Leo's testimony, thereby denying the jury critical information needed to evaluate the incriminating statements in this case. In doing so, it abused its discretion.

CONCLUSION

For the reasons set forth above, amicus urges the Court to recognize that laypeople do not fully understand how to evaluate the reliability of a confession, particularly in the context of a Mr. Big operation. Therefore, admission of expert testimony on false confessions is critical to ensure Appellants' constitutional right to present a defense.

Dated: June 8, 2011

CARNEY BADLEY SPELLMAN

By: James E Lobsenz

James Lobsenz, WSBA #8787
701 Fifth Avenue
Suite 3600
Seattle, WA 98104
(206) 622-8020

WILLKIE FARR & GALLAGHER LLP
Thomas H. Golden
787 Seventh Avenue
New York, NY 10019
(212) 728-8000

Counsel for Amicus Curiae *The Innocence Network*

No. 55217-1

COURT OF APPEALS OF THE STATE OF WASHINGTON

DIVISION ONE

STATE OF WASHINGTON,

Respondent,

v.

GLEN SEBASTIAN BURNS AND ATIF AHMAD RAFAY,

Appellants.

APPENDIX TO BRIEF OF *AMICUS CURIAE* THE INNOCENCE NETWORK

James Lobsenz, WSBA # 8787
Carney Badley Spellman
701 Fifth Avenue
Suite 3600
Seattle, WA 98104
(206) 622-8020

Thomas H. Golden
Alexander L. Cheney
Jill K. Grant
Willkie Farr & Gallagher LLP
787 Seventh Avenue
New York, NY 10019
(212) 728-8000

Counsel for Amicus Curiae
The Innocence Network

APPENDIX A

Exhibit A

NATIONAL EXPERIENCE OF FALSE CONFESSION CASES[1]

1. **David Vasquez** who has substantial cognitive limitations pled guilty to murder. His 'dream statement,' along with his lack of an alibi, convinced a jury of his guilt, and he was convicted in 1985. He served four years before DNA testing exonerated him.

2. In 1982 **Bruce Nelson** was implicated in a rape and murder based on the confession of Terrence Moore, who was also charged with the crime. When police questioned Nelson (with Moore also present in the room), Nelson asked Moore what he had previously told police – and that question was used as a confession in Nelson's trial. In 1990 the prosecution agreed to subject several pieces of evidence to DNA testing, which proved Nelson's innocence.

3. In 1982, **Steven Linscott** was convicted of murdering his neighbor. Linscott told police that he had dreamt about the crime, and his description of the dream mirrored the crime in several ways. In 1992, after three years in prison and seven years on bond, DNA testing excluded Linscott as the perpetrator.

4. **William Kelly** confessed to killing Jeanette Thomas and dumping her body in a landfill. Kelly, who has a low IQ and a history of alcoholism, was led to believe that he had committed the crime. The case was reopened when authorities, led by Joseph Miller, discovered two more bodies in the same landfill. Miller later confessed to killing Thomas; DNA testing matched Miller and confirmed Kelly's innocence.

5. In 1983, **Rolando Cruz**, then a teenager, was charged with raping and killing a little girl. According to detectives, Cruz had reported "visions" of the murder, which closely resembled the actual details of the crime. He and a co-defendant, Alejandro Hernandez, were sentenced to death. Shortly after their trial, a convicted murderer confessed to the crime, but he was never tried. Cruz and Hernandez served nearly 11 years on death row before DNA testing proved their innocence.

6. Together with his codefendant, Rolando Cruz, **Alejandro Hernandez** was sentenced to death for rape and murder and was later exonerated through DNA evidence. The detectives working on the case claimed that both Cruz and Hernandez made incriminating statements. During appeals, one of the detectives recanted his testimony.

7. **Verneal Jimerson** was convicted in 1985 for a 1978 Chicago rape and murder that came to be known as the "Ford Heights Four" case. Paula Gray, who claimed to be an eyewitness, implicated Jimerson and three other men. Jimerson had served years on death row when a group of journalism students at Northwestern University, led by

---

[1] This list of exonerees and descriptions of their cases was compiled from Innocence Project, *250 Exonerated, Too Many Wrongfully Convicted: A Special Report on the First 250 DNA Exonerations in the United States,* http://www.innocenceproject.org/news/reports.php (last visited June 7, 2011) and Innocence Project, http://www.innocenceproject.org (last visited June 7, 2011).

Professor David Protess, uncovered evidence that led to three other suspects. DNA testing ultimately exonerated Jimerson and his three codefendants.

8. **Kenneth Adams** was convicted of rape and murder as one of the "Ford Four." Adams was implicated based on the false confession of Paula Gray. He was convicted, sentenced to 75 years, and exonerated by DNA testing in 1996.

9. **Willie Rainge** was convicted as one of the "Ford Heights Four." He and his codefendants lived in the Ford Heights area and were implicated by the false confession of Paula Gray. Rainge was sentenced to life in prison, but was released 18 years later when DNA testing vindicated all four defendants.

10. Like his co-defendants, Willie Rainge, Kenneth Adams and Verneal Jimerson, **Dennis Williams** was convicted of a rape and murder he did not commit in connection with the Chicago "Ford Heights Four" case. He was sentenced to death and spent 17 and a half years in prison before he was finally exonerated. Williams died in 2003 at the age of 46.

11. In 1993, **Keith Brown** was wrongfully convicted and sentenced to 35 years in prison for sexually assaulting a mother and her nine-year old daughter. During interrogation and under the pressure of law enforcement, Brown falsely confessed to the crimes. Years later, the rape kits collected in the case were tested and the DNA test results implicated a Florida inmate.

12. Following a 1986 rape and murder, police canvassed the neighborhood collecting blood samples from African American men. **Robert Miller's** blood type was found to match evidence from the crime scene. Detectives took advantage of Miller's fragile mental health during a 12-hour interrogation where he claimed he had special powers and could see through the killer's eyes; police called his statements a confession and he was convicted. DNA tests ultimately exculpated Miller and implicated another man.

13. Police officers coaxed **Anthony Gray** to confess to a 1991 rape and murder. Gray, who has limited cognitive abilities, pled guilty and was convicted; he was sentenced to two concurrent life sentences. Years later, DNA testing revealed a match with a new suspect who confessed to the crime, and Gray was exonerated.

14. Along with his codefendant, Ron Williamson, **Dennis Fritz** was convicted of murder in 1988. He became a suspect solely because of his friendship with Williamson. For lack of evidence against Fritz, the prosecution nearly had to drop the charges, until a jailhouse snitch claimed that Fritz had confessed. More than a decade later, DNA proved his innocence. In 2006, Fritz published "Journey Towards Justice," the story of his wrongful conviction and exoneration.

15. **Ronald Jones** falsely confessed to having sex with a rape and murder victim and struggling with her after she attacked him. An eyewitness identified Jones as an aggressive panhandler who had grabbed the victim earlier that day. Jones was convicted and sentenced to death until DNA testing performed in 1997 proved his innocence.

16. With a general IQ in the range of 69, **Earl Washington** compensated for his cognitive limitations by politely deferring to authority figures. When police questioned him about a rape and murder, he confessed to the crime as well as five others. Four of these confessions were dismissed, but Washington was sentenced to death for the fifth. Many years later, DNA testing affirmed Washington's innocence.

17. During an investigation for the rape of a pregnant woman in Miami, **Jerry Frank Townsend,** whose cognitive abilities are limited, confessed to this and several other crimes. When DNA results cleared him of two of the six murders he had confessed to, also implicating another man, prosecutors asked that his other convictions be dismissed.

18. **Marcellius Bradford** was coerced into confessing to involvement in a 1986 Chicago rape and murder. He received a plea bargain for implicating Larry Ollins. After years in prison, DNA testing of spermatozoa and hairs found on the victim's body excluded all four men who were convicted of the crime. Bradford was exonerated and initially released but remains incarcerated on unrelated charges.

19. **Calvin Ollins** was sentenced to life in prison without the possibility of parole for the rape and murder of a medical student. At 14 years old, Calvin Ollins implicated himself, Marcellius Bradford and Larry Ollins in the crime. He spent roughly half his life in prison before DNA testing exonerated him.

20. Together with his cousin Calvin, **Larry Ollins** was implicated in a Chicago crime. Marcellius Bradford testified that the two had raped and murdered a woman while he and codefendant, Omar Saunders, stood watch. The four teenagers were not old enough to be eligible for the death penalty, and all but Bradford were sentenced to life in prison. DNA testing eventually proved their innocence.

21. **Omar Saunders**, along with Larry and Calvin Ollins and Marcellius Bradford, was convicted in connection with a Chicago rape and murder. In addition to Bradford's false confession, another witness testified that Saunders had implicated himself in the crime. In December 2001, all four men were proven innocent through DNA testing.

22. **Richard Danziger's** roommate, Chris Ochoa, implicated Danziger in his confession to the rape and murder of an Austin Pizza Hut employee. They both received life sentences. Years later, another prisoner confessed to the crime. The case was reopened, and DNA tests excluded Ochoa and Danziger and incriminated the other man. Tragically, Danziger sustained brain damage from attacks he suffered while in prison

23. In a desperate attempt to avoid the death penalty, **Chris Ochoa** confessed to a rape and murder and also implicated his roommate, Richard Danziger. DNA testing excluded Ochoa while he was serving a life sentence. Since his exoneration, Ochoa earned a law degree at the University of Wisconsin and has worked with the Wisconsin Innocence Project.

24. Two women in the same apartment complex were raped in 1986. One of them identified **Bruce Godschalk** as the perpetrator. His conviction was fraught with misconduct, including a coerced confession, and after he was convicted, prosecutors and police

mishandled evidence and claimed it was destroyed. After almost 15 years in prison, and seven years fighting for DNA testing, Godschalk was exonerated.

25. Police officers investigating the brutal murder of a 16-year-old girl interrogated **Eddie Joe Lloyd** while he was a patient in a mental hospital. They led him to believe that by confessing and getting arrested, he would help them expose the real perpetrator. The judge said that Lloyd would have received the death penalty if it were legal in Michigan. For over six years, Innocence Project legal clinic students worked to secure the evidence in Lloyd's case. Lloyd died two years after DNA testing proved his innocence.

26. **Paula Gray** was convicted of murder, rape and perjury and sentenced to 50 years in prison in the "Ford Heights Four" case. Then 17 years old, her own statements were used to secure her conviction and that of four innocent men — Kenneth Adams, Verneal Jimerson, Willie Rainge and Dennis Williams. DNA testing ultimately proved that none of the five were involved in the crime.

27. **Antron McCray** and four other adolescents were convicted of a brutal rape in the now infamous Central Park jogger case of 1989. Years after their convictions, DNA test results matched a convicted murderer and rapist who admitted that he alone was responsible for the attack. None of the DNA evidence matched those wrongfully convicted, and all five men were exonerated.

28. **Kevin Richardson,** who was 14 years old at the time, was one of five teenagers convicted in the attack of a Central Park jogger in 1989. Because the victim had no memory of the assault, police focused on a group of youths who were already in police custody for other crimes perpetrated in the park that night. In 2002, all five men were proven innocent through DNA testing.

29. **Yusef Salaam** was convicted of rape and assault in connection with the 1989 Central Park jogger case. He was the only one of five teenagers convicted who did not give a videotaped confession. In 2002, all five men were deemed innocent after DNA testing was conducted on several pieces of evidence, including a rape kit and hairs found on the victim.

30. **Raymond Santana** falsely confessed to involvement in the Central Park jogger case of 1989. He and five other teenagers, between the ages of 14 and 16 years old, were convicted of this crime. In 2002, another man who had been convicted of similar crimes confessed that he alone committed the Central Park jogger attack, and all five men were exonerated after DNA testing confirmed his admission.

31. **Korey Wise** was one of five teenagers convicted in connection with the Central Park jogger case. He and three of his co-defendants gave videotaped confessions that differed significantly on key details of the crime. In retrospect it is clear that the young men did not know where, how, or when the attack took place. In 2002, all five men were deemed innocent after DNA testing.

32. Investigators in the 1981 rape of an elderly woman questioned **Eddie James Lowery** on the day of the attack. They denied him a lawyer, fed him details of the case and extracted

a confession. Lowery's first trial ended in a hung jury, but he was convicted in the second. After his parole in 1991, Lowery financed DNA testing in his case and was proven innocent.

33. **Lafonso Rollins** was a 17-year-old special education student in the ninth grade when he was arrested for robbery and rape on the basis of a composite sketch. Rollins, whose cognitive abilities are limited, confessed to the robberies and four rapes. Years later, DNA testing proved that he was innocent and that an unknown male had committed the crimes. During the years Rollins was wrongfully imprisoned, his mother, father, sister and grandparents had died.

34. **Ryan Matthews** was arrested for murder soon after his 17th birthday. His friend, Travis Hayes, falsely confessed to the crime and implicated Matthews, who was convicted and sentenced to death. The Louisiana Crisis Assistance Center helped Matthews win post-conviction DNA testing that excluded him. After almost five years on death row, he was released.

35. When police lied to **Barry Laughman** and told him that his fingerprints were found a murder scene, he confessed to the crime. Laughman's IQ had been measured at 70, and he was said to be functioning at the level of a 10-year-old child. Despite serious discrepancies between his confession and the actual crime (including the date), he was convicted of rape, murder and other charges in 1988 and sentenced to life in prison. Years later, DNA testing of the evidence proved his innocence.

36. Los Angeles police investigating several murders interrogated **David Allen Jones**, who has the mental ability of an eight year-old, for over two days. After detectives "reminded" Jones that he had already admitted to the crimes, he falsely confessed and was convicted. Nine years later, DNA testing proved Jones's innocence — and matched a convicted serial murderer.

37. At age 17, **Dennis Brown** was accused of rape and confessed to the crime when a detective threatened him. The victim said her attacker's face was almost completely covered, yet she identified Brown. The Innocence Project New Orleans requested DNA testing in Brown's case, which proved his innocence. He had spent over half of his life in prison.

38. Through hair comparison, snitch testimony and **John Kogut's** false confession—produced after 18 hours of interrogation—Kogut was convicted of the rape and murder of a 16-year-old girl. John Restivo and Dennis Halstead were also convicted on the pretense that the three men acted together. Several rounds of DNA testing over 10 years excluded all three men. After a retrial, Kogut was finally exonerated.

39. Investigators in the murder of a 16-year-old girl focused, in part, on **Dennis Halstead** who was believed to be associated with another young woman who had disappeared. Together with John Kogut and John Restivo, Halstead was convicted of rape and murder in 1987. After several rounds of exculpatory DNA testing, all three men were released in 2003 and exonerated in 2005.

40. Together with defendants John Kogut and Dennis Halstead, **John Restivo** was convicted of the rape and murder of a 16-year-old girl on Long Island. DNA testing proved the innocence of all three men in 2003, and they were fully exonerated in 2005. The real perpetrator was never found. Today, Restivo lives in Florida with his girlfriend.

41. Based on the testimony of a codefendant, **Arthur Mumphrey** was convicted of sexual assault and sentenced to 35 years in prison. In exchange for testifying against Mumphrey, his codefendant received a reduced sentence of 15 years. Eventually, DNA tests confirmed the co-defendant's guilt and Mumphrey's innocence.

42. Despite a lack of physical evidence, **Douglas Warney** was convicted of murder in 1997. Warney confessed to the crime, but his confession revealed that he did not know several key facts. DNA testing exonerated him and matched a convicted murderer already serving a life sentence in New York. Warney, who became gravely ill while he was in prison, is cared for by his loved ones in Rochester.

43. Based on a false confession extracted from him at the age of 16, **Jeffrey Deskovic** was convicted of the rape and murder of his 15-year-old classmate—even though DNA testing excluded him. He was released years later when more sophisticated DNA testing was conducted and run through New York State's DNA database, providing a match to a convicted felon. Since his release, Deskovic has graduated from Mercy College and speaks publicly about criminal justice reform

44. Travis Hayes' codefendant, **Ryan Matthews**, was exonerated from death row in 2004. Attorneys at the Innocence Project New Orleans fought for two and a half more years to win Hayes' exoneration for a murder that neither man committed.DNA testing in 2004 cleared Hayes and Matthews and implicated another man, and three years later prosecutors announced that they would not retry Hayes.

45. **Byron Halsey's** girlfriend's two children were raped and murdered in 1985. Halsey was taken into police custody and interrogated for 30 hours. His responses to questioning revealed that he did not know any of the key facts of the crime, but he signed a confession that led to his wrongful conviction. Post-conviction DNA testing performed at the request of the Innocence Project eliminated Halsey and pointed to Clifton Hall, a neighbor at the time and one of the state's witnesses.

46. **Nathaniel Hatchett** became a suspect in a rape and robbery because he was driving the stolen car of the rape victim. He and some friends had found the abandoned car but knew nothing about the crime; nevertheless, the 17-year-old Hatchett confessed believing that he would be released if he cooperated with police. Pre-trial DNA testing excluded him as the perpetrator, but because of prosecutorial misconduct, Hatchett was convicted anyway. The Cooley Innocence Project helped vindicate Hatchett through DNA testing.

47. Four years after an elderly woman was raped and murdered in Beatrice, three men and three women were wrongfully convicted of the crime. Five of the six falsely confessed and/or pled guilty. **Joseph White**, who allegedly raped the victim, refused to confess and

was found guilty of first-degree murder. In late 2007, DNA testing proved that he and his five co-defendants had nothing to do with the crime, and White was soon exonerated.

48. **Kathy Gonzalez** was wrongfully convicted in the so-called Beatrice Six case. Gonzalez and four of her co-defendants pled guilty to involvement in the crime. The real perpetrator, Bruce Allen Smith, was eliminated as a suspect at the time because a forensic technician erroneously reported that testing excluded him. Years later, DNA testing implicated Smith and exonerated Gonzalez and her five co-defendants.

49. **James Dean** falsely confessed to being involved in the 1985 murder of an elderly woman. Dean said that most of his recollection of the crime came from dreams. Post-conviction DNA testing implicated the real perpetrator, who acted alone. Soon after, Dean and his co-defendants became the first people exonerated through DNA testing in Nebraska history.

50. In exchange for a lighter sentence, **Debra Shelden**, a relative of murder victim Helen Wilson, pled guilty to involvement in the crime. Shelden testified that she tried to intervene but was struck down. She was wrongfully convicted of second-degree murder. Shelden was paroled in 1995 and exonerated in 2009 after DNA testing implicated another man, now deceased, and cleared her and her co-defendants.

51. A car similar to the one driven by **Thomas Winslow** was apparently seen near the home of Helen Wilson on the night that she was raped and murdered. Four years later, Winslow was incarcerated on an unrelated incident and questioned by police about the Wilson murder. Winslow was wrongfully convicted along with two other men and three women. DNA testing established that only one man, since deceased, had committed the crime and Winslow and his co-defendants were exonerated.

52. **Ada JoAnn Taylor** agreed with prosecutors to plead guilty to involvement in a 1985 rape and murder case. She falsely testified that she held a pillow over the elderly victim's face while her codefendants raped the victim. DNA testing later implicated the real perpetrator, who had been a leading suspect in the original investigation. Taylor and her five co-defendants were exonerated.

53. **John Kenneth Watkins** was wrongfully convicted of rape when he was 20 years old and sentenced to 14 years in prison. After being subjected to police questioning for more than four hours while detectives fed Watkins non-public details about the crime, Watkins confessed. Prosecutors offered Watkins a plea, and facing a lengthy prison sentence, he decided to accept it. New DNA testing obtained last year by the Arizona Justice Project at the Sandra Day O'Connor College of Law proved that Watkins did not commit the rape.

54. When a Rochester neighbor of Peacock's was raped, she misidentified **Freddie Peacock** as the assailant. He was arrested and interrogated, and police claimed that he confessed. Peacock told police that he had a history of mental illness and had been hospitalized several times. He was wrongfully convicted in 1976 and spent over five years in prison.

Twenty-eight years after he was paroled, Peacock became the 250th person exonerated through DNA testing.

55. **Frank Sterling** served more than 17 years in New York prisons for the murder of an elderly women in Rochester before DNA testing obtained by the Innocence project led to his exoneration in 2010. He was convicted based almost exclusively on a false confession he gave after hours of police interrogation, and he was finally cleared when DNA tests implicated another man in the killing.

56. **Ted Bradford** spent almost 10 years in prison for a rape he didn't commit – and another four years awaiting a new trial – before he was retried and acquitted based on DNA evidence of his innocence in 2010. Despite the fact that there was no physical evidence linking him to the crime nor did he match the victims physical description, he was convicted on the basis of a confession obtained during an eight hour interrogation.

APPENDIX B

Exhibit B

FALSE CONFESSION EXPERT WITNESS SURVEY AND RESULTS

1. Name:

2. Institution:

3. Please enter your primary field of expertise:

4. Degree(s) received in your field (mark all that apply):

BA/BS
MA/MS
PhD

5. Approximately how many times have you testified about false confessions?

5a. Please list one state in which you have testified about false confessions

5b. In the state you listed above, was your testimony admitted into evidence at trial?

6. For which side do you testify most often?

7. Do you keep any records or reports of the cases in which you have testified? (e.g., name of the case or name of the attorney who retained you?)

8. On what information do you typically base your opinion?

	Usually or Always	Sometimes	Rarely/Never
Interviewing defendant			
Reviewing police records			
Reviewing videotaped confession			
Documents from defendant's youth (e.g., school records)			
Interviewing defendant's family/friends			
My research about false confessions			
Other expert's research about false confessions			
Other sources			

9. If it becomes necessary in our writing of the brief, we may wish to contact you for a very short follow-up. What would be the best way to reach you?

Our surveyed false confession experts reported that they appeared approximately 350 times in various courts and that their false confession testimony was admitted into evidence in courts in the following 37 states:

Alabama
Alaska
Arkansas
California
Colorado
Connecticut
Florida
Georgia
Illinois
Indiana
Iowa
Kansas
Kentucky
Louisiana
Maryland
Massachusetts
Michigan
Minnesota
Missouri
Montana
Nevada
New Hampshire
New Jersey
New York
Ohio
Oklahoma
Oregon
Pennsylvania
South Carolina
South Dakota
Tennessee
Texas
Virginia
Washington
West Virginia
Wisconsin
Wyoming

1. Name: - Richard Leo
Institution or Company: - University of San Francisco
2. Please enter your primary field of expertise.
Psychology
Sociology
Other (please specify) - Social Psychology and Criminology
3. Degree(s) Received in your field (mark all that apply)
PhD and JD

1. Approximately how many times have you testified about false confessions?
100-200
2. For which side do you testify most often?
Defense
3. Do you keep any records or reports of the cases in which you have testified (e.g., name of the case or name of the attorney who retained you)?
Yes

1. Please list one state in which you have testified about false confessions:
California
2. In the state you just listed above, has your testimony been admitted into evidence at trial?
Yes
3. If applicable, list another state in which you have testified about false confessions:
Washington
4. In the state you just listed above, has your testimony been admitted into evidence at trial?
Yes
5. If applicable, list another state in which you have testified about false confessions:
Alabama
6. In the state you just listed above, has your testimony been admitted into evidence at trial?
Yes
7. If applicable, list another state in which you have testified about false confessions:
Alaska
8. In the state you just listed above, has your testimony been admitted into evidence at trial?
Yes
9. If applicable, list another state in which you have testified about false confessions:
Arizona
10. In the state you just listed above, has your testimony been admitted into evidence at trial?
Yes
11. If applicable, list another state in which you have testified about false confessions:

Arkansas

12. In the state you just listed above, has your testimony been admitted into evidence at trial?

Yes

13. If you have testified in any other states not listed above, please list them below.

Colorado, Connecticut, Florida, Georgia, Hawaii,Kansas, Kentucky, INdiana, Iowa, Maryland, Missouri, Montana, New York, Oregon, Pennsylvania, South Carolina, Texas, Virginia, Washington, Wisconsin, South Dakota, Utah

1. On what information do you typically base your opinion?

	Usually or always	Sometimes	Rarely or never
Interviewing defendant		X	
Reviewing police records	X		
Reviewing videotaped confession	X		
Information about jurisdiction's interrogation practices		X	
Documents from defendant's youth (e.g., school records)		X	
Interviewing defendant's family or friends			X
My research about false confessions	X		
Other experts' research about false confessions	X		
Other sources	X		

What other sources do you rely on?: other pretrial case records

1. If it becomes necessary in our writing of the brief, we may wish to contact you for a very short follow-up. What would be the best way to reach you?

Email

rleo@usfca.edu

APPENDIX C

Exhibit C

DR. RICHARD A. LEO TESTIMONY

1. *People v. Hernandez*, No. B215707, 2011 WL 1534547, at *3 (Cal. Ct. App. Apr. 25, 2011) (Dr. Leo testified before the Superior Court of Los Angeles County).

2. *People v. Vargas*, No. G041999, 2010 WL 2525582, at *3 (Cal. Ct. App. June 23, 2010) (Dr. Leo testified during the pretrial hearing).

3. *Rivera v. Runnels*, No. CV 04-4672-VAP (CW), 2010 WL 3220107, at *4 (C.D.Cal. Apr. 30, 2010) (Dr. Leo testified before the Superior Court of Los Angeles County).

4. *Crowe v. County of San Diego*, 608 F.3d 406, 431 (9th Cir. 2010) (Dr. Leo testified before the Southern District of California).

5. *People v. Lucas*, No. C057593, 2009 WL 2049984, at *6 (Cal. Ct. App. July 15, 2009) (held it was an abuse of discretion for trial court to deny Dr. Leo's testimony).

6. *People v. Robles*, No. G038739, 2009 WL 1364364, at *3 (Cal. Ct. App. May 15, 2009) (Dr. Leo testified before the Superior Court of Orange County).

7. *People v. Leon*, No. G037950, 2009 WL 249362, at *3 (Cal. Ct. App. Feb. 3, 2009) (Dr. Leo testified before the Superior Court of Orange County).

8. *In re Taylor*, No. 35724-1-II, 2008 WL 6693462, at *3 (Wash. Ct. App. May 20, 2008) (Taylor's petition attached a declaration by Dr. Leo).

9. *People v. Muratalla*, No. B192446, 2007 WL 4376374, at *3 (Cal. Ct. App. Dec. 17, 2007) (Dr. Leo testified before the Superior Court of Los Angeles County).

10. *People v. Villarreal*, No. H029622, 2007 WL 1556645, at *2 (Cal. Ct. App. May 30, 2007) (Dr. Leo testified before the Superior Court of Santa Cruz County).

11. *In re Genaro R.*, No. A112572, 2007 WL 934886, *1 (Cal. Ct. App Mar. 29, 2007) (court affirmed order suppressing minor's confession as involuntary).

12. *Reyes v. Duncan*, No. C 05-04078 SI, 2006 WL 2529106, at *4 (N.D.Cal. Aug. 31, 2006) (Dr. Leo testified before the Superior Court of San Mateo County).

13. *Washington v. Buraker*, 322 F.Supp.2d 702 (W.D.Va. 2004) (Dr. Leo provided expert testimony in Earl Washington's §1983 civil rights action against city and police officers).

14. *United States v. Bresnahan*, 62 M.J. 137, 149 (U.S. Armed Forces 2005) (held that military judge abused his discretion in denying defendant's request for expert assistance, reversed, and authorized a rehearing).

15. *In re Owens*, No. D045194, 2005 WL 2160209, at *4 (Cal. Ct. App. Sept. 8, 2005) (Dr. Leo testified before the Superior Court of San Diego).

16. *People v. Ford*, No. A100574, 2005 WL 236593, at *5 (Cal. Ct. App. Jan. 31, 2005) (Dr. Leo testified before the Superior Court of Alameda County).

17. *Cobb v. Bruce*, No. Civ.A.03-3400-KHV, 2004 WL 3019345, at *5 (D.Kan. Dec. 29, 2004) (Dr. Leo testified before the trial court).

18. *People v. Sowl*, No. A098094, 2004 WL 1080171, at *8 (Cal. Ct. App. May 14, 2004) (Dr. Leo testified before the Superior Court of San Mateo County).

19. *People v. Gonzalez*, No. B154557, 2003 WL 22977531, at *6 (Cal. Ct. App. Dec. 19, 2003), *rev'd*, 104 P.3d 98 (Cal. 2005), *cert. denied*, 545 U.S. 1108 (2005) (Dr. Leo testified before the Superior Court of Los Angeles County).

20. *People v. Martinez*, No. B157095, 2003 WL 1438802, at *3 (Cal. Ct. App. Mar. 21. 2003) (Dr. Leo testified before the Superior Court of Los Angeles County).

21. *State v. Schofield*, No. 23038-1-II, 1999 WL 1033547, at *3 (Wash. Ct. App. Nov. 12, 1999) (the Superior Court of Clark County held that Dr. Leo could explain facts and circumstances that may lead to a coerced confession).

APPENDIX D

JOURNAL OF
EMPIRICAL LEGAL STUDIES

Journal of Empirical Legal Studies
Volume 7, Issue 2, 231–247, June 2010

Juror Beliefs About Police Interrogations, False Confessions, and Expert Testimony

*Mark Costanzo, Netta Shaked-Schroer, and Katherine Vinson**

Although there has been a rapid expansion in research on police interrogations and false confessions, little is known about the beliefs of potential jurors as to these issues. In collaboration with a trial research firm, we recruited 461 jury-eligible men and women who matched the demographic characteristics of jury pools in several states. Surrogate jurors responded to questions and statements in five areas: likely rates of false confessions for different crimes, the ability to discern true from false confessions, beliefs about false confessions, beliefs about permissible interrogation tactics, and beliefs about expert testimony on police interrogations. Results indicated that jurors believed that police interrogators are better than ordinary people at identifying lies and that this ability improves with experience. Jurors believed that they would be able to differentiate a true confession from a false confession by watching a videotape, but were less confident about making such a differentiation from an audio recording. A large majority of the sample reported that it would be helpful to hear expert testimony about interrogation techniques and reasons why a defendant might falsely confess to a crime. There were no significant gender differences. Compared to whites, nonwhite jurors had significantly less confidence in the abilities of the police and gave significantly higher estimates of false confession rates. Results are discussed in light of prior research and implications for jury decision making and expert testimony.

I. Introduction

False confessions are a significant cause of wrongful convictions (Drizin & Leo 2004; Scheck et al. 2000). Particularly during the past two decades, researchers have used a variety of research methods to deepen our understanding of the interrogation process and the social influence techniques that sometimes lead to false confessions and wrongful convictions (Davis & O'Donahue 2003; Gudjonsson 2003; Kassin & Gudjonsson 2004; Leo et al. 2008).

A series of laboratory experiments by Kassin and his colleagues illustrate the power of confessions. For example, Kassin and Neumann (1997) systematically compared eyewitness, character, and confession evidence, and found that confessions produced the highest conviction rate among mock jurors. Extending this basic finding, Kassin and Sukel (1997)

*Address correspondence to Mark Costanzo, Claremont McKenna College, 850 Columbia Ave., Claremont, CA 92651; email: mark.costanzo@cmc.edu. Costanzo is Professor of Psychology & Co-Director, Center for Applied Psychological Research at Claremont McKenna College; Shaked-Schroer and Vinson are at the Claremont Graduate University.

found that even when mock jurors recognized that a confession was coerced, they were not able to discount it when reaching a verdict. More recently, laboratory researchers have induced college students to confess to cheating (Russano et al. 2005). Using this cheating paradigm, researchers have found that the risk of false confessions significantly increases when implied promises of leniency are used, and when a more accusatory interrogation style is used (Rigoni & Meissner 2008).

Systematic analyses of actual cases have greatly expanded our knowledge of false confessions. Based on case studies uncovered by the "Innocence Project" and others, we do know that approximately 24 percent of known wrongful convictions appear to involve false confessions (Innocence Project, n.d.). In the most comprehensive study of false confessions to date, Drizin and Leo (2004) examined 125 proven false confessions. They found that 80 percent of these false confessions occurred in murder cases, another 9 percent involved rape, and 3 percent involved arson. Although this overrepresentation of serious cases may be partly due to the greater availability of DNA evidence in murder and rape cases (Costanzo & Leo 2007), it is also likely to be the result of strong pressure on police to solve cases involving violent crime (Warden 2003). An especially important finding of the Drizin and Leo (2004) study was that when suspects falsely confessed and then pled "not guilty" and proceeded to trial, the conviction rate was 81 percent. Other research on actual cases has made use of systematic observation to analyze police tactics during actual interrogations (Corwin 2003; Leo 1996). These observational studies have shed light on some possible causes of false confessions, including lying about incriminating evidence, implied threats of punishment or promises of leniency, and individual vulnerabilities (Gudjonsson 2004).

In the area of interrogations and false confessions, there has been relatively little research exploring the beliefs and abilities of key actors in the legal system such as judges, police, and jurors. There has been almost no research on judges, probably because of the difficulty of gaining access to this important group. However, one recent study exposed judges to an interrogation viewed from different camera angles (Lassiter et al. 2007). Findings revealed that judges showed the same perceptual bias as mock jurors: a camera perspective showing only the suspect led to higher ratings of guilt and voluntariness than did a neutral "equal-focus" camera perspective showing both the suspect and the interrogator (Lassiter & Geers 2004). Using a questionnaire, a group of researchers recently analyzed police beliefs about the interrogation process (Kassin et al. 2007). Police investigators responding to the questionnaire estimated that about 68 percent of suspects make self-incriminating statements during interrogation. One striking finding was that police estimated that they could distinguish between truthful and deceptive statements from suspects at about a 77 percent rate of accuracy. This estimate is at odds with the available research. For example, in an experimental study comparing the lie detection abilities of police and college students, Kassin et al. (2005) found that although college students performed slightly better than chance at detecting lies, police did not. However, despite their poorer performance, police were significantly more confident about the accuracy of their judgments.

We know very little about juror beliefs in the area of interrogations and false confessions. One recent study made use of an Internet questionnaire to asses the attitudes of potential jurors (Chojnacki et al. 2008). Among the interesting findings of this study were

that 80 percent of respondents believed jurors would benefit from hearing expert testimony on interrogations and confessions; that 67 percent of respondents agreed that an innocent person would falsely confess to a crime after "strenuous pressure"; and that only 43 percent of respondents knew that interrogators are allowed to lie to suspects. This study produced some provocative findings, but used an unrepresentative convenience sample of potential jurors who were younger (63 percent aged 29 or less), better educated (94 percent with some college a college degree), more Caucasian (88 percent), and more female (72 percent) than the actual jury pool.

Research on jurors' beliefs is important because it is jurors who must evaluate the veracity of disputed confessions when making verdict decisions. Potential jurors arrive in the courtroom with beliefs, preconceptions, expectations, and biases. These beliefs—whether accurate or not—shape how jurors process and interpret evidence presented at trial. Indeed, research exploring the story model of juror decision making has demonstrated that jurors use their preexisting beliefs to construct narratives about whether a defendant is guilty (Huntley & Costanzo 2003; Olsen-Fulero & Fulero 1997; Pennington & Hastie 1994). To gain a full, empirically-based understanding of police interrogations and false confessions, we need research on jurors.

A second reason for studying jurors is that judges' decisions about whether to allow expert testimony at trial are largely determined by assumptions about jurors. Under *Daubert* (1993), judges have substantial discretion in deciding whether an expert witness will be permitted to testify. The decision to exclude such testimony is typically based on nothing more than judges' untested assumptions about what jurors believe and how jurors might be influenced by expert testimony. Similarly, defense attorneys must argue for allowing expert testimony without the benefit of data on what potential jurors are likely to know and believe. Despite the large and growing research literature on the psychology of interrogations and false confessions, there has been little research on juror attitudes toward interrogations and confessions. Some courts have taken note of this lack of research, and have excluded expert testimony on the grounds that there is no research showing that the content of expert testimony would be helpful for the average juror (*State v. Free* 2002).

An understanding of juror beliefs is also important for expert witnesses. If a false or disputed confession is presented at trial, the best means of challenging that confession is likely to be expert testimony. As the U.S. Supreme Court concluded in *Crane v. Kentucky* (1986):

> a defendant's case may stand or fall on his ability to convince the jury that the manner in which the confession was obtained casts doubt on its credibility. . . . stripped of the power to describe to the jury the circumstances that prompted his confession, the defendant is effectively disabled from answering the one question every rational juror needs answered: If the defendant is innocent, why did he previously admit his guilt?

Expert testimony has several functions: to educate jurors about police interrogation tactics, to summarize research on interrogations and confessions, and to explain how interrogation pressures and individual characteristics can sometimes lead to false confessions (Costanzo & Leo 2007; Fulero 2004). Generally, it is the job of the expert witness to

assist the factfinder by pointing out what factors should be considered in evaluating the reliability of a confession. Jurors can then decide how much weight should be assigned to the disputed confession. Experts are charged with the difficult task of making research on interrogation tactics and false confessions clear and accessible to jurors. Knowledge of juror preconceptions is helpful for deciding what issues should be emphasized by experts. For all these reasons, research on juror beliefs is critical.

A. The Present Study

The study described below was an attempt to advance our understanding of juror beliefs about police interrogations and the possibility of false confessions. We recruited participants who matched actual jury pools. Many studies have relied on college student mock jurors who are not representative of actual jury pools. While there is some controversy about the external validity of college student samples (Bornstein 1999), the lack of realistic samples makes it difficult to convince legal professionals that research findings are generalizable to actual jurors. It is imperative to have a diverse, realistic sample of jurors that is demographically varied and similar to actual jury pools.

II. Method

A. Participants

Four-hundred-sixty-one jury-eligible men and women were recruited by a professional trial research firm. The research firm was hired by corporate clients to collect data on juror psychology and trial strategy for actual cases that were likely to be litigated. Each research participant was paid $250 for one seven-hour day. The questionnaire used for the current study was unrelated to the corporate-sponsored research. The data used in this study were collected during seven research sessions. These sessions were conducted in the cities of Chicago, Illinois; Green Bay, Wisconsin; Las Vegas, Nevada; Los Angeles, California; New York, New York; Sacramento, California; and San Francisco, California. Surrogate jurors were selected to match the demographic characteristics of the jury pool in each city where the research was conducted. In an effort to match the actual venue jury pools, specific requirements were met by each surrogate juror. First, Census data for the venue were collected and carefully reviewed. Surrogate jurors fit into specific demographic categories relating to gender, age, race, education, and occupation. This was accomplished by using Census data to determine what percentage of surrogate jurors should be in each category. Although Census data provide a rough indication of the jury pool in a particular location, they do not include some information that is critical for jury service (e.g., which adult residents of an area have a valid driver's license or voter registration; which residents are fluent in the English language; which former residents have died or moved away from the area; what new residents have moved into the area; and which people have turned 18 years old since the time of last Census). In an additional effort to make the sample similar to actual jury panels in each location, trial lawyers who frequently practiced in each jurisdiction were consulted. These attorneys reviewed the participant characteristics and suggested

Table 1: Demographic Characteristics of Participants ($N = 461$)

Demographic Characteristic	N
Age	
18–35	146
36–50	172
51+	143
Gender	
Male	209
Female	252
Race	
White	223
Hispanic	98
Black	91
Asian	34
Native American	3
Other	12
Income	
Under $20,000	68
$21,000–$40,000	115
$41,000–$60,000	114
$61,000–$80,000	77
$81,000–$100,000	52
Over $100,000	35
Highest Level of Education Completed	
Some high school or less	28
High school diploma	59
Some college or technical school	172
Technical school degree	21
College degree	115
Some graduate school	21
Graduate degree	45

changes to make the participant sample better reflect the composition of actual jurors in the venue. Adjustments in recruiting were made in response to the recommendations of the trial lawyers. Finally, all participants were required to present a current driver's license and/or proof of voter registration.

Table 1 summarizes the demographic characteristics of the surrogate jurors who participated in this study. Responses to nine demographic questions were obtained from each surrogate juror: age, gender, education level, ethnic background, marital status, parental status, annual household income, employment status, and occupation. Of the 461 jurors, 209 were male and 252 were female. Most checked the age category of 36 to 50 years old, and roughly half the sample fell into the annual income categories of either $21,000 to $40,000 or $41,000 to $60,000. Educational level varied considerably among our sample—18.9 percent had a high school degree or less, 28.6 percent reported some postgraduate work or a graduate degree, and the largest group (37.3 percent) reported having some college or technical school coursework. The racial distribution was as follows:

48.4 percent Caucasian, 21.3 percent Hispanic, 19.7 percent African American, 7.4 percent Asian, 0.7 percent Native American, and 2.6 percent other. Put differently, roughly half the participants (51.6 percent) were nonwhite, and half (48.4 percent) were white. Table 2 provides a detailed breakdown of the demographic characteristics of the surrogate jurors by city.

B. Procedure

As participants arrived at the designated hotel, they were met and checked in by a research assistant. The check-in process involved showing picture identification, as well as a confirmation letter sent to respondents by the recruiting company. All participants read and signed informed consent forms agreeing to participate in the research project. Surrogate jurors were told that their individual responses would remain confidential, their names would not be attached to their answers, and they were free to withdraw at any time without penalty. Before any data were collected, a moderator informed respondents that they were going to be participating in an abbreviated, simulated trial that would involve listening to attorney arguments and key testimony and then answering questions about their reactions to the evidence. The questionnaire used in this study was administered to participants at the beginning of the day, prior to their participation in the corporate-sponsored trial simulations.

1. Materials

Each surrogate juror was assigned his or her own hand-held electronic recording device. On the face of the device is a dial that respondents can turn up to a range of 270 degrees in order to select a response. An LED screen above the dial allowed the respondents to view the responses they were about to select using a scale that was customized for the type of question asked. Questions were projected onto a large screen (9×6 ft.) at the front of the room. As each question appeared on the screen, surrogate jurors dialed in their answers, which were transmitted to a computer and were automatically entered into an SPSS spreadsheet.

On 15 of the questions, participants responded using a 10-point Likert scale where 1 designated "strongly disagree" and 10 indicated "strongly agree." Five additional questions asked for estimates on a 0–100 percent scale. The questionnaire addressed five areas: (1) the ability to discern true from false confessions (e.g., "Trained police interrogators are better than ordinary people at identifying lies"), (2) beliefs about false confessions (e.g., "If interrogated by the police, I would falsely confess to a serious crime"), (3) rates of false confessions (e.g., "What percentage of confessions in murder cases are false?"), (4) beliefs about permissible tactics (e.g., "To help persuade suspects to confess, interrogators should be allowed to lie to a suspect, falsely claiming that an eyewitness has identified him"), and (5) beliefs about expert testimony (e.g., "It would be useful for jurors to hear an expert testify about interrogation techniques used by police"). In answering the questions, respondents were instructed to assume that the interrogations did not involve physical threats or physical harm.

Table 2: Participant Demographics by Data Collection Location (N= 461)

		City						
		New York (N = 220)	*San Francisco (N = 90)*	*Sacramento (N = 24)*	*Las Vegas (N = 21)*	*Chicago (N = 21)*	*Los Angeles (N = 55)*	*Green Bay (N = 30)*
Gender	Male	45.5%	50.0%	45.8%	42.9%	57.1%	34.5%	43.3%
	Female	54.5%	50.0%	54.2%	57.1%	42.9%	65.5%	56.7%
Race	Caucasian	45.0%	37.8%	66.7%	28.6%	61.9%	54.5%	83.3%
	Hispanic	24.5%	14.4%	16.7%	28.6%	14.3%	29.1%	6.7%
	African American	21.4%	26.7%	12.5%	33.3%	9.5%	12.7%	3.3%
	Asian	6.4%	16.7%	4.2%	9.5%	4.8%	0%	3.3%
	Native American	0%	1.1%	0%	0%	4.8%	0%	3.3%
	Other	2.7%	3.3%	0%	0%	4.8%	3.6%	0%
Age	18–35	33.2%	31.1%	25.0%	38.1%	19.0%	27.3%	40.0%
	36–50	35.5%	41.1%	41.7%	33.3%	47.6%	34.5%	36.7%
	51+	31.4%	27.8%	33.3%	28.6%	33.3%	38.2%	23.3%
Income	$0–30,000	22.7%	28.9%	16.7%	33.3%	42.9%	21.8%	36.7%
	$31–60,000	39.0%	41.1%	25.0%	33.3%	38.1%	40.0%	40.0%
	$61–90,000	18.6%	27.8%	41.7%	23.8%	19.0%	32.7%	13.3%
	Over $91,000	19.5%	2.2%	16.7%	9.5%	0%	5.5%	10.0%
Marital Status	Married	28.2%	27.8%	54.2%	23.8%	38.1%	52.7%	56.7%
	Single	50.0%	43.3%	20.8%	52.4%	14.3%	27.3%	23.3%
	Divorced/separated	7.7%	14.4%	16.7%	9.5%	33.3%	16.4%	13.3%
	Widowed	2.3%	1.1%	4.2%	14.3%	9.5%	0%	3.3%
	Live w/partner	11.8%	13.3%	4.2%	0%	4.8%	3.6%	3.3%
Education	Some college/technical school or less	52.7%	55.6%	62.5%	47.6%	66.7%	67.3%	56.7%
	College/technical degree or more	47.3%	44.4%	37.5%	52.4%	33.3%	32.7%	43.3%
Employment	Full time	52.3%	36.7%	41.7%	52.4%	47.6%	40%	30.0%
	Part time	21.4%	26.7%	8.3%	19.0%	23.8%	29.1%	26.7%
	Unemployed	9.1%	15.6%	0%	14.3%	0%	1.8%	6.7%
	Student	2.3%	3.3%	0%	0%	0%	0%	0%
	Homemaker	4.5%	2.2%	20.8%	0%	4.8%	5.5%	20.0%
	Disabled	2.7%	6.7%	4.2%	0%	0%	5.5%	3.3%
	Retired	7.7%	8.9%	25.0%	14.3%	23.8%	18.2%	13.3%

III. Results

Means, standard deviations, and frequencies for responses across all participants are listed in Table 3. Responses of 1–4 on the 10-point scale were classified as "Disagree," responses of 5–6 were coded as "Uncertain," and responses of 7–10 were coded as "Agree." It is important to acknowledge that the mid-scale ratings (5 or 6) that we label as "uncertain" are also uncertain in their meaning—such noncommittal ratings may indicate uncertainty, neutrality, lack of conviction, or confusion (Saucier & Goldberg 2002).

A. Beliefs About Interrogation Tactics

Participants indicated the extent of their agreement with statements that police should be permitted to engage in various interrogation tactics. Participants gave the lowest rating of agreement (9.5 percent) to the technique of falsely claiming that a suspect failed a polygraph test. The rate of agreement was only slightly higher for lying about the presence of matching fingerprints or DNA (16.9 percent), lying about the existence of an eyewitness who identified the suspect (18 percent), threatening a longer sentence (19.5 percent), or promising a more lenient sentence in exchange for a confession (24.3 percent). Put differently, a substantial majority of participants responded that they disagreed with interrogators' use of all five of these techniques. In addition, 63 percent of participants agreed with the statement that police should conduct an investigation to make sure the suspect actually committed the crime before subjecting that suspect to an interrogation.

B. Detecting Lies and False Confessions

Participants tended to agree with the statement that police interrogators are better than ordinary people at identifying lies (53.2 percent), and with the statement that interrogators' ability to detect lies improves with experience (60.1 percent). Participants were considerably more uncertain about their own ability to distinguish between true and false statements. Only 18.7 percent agreed with the statement that they would be able to differentiate a true confession from a false confession by listening to an audiotape of an interrogation. However, more than twice that percentage (39.9 percent) agreed with the statement that they would be able to differentiate a true confession from a false confession by watching a videotape of an interrogation. This audio versus audio+video difference was significant, $t(460) = -12.17$, $p < 0.001$. Finally, participants believed that a false confession might be persuasive to juries—they estimated that there was a 52.1 percent chance that a jury would convict a suspect who falsely confessed to a murder, even when there was no other evidence that he or she was guilty.

C. Beliefs About False Confessions

Jurors did not believe that they would falsely confess to a crime. When asked about minor crimes, 91.3 percent disagreed that they would be likely to falsely confess when interrogated by police. When asked about serious crimes (e.g., murder or rape), even more of the respondents (93.3 percent) said they would not falsely confess.

Table 3: Overall Ratings ($N = 461$)

Statement	M (SD)	*Disagree*	*Uncertain*	*Agree*
Beliefs About Permissible Tactics				
To help police persuade suspects to confess, interrogators should be permitted to promise a more lenient sentence	4.32 (2.75)	237	112	112
To help police persuade suspects to confess, interrogators should be permitted to threaten a longer sentence	3.67 (2.81)	293	78	90
To help police persuade suspects to confess, interrogators should be permitted to lie about the existence of an eyewitness	3.47 (2.88)	303	75	83
To help police persuade suspects to confess, interrogators should be permitted to lie about the presence of matching fingerprints or DNA	3.27 (2.79)	317	66	78
To help police persuade suspects to confess, interrogators should be permitted to falsely claim that the suspect failed a polygraph test	2.72 (2.45)	349	68	44
Before police interrogate a suspect with the goal of getting him or her to confess, they should conduct an investigation to make sure the suspect actually committed the crime	7.04 (2.45)	95	75	291
Detecting True and False Confessions				
Trained police interrogators are better than ordinary people at identifying lies	6.28 (2.81)	114	102	245
Interrogators' ability to detect lies improves with experience	6.78 (2.54)	79	105	277
If I were to listen to an audiotape of an interrogation and confession, I would be able to tell if the confession was true or false	4.45 (2.35)	204	171	86
If I were to watch a videotape of an interrogation and confession, I would be able to tell if the confession was true or false	5.59 (2.41)	137	140	184
A jury will convict an innocent suspect who falsely confessed to a murder when there is no other evidence that he or she is guilty	52.1% (2.95)	—	—	—
Beliefs About Expert Testimony				
It would be useful for jurors to hear an expert witness testify about interrogation techniques used by police	7.27 (2.33)	49	103	309
It would be useful for jurors to hear an expert witness testify about why a defendant might falsely confess to a crime he or she did not commit	7.15 (2.42)	56	109	296
Beliefs About False Confessions				
If interrogated by the police, I would falsely confess to a minor crime	1.68 (1.90)	421	22	18
If interrogated by the police, I would falsely confess to a serious crime	1.58 (1.93)	430	8	23
Innocent suspects are more likely than guilty suspects to consent to police questioning without an attorney present	6.02 (3.18)	143	89	229
Rates of False Confessions				
Percentage of confessions in theft cases that are false	24.2% (1.91)	—	—	—
Percentage of confessions in rape cases that are false	22.5% (2.26)	—	—	—
Percentage of confessions in child molestation cases that are false	19.5% (2.27)	—	—	—
Percentage of confessions in murder cases that are false	22.3% (2.21)	—	—	—

Participants also tended to believe that innocent suspects were more likely than guilty suspects to agree to be questioned by police without an attorney present. About half (49.7 percent) agreed with this statement, while only 31 percent disagreed.

We asked jurors to estimate the rates of false confessions in a variety of case types. The rate of false confessions was believed to be highest in theft cases (24.2 percent), but slightly lower for rape (22.5 percent), murder (22.3 percent), and child molestation cases (19.5 percent).

D. Beliefs About Expert Testimony

An overwhelming majority of participants indicated receptiveness to expert testimony. Roughly three-quarters (74.3 percent) indicated that it would be useful for jurors to hear an expert witness testify about interrogation techniques used by police, and only 11.8 percent indicated that they would not find such testimony helpful. Similarly, when asked if it would be helpful to hear testimony from an expert about why a defendant might falsely confess to a crime he or she did not commit, 71.2 percent said that such testimony would be helpful, while only 13.5 percent believed that it would not.

E. Group Differences

A MANOVA was carried out on all questions as a function of gender. No significant gender differences were found.

A second MANOVA was run to determine if the responses of white surrogate jurors ($N = 223$) differed from the responses of nonwhite surrogate jurors ($N = 238$). The differences between white and nonwhite participants are summarized in Table 4.

Nonwhite participants were significantly more likely than white participants to believe that they would falsely confess to a minor ($F(1, 459) = 5.37$, $p < 0.05$) or a serious ($F(1, 459) = 4.97$, $p < 0.05$) crime. Compared to whites, nonwhites were also significantly more likely to give higher estimates of the probability of false confessions in theft cases ($F(1, 459) = 13.94$, $p < 0.001$), child molestation cases ($F(1, 459) = 7.75$, $p < 0.05$), rape cases ($F(1, 459) = 18.85$, $p < 0.001$), and murder cases ($F(1, 459) = 6.27$, $p < 0.05$).

Whites also indicated greater confidence in the abilities of the police. Compared to nonwhites, white participants were significantly more likely to believe that police are better than ordinary people at detecting lies ($F(1, 459) = 10.74$, $p < 0.05$) and marginally more likely to believe that the interrogators' ability to detect lies improves with experience ($F(1, 459) = 3.57$, $p = 0.06$). With respect to police tactics, whites were more likely to believe that interrogators should be allowed to threaten a suspect with a longer prison sentence if he or she does not confess ($F(1, 459) = 4.60$, $p < 0.05$).

IV. Discussion

The findings presented above make a significant contribution to the understudied area of juror beliefs about interrogations, confessions, and the usefulness of expert testimony. Perhaps the most straightforward finding of this study is that a strong majority of surrogate

Table 4: Response Differences Between White ($N = 223$) and Nonwhite ($N = 238$) Participants

Statement	*Race*	M (SD)	*Median*	*F(1, 459)*
If interrogated by the police, I would falsely confess to a minor crime	White	1.47 (1.50)	1.00	5.37**
	Nonwhite	1.88 (2.19)	1.00	
If interrogated by the police, I would falsely confess to a serious crime	White	1.39 (1.60)	1.00	4.97**
	Nonwhite	1.75 (2.18)	1.00	
Percentage of confessions in theft cases that are false	White	3.08 (1.76)	2.00	13.94***
	Nonwhite	3.74 (1.99)	3.00	
Percentage of confessions in rape cases that are false	White	2.79 (1.90)	2.00	18.85***
	Nonwhite	3.68 (2.47)	3.00	
Percentage of confessions in child molestation cases that are false	White	2.65 (2.04)	2.00	7.75**
	Nonwhite	3.24 (2.44)	2.00	
Percentage of confessions in murder cases that are false	White	2.99 (1.99)	2.00	6.27**
	Nonwhite	3.50 (2.38)	3.00	
Innocent suspects are more likely than guilty suspects to consent to police questioning without an attorney	White	6.36 (3.10)	7.00	5.02**
	Nonwhite	5.70 (3.27)	5.50	
Before police officers interrogate a suspect, they should conduct an investigation to make sure he or she actually committed the crime	White	7.07 (2.77)	8.00	0.04
	Nonwhite	7.02 (2.97)	8.00	
To help police persuade suspects to confess, interrogators should be permitted to promise a more lenient sentence	White	4.42 (2.57)	5.00	0.55
	Nonwhite	4.23 (2.91)	4.00	
To help police persuade suspects to confess, interrogators should be permitted to threaten a longer sentence	White	3.96 (2.77)	4.00	4.60**
	Nonwhite	3.39 (2.83)	2.00	
To help police persuade suspects to confess, interrogators should be permitted to lie about the existence of an eyewitness	White	3.69 (2.88)	3.00	2.42
	Nonwhite	3.27 (2.87)	2.00	

Table 4 *Continued*

Statement	*Race*	M (SD)	*Median*	*F(1, 459)*
To help police persuade suspects to confess, interrogators should be permitted to lie about the presence of matching fingerprints or DNA	White	3.38 (2.77)	2.00	0.70
	Nonwhite	3.16 (2.80)	2.00	
To help police persuade suspects to confess, interrogators should be permitted to falsely claim that the suspect failed a polygraph test	White	2.91 (2.58)	1.00	2.50
	Nonwhite	2.55 (2.31)	1.00	
Trained police interrogators are better than ordinary people at identifying lies	White	6.72 (2.50)	7.00	10.74**
	Nonwhite	5.87 (3.01)	6.00	
Interrogators' ability to detect lies improves with experience	White	7.01 (2.29)	7.00	3.57*
	Nonwhite	6.57 (2.75)	7.00	
If I were to listen to an audiotape of an interrogation and confession, I would be able to tell if the confession was true or false	White	4.37 (2.24)	5.00	0.58
	Nonwhite	4.53 (2.44)	5.00	
If I were to watch a videotape of an interrogation and confession, I would be able to tell if the confession was true or false	White	5.54 (2.27)	6.00	0.17
	Nonwhite	5.63 (2.53)	6.00	
It would be useful for jurors to hear an expert witness testify about interrogation techniques used by police	White	7.23 (2.12)	7.00	0.14
	Nonwhite	7.31 (2.51)	8.00	
It would be useful for jurors to hear an expert witness testify about why a defendant might falsely confess to a crime he or she did not commit	White	7.29 (2.28)	8.00	1.40
	Nonwhite	7.03 (2.54)	7.00	
Probability that a jury will convict an innocent suspect who falsely confessed to a murder when there is no other evidence that he or she is guilty	White	6.35 (2.86)	6.00	1.03
	Nonwhite	6.08 (3.03)	6.00	

NOTE: ***$p < 0.001$; **$p < 0.05$; *$p < 0.10$. All responses are on a 10-point scale.

jurors reported that they would find it helpful to hear expert testimony about police interrogation tactics and about why a suspect might falsely confess to a crime he or she did not commit. Only about 11 percent thought that such testimony would not be useful, while about 64 percent thought it would be useful. This finding is consistent with the one other study in this area, which found that 80 percent of respondents to an Internet questionnaire believed that it would be useful to hear such testimony (Chojnacki et al. 2008). Jurors have the difficult job of sifting through testimony and evidence to reach a verdict. If they believe

a particular type of testimony would assist them in this difficult task, perhaps judges should be predisposed to allow it. Of course, judges may believe they are better judges of what jurors would find helpful than are the jurors themselves.

One concern of judges is that expert testimony might be too influential and would essentially "usurp the role of the jury." Because it is almost always the defense attorney who asks for expert testimony about interrogations and confessions to be presented at trial, some judges may fear that such testimony will cause jurors to overestimate the likelihood of a false confession (Costanzo & Leo 2007; Fulero 2004). Interestingly, in their recent survey, Kassin et al. (2007) found that police investigators estimated that 23.3 percent of innocent subjects provide some form of confession when interrogated. Similarly, our data suggest that jurors may already have a high estimate of the frequency of false confessions. Depending on the type of crime, our participants estimated that somewhere between 19 percent and 24 percent of confessions are false. These estimates are surprisingly high, and may be a consequence of an unusually large amount of media coverage of the phenomenon of false confessions in recent years. A few highly publicized false confessions (e.g., John Mark Karr, the confessor in the Central Park Jogger case), the long list of false confessions exposed through DNA exonerations, and revelations about torture-based interrogations in military settings (Costanzo & Gerrity 2010) have probably shifted public perceptions of the frequency of false confessions. It appears that potential jurors may arrive in the courtroom already willing to believe that a significant number of confessions are false. Because no responsible expert would argue that a fifth of all confessions are false, it is possible that expert testimony might actually lower jurors' estimates of the frequency of false confessions. Further, testimony by a responsible expert would focus the attention of jurors on factors that research indicates might increase the probability of a false confession (e.g., situational forces, interrogation tactics, and suspect vulnerabilities). This focus would improve the quality of juror decisions.

Jurors in this study were open to the idea that a significant number of criminal suspects offer false confessions. However, when we personalized the statement to read "If interrogated by the police, I would falsely confess to a crime I did not commit," approximately 92 percent disagreed. Although they could understand how *others* might be vulnerable to interrogation, most people believed they were personally immune. This finding is consistent with a large body of social-psychological research indicating that people underestimate the extent to which their own behavior might be shaped by strong situational pressures (Zimbardo 2007). It might be that surrogate jurors in our sample believe that false confessors suffer from individual deficits (e.g., retardation, mental illness, youth, drug addiction) that make them vulnerable to interrogators. However, although some false confessions do appear to be the result of individual deficits, it is important to note that the majority of false confessions are given by mentally normal adults (Leo 2008; Leo et al. 2008). Future research should investigate how jurors make sense of false confessions, for example, which individual and situational factors they believe might lead to false confessions.

Our study explored juror beliefs rather than juror knowledge of facts. However, for some beliefs, it is possible to compare what jurors believe to be true with what is actually true. For example, 52 percent of our sample believed that if someone falsely confessed to

a crime, he or she would be convicted, even if there was no other evidence against the person. Research on actual false confession cases has revealed that when a suspect falsely confessed to a crime, then pled "not guilty" and proceeded to trial, he or she was convicted 81 percent of the time (Drizin & Leo 2004). This comparison suggests that potential jurors significantly underestimate the power of a false confession. Expert testimony would likely be helpful in helping jurors appreciate the potency of a false confession and the reasons why that confession might seem plausible (Costanzo & Leo 2007).

Research on lie detection is also relevant here. In this study, 53 percent of participants believed that police interrogators are better than ordinary people at identifying lies (only 25 percent disagreed). In addition, 60 percent believed that interrogators' ability to detect lies improves with experience (only 17 percent disagreed). In contrast, the available research indicates that people perform only slightly better than chance when asked to distinguish between truth and lies (Bond & DePaulo 2006). Police appear to be no better than laypeople at distinguishing truthful from deceptive statements, and police training does not appear to improve their performance (Granhag & Stromwall 2004; Meissner & Kassin 2002). However, despite mediocre performance, police are far more confident than laypeople about their ability to tell when a suspect is lying. This unfounded confidence is consequential because once an innocent suspect is misclassified as deceptive, that suspect can then be subjected to coercive interrogation techniques. Jurors' misplaced confidence in the lie detection abilities of police may cause them to give too much weight to confident but mistaken police judgments about the deceptiveness of a defendant.

The process of police interrogation is hidden from public view. Because interrogations are conducted in private, most of what occurs in the interrogation room is mysterious to potential jurors. Although police are legally permitted to lie to suspects about the existence of incriminating evidence, most potential jurors are not aware of this fact. For example, in the Chojnacki et al. (2008) survey, only 43 percent of respondents correctly identified lying to suspects as a legally permissible interrogation technique. In the study presented above, surrogate jurors expressed disapproval of interrogators lying about evidence. Strong majorities disapproved of lying about the existence of an eyewitness who identified the suspect (65.7 percent), lying about the presence of matching fingerprints or DNA (68.8 percent), and telling a suspect that he or she failed a polygraph test when the suspect had not (75.7 percent). These data suggest that when jurors are presented with a defendant's confession, they may assume that it was obtained without lying by interrogators. A capable lawyer may be able to point out this tactic without the assistance of an expert witness, but it is not clear that all lawyers raise the issue effectively. Because audio or video recording of interrogations is still not required in most jurisdictions, jurors may not even know that interrogators lied to a suspect to induce a confession. If jurors learn that police lied to elicit a confession, it might make them more skeptical of that confession.

Although gender played no significant role in accounting for the beliefs of jurors, race did. For every question where we found significant differences between white and nonwhite jurors, the differences were in the same direction: nonwhites expressed less confidence in police and a greater willingness to believe in the possibility of false confessions. Specifically, compared to whites, nonwhites were more likely to believe that they would confess to a minor or a serious crime, that a higher percentage of confessions in

theft, rape, child molestation, and murder cases are false, that innocent suspects are more likely than guilty suspects to consent to being questioned without an attorney present, and that interrogators should not be allowed to threaten a longer sentence if a suspect is reluctant to confess. Nonwhites were less likely to believe that interrogators are better than ordinary people at detecting lies, or that the ability of a police officer to detect lies improves with experience. These findings have implications for jury selection in cases involving disputed confessions. Because white and nonwhite jurors differ in beliefs relevant to many types of cases, some researchers have called for "racially conscious" jury selection as a means of ensuring greater fairness in verdicts, and as a way of lending greater legitimacy to verdicts (Fukurai & Krooth 2003).

Our study used a diverse and realistic sample of prospective jurors to assess what jurors actually know and believe about the process of interrogation and the possibility of false confessions. Although this study advances our understanding of juror knowledge and beliefs, it is only a first step. Further research is needed to determine if our findings can be replicated by others. It is also important to understand how jurors reason about confession evidence. The questionnaire used in this study was administered to individual jurors. It is unclear whether the process of jury deliberation would shift the beliefs of individual jurors. Those uncertain jurors who did not fall into either the "disagree" or "agree" categories might be especially persuadable during the process of group deliberation. Postverdict interviews with actual jurors would enable us to gain a better understanding of how jurors evaluate both confessions and expert testimony about interrogations and confessions.

It is jurors who must evaluate the credibility of disputed confessions. Research on jurors is an essential component of a deep, psychological understanding of police interrogations and false confessions. Such research also has implications for decisions made by lawyers, experts, and judges. Data on what jurors actually know and believe provide the best foundation for decision making. The findings presented above are a step toward building that foundation.

References

Bond, Charles F., & Bella M. DePaulo (2006) "Accuracy of Deception Judgments," 10 *Personality & Social Psychology Rev.* 214.

Bornstein, Brian H. (1999) "The Ecological Validity of Jury Simulations: Is the Verdict Still Out?" 23 *Law & Human Behavior* 75.

Chojnacki, Danielle E., Michael D. Cicchini & Lawrence T. White (2008) "An Empirical Basis for the Admission of Expert Testimony on False Confessions," 40 *Arizona State Law J.* 111.

Corwin, Miles (2003) *Homicide: A Year with the LAPD's Elite Detectives.* New York: Holt.

Costanzo, Mark, & Ellen Gerrity (2010) "The Effects and Effectiveness of Using Torture as an Interrogation Device: Using Reseach for Inform the Policy Debate," 3 *Social Issues & Policy Rev*. 179.

Costanzo, Mark, & Richard A. Leo (2007) "Research findings and expert testimony on police interrogations and confessions to crimes," in M. Costanzo, D. Krauss, & K. Pezdek, eds., *Expert Psychological Testimony for the Courts.* (pp. 69–98). Mahwah, NJ: Erlbaum.

Davis, Deborah, & William O'Donahue (2003) "The Road to Perdition: Extreme Influence Tactics in the Interrogation Room," in W. O'Donahue & E. Levensky, eds., *Handbook of Forensic Psychology.* San Diego, CA: Elsevier Academic Press.

Drizin, Steven A., & Richard A. Leo (2004) "The Problem of False Confessions in the Post-DNA World," 82 *North Carolina Law Rev.* 891.

Fukurai, Hiroshi, & Richard Krooth (2003) *Race in the Jury Box: Affirmative Action in Jury Selection.* Albany, NY: State Univ. of New York Press.

Fulero, Solomon (2004) "Expert Psychological Testimony on the Psychology of Interrogations and Confessions," in G. D. Lassiter, ed., *Interrogations, Confessions, and Entrapment.* New York: Kluwer Press.

Granhag, Par A., & Leif A. Stromwall (2004) *The Detection of Deception in Forensic Contexts.* Cambridge, UK: Cambridge Univ. Press.

Gudjonsson, Gisli H. (2004) *The Psychology of Interrogations and Confessions: A Handbook.* Chichester: John Wiley & Sons.

Huntley, Jill E., & Mark Costanzo (2003) "Sexual Harassment Stories: Testing a Story-Mediated Model of Juror Decision-Making in Civil Litigation," 27 *Law & Human Behavior* 29.

Innocence Project (n.d.) *False Confessions and Recording of Custodial Interrogation.* Available at <http://www.innocenceproject.org/Content/314.php#>.

Kassin, Saul, & Gisli H. Gudjonsson (2004) "The Psychology of Confessions: A Review of the Literature and Issues," 5 *Psychological Science in the Public Interest* 33.

Kassin, Saul M., Richard A. Leo, Christian A. Meissner, Kimberly D. Richman, Lori H. Colwell, Amy Leach, & Dana LaFon (2007) "Police Interviewing and Interrogation: A Self-Report Survey of Police Practices and Beliefs," 31 *Law & Human Behavior* 381.

Kassin, Saul, Christian Meissner, & Rebecca J. Norwick (2005) "I'd Know a False Confession if I Saw One. A Comparative Study of College Students and Police Investigators," 29 *Law & Human Behavior* 211.

Kassin, Saul, & Katherine Neumann (1997) "On the Power of Confession Evidence: An Experimental Test of the Fundamental Difference Hypothesis," 21 *Law & Human Behavior* 469.

Kassin, Saul, & Holly Sukel (1997) "Coerced Confessions and the Jury: An Experimental Test of the Harmless Error Rule," 21 *Law & Human Behavior* 27.

Lassiter, Daniel, Shari S. Diamond, Heather C. Schmidt, & Jennifer K. Elek (2007) "Evaluating Videotaped Confessions: Expertise Provides No Defense Against the Camera-Perspective Effect," 18 *Psychological Science* 224.

Lassiter, Daniel, & Andrew L. Geers (2004) "Evaluation of Confession Evidence: Effects of Presentation Format," in G. D. Lassiter, ed., *Interrogations, Confessions, and Entrapment.* New York: Kluwer Press.

Leo, Richard A. (1996) "Inside the Interrogation Room," 86 *J. of Criminal Law & Criminology* 266.

——— (2008) *Police Interrogation and American Justice.* Cambridge: Harvard Univ. Press.

Leo, Richard, Mark Costanzo, & NeHa Shaked-Schroer (2008) "Psychological and Cultural Aspects of Interrogation and False Confessions: Using Research to Inform Legal Decision-Making," in J. Lieberman & D. Krauss, eds., *Psychology in the Courtroom.* London: Ashgate.

Meissner, Christian A., & Saul M. Kassin (2002) " 'He's Guilty!' Investigator Bias in Judgments of Truth and Deception," 26 *Law & Human Behavior* 469.

Olsen-Fulero, Lynda, & Solomon M. Fulero (1997) "Commonsense Rape Judgments: An Empathy-Complexity Theory of Rape Juror Story Making," 3 *Psychology, Public Policy, & Law* 402.

Pennington, Nancy, & Reid Hastie (1994) "The Story Model for Juror Decision Making," in R. Hastie, ed., *Inside the Juror.* New York: Cambridge Univ. Press.

Rigoni, Mary E., & Christian A. Meissner (2008). "Is it Time for a Revolution in the Interrogation Room? Empirically Validating Inquisitorial Methods," presented at the American Psychology-Law Society Conference, Jacksonville, FL.

Russano, Melissa B., Christian A. Meissner, Fadia M. Narchet, & Saul M. Kassin (2005) "Investigating True and False Confessions Within a Novel Experimental Paradigm," 16 *Psychological Science* 481.

Saucier, Gerard, & Lewis R. Goldberg (2002) "Assessing the Big Five: Applications of 10 Psychometric Criteria to the Development of Marker Scales," in B. de Raad & M. Perugini, eds., *Big Five Assessment.* Goettingen, Germany: Hogrefe & Huber.

Scheck, Barry, Peter Neufeld, & James Dwyer (2000) *Actual Innocence: Five Days to Execution, and Other Dispatches from the Wrongly Convicted.* Garden City, NJ: Doubleday.

Warden, Robert (2003) *The Role of False Confessions in Illinois Wrongful Murder Convictions Since 1970.* Center on Wrongful Convictions Research Report. Available at <www.law.northwestern.edu/depts/clinic/>.

Zimbardo, Philip G. (2007) *The Lucifer Effect: Understanding How Good People Turn Evil.* New York: Random House.

Cases Cited

Crane v. Kentucky, 476 U.S. 683 (1986).

Daubert v. Merrell Dow Pharmaceuticals, Inc., 113 S. CT. 2786 (1993).

State v. Free, 798 A.2d 83 (N.J. Ct. App. 2002).

APPENDIX E

Psychological Science in the PUBLIC INTEREST

Volume 5 Number 2 • November 2004

The Psychology of Confessions

A Review of the Literature & Issues

by Saul M. Kassin and Gisli H. Gudjonsson

Editorial by Elizabeth F. Loftus

A Supplement to *Psychological Science*

A JOURNAL OF THE American Psychological Society

PSYCHOLOGICAL SCIENCE IN THE PUBLIC INTEREST

A Supplement to *Psychological Science*
A Journal of the American Psychological Society
Published by Blackwell Publishing

Note to Readers of *Psychological Science in the Public Interest* (PSPI): PSPI is published three times a year by the American Psychological Society. Ordinarily, each issue of PSPI will contain a single analysis of an important issue of public interest. All articles are commissioned by the editors, and PSPI does not accept unsolicited manuscripts. An article is commissioned by the editors only after careful vetting of both the topic and the authors. Topics chosen for commissioning are nominated from many sources, including editorial board members, APS Board of Directors, and members of APS. All members of APS are invited to nominate topics (and names of potential authors). Send nominations to either editor at: *sjc9@Cornell.edu; MAGernsb@wisc.edu.* For a description of editorial policies governing PSPI manuscripts, please see the editorial in the May 2000 issue of *Psychological Science.*

EDITORIAL OFFICE
Psychological Science in the Public Interest, Department of Human Development, Cornell University, Ithaca, NY 14853; Email: sjc9@cornell.edu

SOCIETY AND MEMBERSHIP OFFICE
American Psychological Society, Alan Kraut, Executive Director, 1010 Vermont Avenue, NW, Suite 1100, Washington, DC 20005-4907; telephone 202-783-2077; fax 202-783-2083; e-mail: aps@psychologicalscience.org; www.psychologicalscience.org. APS journals are available on-line to APS Members and journal subscribers. Contact the APS office for information.

SUBSCRIPTION AND PUBLICATION OFFICES
Blackwell Publishing, 350 Main Street, Malden, MA 02148, US, and 9600 Garsington Road, Oxford OX4 2XG, UK. Call US (800) 835-6770 or (781) 388-8206, UK +44 (0) 1865 778315; fax US (781) 388-8232, UK +44 (0) 1865 471775; e-mail: US subscrip@bos.blackwellpublishing.com, UK customerservices@oxon.blackwellpublishing.com. Please visit us on-line at www.blackwellpublishing.com.
ADVERTISING: For information and rates, please visit the journal's website at www.blackwellpublishing.com/journals/pspi, email: aidcads@aidcvt.com, or contact Faith Elliott, Blackwell Advertising Representative, 50 Winter Sport Lane, PO Box 80, Williston, VT 05495. Phone: (800) 866-1684 or Fax: (802) 864-7749.
MAILING: Periodical postage paid at Boston, MA, and additional offices. Mailing to rest of world by Deutsche Post Global Mail. Canadian mail is sent by Canadian publications mail agreement number 40573520. Postmaster: Send all address changes to *Psychological Science in the Public Interest*, Blackwell Publishing Inc., Journals Subscription Department, 350 Main St., Malden, MA 02148-5020.

SUBSCRIPTION INFORMATION
Psychological Science in the Public Interest is published three times a year as a supplement to *Psychological Science. Psychological Science* (ISSN 0956-7976) is published monthly. Subscriptions to *Psychological Science in the Public Interest* and *Psychological Science* also include 6 issues of *Current Directions in Psychological Science*. Annual subscription rates (2004) are:

	The Americas**	Rest of World***
Institutional Premium Rate*	$1522	£1134
Personal Rate	$206	£184 (€276)

Members of the American Psychological Society receive the journal as part of their annual dues. *Includes print plus premium on-line access to the current issue and all available backfiles. Print and on-line-only rates are also available (see below). **Customers in Canada should add 7% GST or provide evidence of entitlement to exemption. ***Customers in the UK should add VAT at 5%; customers in the EU should also add VAT at 5%, or provide a VATregistration number or evidence of entitlement to exemption. For more information about Blackwell Publishing journals, including on-line-access information, terms and conditions, and other pricing options, please visit www.blackwellpublishing.com or contact our customer service department, phone: (800) 835-6770 or (781) 388-8206 (US office), +44 (0)1865 778315 (UK office). **Back Issues:** Back issues are available from the publisher at the current single issue rate.
Indexing/Abstracting: *Academic ASAP; Expanded Academic ASAP; Academic Search Elite; Academic Search Premier; Cambridge Scientific Abstracts Social Services Abstracts; CatchWord; e-psyche; EBSCO Online; ISI Basic Social Sciences Index; ISI Current Contents/Social & Behavioral Science; InfoTrac OneFile; Ingenta; Linguistics and Language Behavior Abstracts; Online Computer Library Center FirstSearch Electronic Collections Online; PsycINFO; Psychological Abstracts; Psychological and Behavioral Sciences Collection; Social Sciences Citation Index; Social Sciences Index/Full Text; Sociological Abstracts; Wilson Social Sciences Index/Abstracts.*

Editorial

The Devil in Confessions

Elizabeth F. Loftus

University of California, Irvine

It is a humbling experience to go to the Web site of the Innocence Project (http://www.innocenceproject.org), a nonprofit legal clinic at the Cardozo School of Law that handles cases in which postconviction DNA testing of evidence has provided proof of innocence. A recent visit to the site led me to the case of Eddie Joe Lloyd, who was wrongfully convicted of the murder of a 16-year-old girl in Detroit. During police interrogation, officers fed him information that he could not have known, such as details about the victim's clothing and the location of her body. Lloyd confessed and was tried by a jury that convicted him after less than an hour's deliberation. He was sentenced to life without the possibility of parole, and was freed in 2002 after serving 17 years in prison. He is the 110th American to be exonerated by DNA testing, and a good case to spotlight the false-confession problem.

Lloyd's is one of the 155 wrongful-conviction case profiles described on the Innocence Project Web site. Although the convictions in the vast majority of these cases appear to have been due to faulty eyewitness memory, about a fifth of the cases involved defendants who falsely confessed.

Kassin and Gudjonsson have thoroughly reviewed the literature on confessions, providing scientific evidence bearing on just about any question you might ask about the subject, as well as identifying the very real problem of false confessions and recommending some solutions. They use case studies, archival data, results of laboratory and field experiments, and other forms of evidence to analyze confession evidence and its impact on real people and society. Their monograph is a superb example of psychological science in the public interest.

People intuitively feel that they would never confess to something they did not do. But people do confess. They confess to things they actually did (in confessionals, in psychotherapy, and in police interrogations). And they confess to things that they did not do. One goal of our legal system must be to secure convictions of the guilty, but another must be to minimize wrongful convictions, including those involving false confessions. There is much about the legal process that traps the innocent in the confession net, and there are some ways we can, in principle, widen the holes of that nasty net.

What I have always found particularly disturbing about the extraction of confessions by police is the use of a common interrogation tactic: presentation of false incriminating evidence. If the police had wanted to, they could have told Eddie Joe Lloyd that his fingerprints had been found at the scene or that an eyewitness saw him commit the murder. Such trickery and deceit is perfectly legal in the United States (although interestingly, in many European countries, lying to suspects is not permissible). To see why such a tactic is a problem, one has only to look at the false-memory literature and note what ordinary individuals can be led falsely to believe. In recent work, subjects have been deceived into believing (on the basis of a story experimenters said the subjects' parents had provided) that, as children, they had been lost in a shopping mall for an extended time before being rescued by an elderly person and reunited with their parents. In other studies based on this lost-in-the mall paradigm, subjects came to believe that they had had an accident at a family wedding, that they had been victims of a vicious animal attack, or that they had nearly drowned as children and had been rescued by a lifeguard. And in the famous computer-crash paradigm, developed by Kassin and his collaborators, subjects presented with false evidence that an eyewitness saw them hit a forbidden key on a computer keyboard were especially likely later to confess to having committed that prohibited act.

So we have every reason to believe that some people who are presented with false evidence that they committed a crime might actually come to believe that they did. In such cases of internalized false confession, people might not only confess to acts they did not do, but in some cases even confabulate false memories to go along with their confession, producing what is sometimes called a *full confession*—a detailed and convincing, but untrue, account of the crime and how it was committed. How often do the police actually use this type of trickery? One study of the interrogation tactics most frequently observed in 182 actual police interrogations suggests that it happens about 30% of the time.

Studies using the computer-crash paradigm have taught us much about false confessions in an experimental setting. They have taught us some people will make false confessions and come to believe in their own guilt even when their confessions have substantial financial consequences. And they have taught us that teenagers will confess falsely at greater rates than adults.

And from the studies of actual inmates, we learn some of the reasons why people confess. Although some suspects confess because they are psychologically manipulated into believing

they played a role in the crimes, others confess to seek an escape from police pressure or to protect someone else.

Despite the common use of interrogation tactics that can ensnare the innocent, juries and judges tend to be especially impressed with confession evidence. Some studies show that it can sometimes be more powerful than even eyewitness testimony, another form of persuasive evidence. This is true despite the fact that observers, even trained ones, have great difficulty telling true confessions from false ones when they watch them.

Kassin and Gudjonsson provide a real service when they not only identify the problems, but also suggest some solutions that will secure confessions from the guilty, but not from the innocent. They recommend changes in current practices—especially the practice of outright lying to suspects. They recommend videotaping all interviews and interrogations, suggesting that more states join Minnesota, Alaska, Illinois, and Maine in requiring videotaping. And they provide an important insight into how the videotaping needs to be done: As tempting as it is to simply focus the camera on the suspect, this will lead to a mistaken impression: Observers feel that confessions are elicited with less pressure when the camera is focused on the suspect alone than when it is focused on both the suspect and the interrogator.

Eddie Joe Lloyd has yet to receive compensation for the nearly two decades he lost when he was tried, wrongfully convicted, and imprisoned. Let us hope that scrutiny of his case and the cases of other known false confessors, considered together with the growing literature on confessions so ably reviewed in this issue of *Psychological Science in the Public Interest,* will lead to more reforms, more innovation, and more justice.

Psychological Science in the PUBLIC INTEREST

CONTENTS

Volume 5 Number 2 • November 2004

The Psychology of Confessions: A Review of the Literature and Issues

Saul M. Kassin and Gisli H. Gudjonsson

A JOURNAL OF THE American Psychological Society

About the Authors

Saul M. Kassin is Massachusetts Professor of Psychology and Founder of Legal Studies at Williams College. In 1984, he was awarded a U.S. Supreme Court Judicial Fellowship; in 1985, he was a visitor in the Psychology and Law Program at Stanford University. Kassin is author of the textbook *Psychology* (Prentice Hall, 4th ed., 2004) and coauthor of *Social Psychology* (with Sharon Brehm and Steven Fein; Houghton Mifflin, 6th ed., 2005). In collaboration with Lawrence Wrightsman, he has also published *Confessions in the Courtroom* (Sage, 1993), *The Psychology of Evidence and Trial Procedure* (Sage, 1985), and *The American Jury on Trial: Psychological Perspectives* (Hemisphere, 1988). Kassin's research focuses on police interrogations and confessions and their impact on juries. He also studies eyewitness testimony, including questions pertaining to general acceptance within the scientific community. He is a Fellow of the American Psychological Society and American Psychological Association and has served on the editorial board of *Law and Human Behavior* since 1986. He has testified as an expert witness in state, federal, and military courts; lectures frequently to judges, lawyers, law-enforcement groups, and psychologists; and has appeared as a media consultant for several news programs.

Gisli H. Gudjonsson is a Professor of Forensic Psychology at the Institute of Psychiatry, King's College, London, and Head of the Forensic Psychology Services at the Maudsley Hospital, also in London. He is a Fellow of the British Psychological Society and has an Honorary Doctorate in Medicine from the University of Iceland. He has published extensively in the areas of forensic psychology, including violence, psychological vulnerability, false confessions, police interviewing, and recovered memories. He pioneered the empirical measurement of suggestibility and provided expert evaluation in a number of high-profile cases, including those of the Guildford Four and the Birmingham Six in England and of Henry Lee Lucas in the United States. Gudjonsson is author of *The Psychology of Interrogations, Confessions, and Testimony* (Wiley, 1992), *The Gudjonsson Suggestibility Scales Manual* (Psychology Press, 1997), *Forensic Psychology: A Guide to Practice* (with Lionel Haward; Routledge, 1998), *The Causes and Cures of Criminality* (with Hans Eysenck; Plenum Press, 1989), and *The Psychology of Interrogations and Confessions: A Handbook* (John Wiley, 2003). He has been co-editor-in-chief of *Personality and Individual Differences* since 1998 (a joint position with Sybil Eysenck).

The Psychology of Confessions

A Review of the Literature and Issues

Saul M. Kassin[1] and Gisli H. Gudjonsson[2]

[1]Department of Psychology, Williams College, and [2]Institute of Psychiatry, King's College, London, United Kingdom

SUMMARY—*Recently, in a number of high-profile cases, defendants who were prosecuted, convicted, and sentenced on the basis of false confessions have been exonerated through DNA evidence. As a historical matter, confession has played a prominent role in religion, in psychotherapy, and in criminal law—where it is a prosecutor's most potent weapon. In recent years, psychologists from the clinical, personality, developmental, cognitive, and social areas have brought their theories and research methods to bear on an analysis of confession evidence, how it is obtained, and what impact it has on judges, juries, and other people.*

Drawing on individual case studies, archival reports, correlational studies, and laboratory and field experiments, this monograph scrutinizes a sequence of events during which confessions may be obtained from criminal suspects and used as evidence. First, we examine the preinterrogation interview, a process by which police target potential suspects for interrogation by making demeanor-based judgments of whether they are being truthful. Consistent with the literature showing that people are poor lie detectors, research suggests that trained and experienced police investigators are prone to see deception at this stage and to make false-positive errors, disbelieving people who are innocent, with a great deal of confidence.

Second, we examine the Miranda *warning and waiver, a process by which police apprise suspects of their constitutional rights to silence and to counsel. This important procedural safeguard is in place to protect the accused, but researchers have identified reasons why it may have little impact. One reason is that some suspects do not have the capacity to understand and apply these rights. Another is that police have developed methods of obtaining waivers. Indeed, innocent people in particular tend to waive their rights, naively believing that they have nothing to fear or hide and that their innocence will set them free.*

Third, we examine the modern police interrogation, a guilt-presumptive process of social influence during which trained police use strong, psychologically oriented techniques involving isolation, confrontation, and minimization of blame to elicit confessions. Fourth, we examine the confession itself, discussing theoretical perspectives and research on why people confess during interrogation. In particular, we focus on the problem of false confessions and their corrupting influence in cases of wrongful convictions. We distinguish among voluntary, compliant, and internalized false confessions. We describe personal risk factors for susceptibility to false confessions, such as dispositional tendencies toward compliance and suggestibility, youth, mental retardation, and psychopathology. We then examine situational factors related to the processes of interrogation and show that three common interrogation tactics—isolation; the presentation of false incriminating evidence; and minimization, which implies leniency will follow—can substantially increase the risk that ordinary people will confess to crimes they did not commit, sometimes internalizing the belief in their own culpability.

Fifth, we examine the consequences of confession evidence as evaluated by police and prosecutors, followed by judges and juries in court. Research shows that confession evidence is inherently prejudicial, that juries are influenced by confessions despite evidence of coercion and despite a lack of corroboration, and that the assumption that "I'd know a false confession if I saw one" is an unsubstantiated myth. Finally, we address the role of psychologists as expert witnesses and suggest a number of possible safeguards. In particular, we argue that there is a need to reform interrogation practices that increase the risk of false confessions and recommend a policy of mandatory videotaping of all interviews and interrogations.

Address correspondence to Saul Kassin, Department of Psychology, Williams College, Williamstown, MA 01267; e-mail: skassin@williams.edu.

In 1989, a female jogger was beaten senseless, raped, and left for dead in New York City's Central Park. Her skull had multiple fractures, her eye socket was crushed, and she lost three quarters of her blood. She managed to survive, but she was and still is completely amnesic for the incident (Meili, 2003). Within 48 hours, solely on the basis of police-induced confessions, five African American and Hispanic American boys, 14 to 16 years old, were arrested for the attack. All were ultimately tried, convicted, and sentenced to prison. The crime scene betrayed a bloody, horrific act, but no physical traces at all of the defendants. Yet it was easy to understand why detectives, under the glare of a national media spotlight, aggressively interrogated the boys, at least some of whom were "wilding" in the park that night. It was also easy to understand why the boys were then prosecuted and convicted. Four of their confessions were videotaped and presented at trial. The tapes were compelling, with each and every one of the defendants describing in vivid—though, in many ways, erroneous—detail how the jogger was attacked, when, where, and by whom, and the role that he played. One boy stood up and reenacted the way he allegedly pulled off the jogger's running pants. A second said he felt pressured by the others to participate in his "first rape." He expressed remorse and assured the assistant district attorney that he would not commit such a crime again. Collectively, the taped confessions persuaded police, prosecutors, two trial juries, a city, and a nation (for details, see T. Sullivan, 1992).

Thirteen years later, Matias Reyes, in prison for three rapes and a murder committed subsequent to the jogger attack, stepped forward at his own initiative and confessed. He said that he had raped the Central Park jogger and that he had acted alone. Investigating this new claim, the Manhattan district attorney's office questioned Reyes and discovered that he had accurate, privileged, and independently corroborated knowledge of the crime and crime scene. DNA testing further revealed that the semen samples originally recovered from the victim—which had conclusively excluded the boys as donors (prosecutors had argued at trial that the police may not have captured all the perpetrators in the alleged gang rape, but this did not mean they did not get some of them)—belonged to Reyes. In December 2002, the defendants' convictions were vacated. The case of the Central Park jogger revealed five false confessions resulting from a single investigation (Kassin, 2002; *New York v. Wise, Richardson, McCray, Salaam, & Santana*, 2002; Saulny, 2002).

Despite its historic symbolic value and notoriety, the jogger case illustrates a phenomenon that is not new or unique. In 1975, in one of the worst miscarriages of justice in England, six Irishmen were erroneously convicted of the largest number of murders in British history; they remained in prison until the Court of Appeal quashed their convictions in 1991. The case involved the Irish Republican Army's bombing of two public houses in Birmingham, which resulted in the death of 21 people. During extensive interrogations, the men were pressured, ill-treated, and confronted with scientific evidence supposedly indicating that two of them had traces of explosives on them. This "evidence" later proved to be flawed, as was documentary evidence fabricated by the police. Four of the men eventually broke down and signed full written confessions. Though implicated in these confessions, the other two men resisted the pressure and maintained their innocence (see Gudjonsson, 2003b).

The pages of legal history reveal many tragic miscarriages of justice involving innocent men and women who were prosecuted, wrongfully convicted, and sentenced to prison or death (Bedau & Radelet, 1987; Borchard, 1932; Munsterberg, 1908; Radelet, Bedau, & Putnam, 1992; Rattner, 1988). Although there are divergent opinions on the rate of wrongful convictions and whether it is even possible to estimate their frequency (e.g., Bedau & Radelet, 1987; Cassell, 1999; Leo & Ofshe, 2001; Markman & Cassell, 1988), some disturbing number of these cases have involved defendants who were convicted solely on the basis of false confessions that they had contested—only later to be exonerated (Drizin & Leo, 2004; Gross, Jacoby, Matheson, Montgomery, & Patel, 2004; Gudjonsson, 1992, 2003b; Kassin, 1997b; Kassin & Wrightsman, 1985; Leo & Ofshe, 1998).

As a result of technological advances in forensic DNA typing—which now enables investigators to review past cases in which blood, hair, semen, skin, saliva, or other biological material has been preserved—many new, high-profile wrongful convictions have surfaced in recent years. In *Actual Innocence*, Scheck, Neufeld, and Dwyer (2000) autopsied the first 62 postconviction DNA exonerations and the flaws that they exposed within the criminal justice system. As the number of postconviction DNA exonerations has accumulated since that time (up to 157 at the time of this writing), revealing the mere tip of a much lager iceberg (Gross et al., 2004), the Innocence Project and other researchers have come to realize the pivotal role that psychological science can play in the study and prevention of wrongful convictions. First and foremost, it is clear that eyewitness misidentifications are the most common source of error, found in roughly three quarters of these cases, and that psychologists who study eyewitness memory have had enormous impact identifying the problems and proposing reforms to minimize error (Wells et al., 2000; Wells & Olson, 2003). Although other problems involve police and prosecutorial misconduct, bad lawyering, witness and informant perjury, and flaws in various forensic sciences (see Faigman, Kaye, Saks, & Sanders, 2002), our focus in this monograph is on a second psychologically based problem that has reared its ugly head: that 15 to 25% of innocent defendants overall—and a much larger percentage of homicide defendants—who have been exonerated by DNA evidence had confessed (Innocence Project, 2001; White, 2003).

CONFESSIONS IN CONTEXT

A *confession* is a detailed written or oral statement in which a person admits to having committed some transgression, often acknowledging guilt for a crime. In some settings, confessions are presumed necessary for absolution, social acceptance, freedom, or physical and mental health, making it easy to understand why people often exhibit an "urge to confess." In other settings, however, confessions predictably result in personally damaging consequences to the confessor—such as a loss of money, liberty, or even life itself—making it difficult to understand this aspect of human behavior.

Confessions have played a multifaceted role throughout history. There are three venues of human social encounters in which one person's confession to another person has proved important: religion, psychotherapy, and criminal justice. In religion, the scene of the penitent with the Catholic priest, occurring inside a small, private, and hallowed stall known as a confessional, serves as a reminder that all of the world's major religions advise or oblige adherents to confess their transgressions as a means of moral cleansing. In psychotherapy, the image of the emotionally distressed patient lying on a couch, often in tears, while disclosing personal secrets to a therapist illustrates the widely held belief in the healing power of "opening up" the past—including memories of one's actual or imagined misdeeds. In criminal justice, of course, the classic image of the beleaguered suspect being grilled behind locked door and under the bright light of the interrogation room serves as a stark reminder that, in law, confession is the most potent evidence of guilt.

Confession in Religion

All major religions of the world—Buddhism, Christianity, Hinduism, Islam, and Judaism—provide a mechanism and encouragement for followers to acknowledge and disclose their transgressions. The purposes served by these confessions are twofold: to cleanse the individual's soul and to police the community, thus serving as a deterrent to wrongdoing. Religions vary as to how, when, where, and to whom confessions are given, and even whether they are made in private or in public. Profound differences exist even within Christianity. For example, Quakers and Unitarians are encouraged to confess their sins to themselves, through private prayer. Other Christians, such as Catholics and the Greek and Russian Orthodox, have more formal rituals whereby they confess to ministers or priests, often at a designated time or place. The adoption of this model was particularly explicit in the year 1215, when the Roman Catholic Church, in the Fourth Lateran Council, made the rite of an annual confession obligatory for all adherents. In still other religions, the confession to be given depends on the nature of the misdeed. Among American Southern Baptists, for example, people are required to disclose their sins to whomever they have specifically harmed—such as a spouse, an employer, or the entire congregation.

Confession in Psychotherapy

In many parts of the world, people have long believed that confession is good not only for the soul, but also for the body and the mind. Several years ago, La Barre (1964) found that many natives of North and South America believed that physical and mental health required purity, which in turn required the exposure of misdeeds—often through elaborate confession ceremonies involving shamans and witch doctors. Similar notions have permeated Western medicine, as when Breuer and Freud (1895/1955) observed from psychotherapy sessions that patients often felt better after purging the mind of material buried beneath consciousness. This discovery spawned Freudian psychoanalysis, the first systematic "talking cure," and now forms the basis for most modern psychotherapies and social support groups.

Recent research confirms the healing power of opening up about one's problems, traumas, and transgressions. In a series of controlled experiments, Pennebaker (1997, 2002) and other investigators had research subjects talk into a tape recorder or write either about past traumas or about trivial daily events. While speaking or writing, subjects in the trauma group were physiologically aroused and upset. Many tearfully recounted deaths, accidents, failures, personal wrongdoings, and instances of physical or sexual abuse. Soon, however, these subjects felt better. Although systolic blood pressure levels rose during the disclosures, they later dipped below preexperiment levels. Moreover, these subjects exhibited a decline in doctor visits over the next 6 months.

Other studies, too, have shown that keeping confessional secrets can be stressful and that "letting go" can have therapeutic effects on health—especially when the events in question are highly traumatic (Smyth, 1998). In a study of women who had undergone an abortion, those who talked about it to an experimenter—compared with those who did not—were later less haunted by intrusive thoughts of the experience (Major & Gramzow, 1999). In another study, researchers identified 80 gay men who were newly infected with the HIV virus but were asymptomatic, questioned them extensively, and tracked their progress for 9 years. Results showed that the infection spread more rapidly and length of survival was shorter in men who were partly "in the closet" compared with those who were open about their homosexuality (Cole, Kemeny, Taylor, Visscher, & Fahey, 1996). This correlation does not prove that coming out is healthier than "staying in." In a controlled laboratory experiment, however, subjects told to suppress rather than express turbulent emotional thoughts exhibited a temporary decrease in the activity of certain immune cells (Petrie, Booth, & Pennebaker, 1998).

Confession in Criminal Law

In criminal law, confession evidence is the government's most potent weapon—so much so, as one prominent legal scholar

put it, that "the introduction of a confession makes the other aspects of a trial in court superfluous" (McCormick, 1972, p. 316). On the one hand, confessions play a vital role in law enforcement and crime control. On the other hand, they serve as a recurring source of controversy, with questions often arising about whether a statement is authentic, voluntary, reliable, the product of a competent waiver of rights, and in accord with the law. For these reasons, confessions to crime have been described as "troubling" (Brooks, 2000).

To guard the integrity of the criminal justice system, to protect citizens against violations of their constitutional rights, and to minimize the risk that innocent people are induced to confess to crimes they did not commit, American courts have set guidelines for the admission of confession evidence at trial. According to Wigmore's (1970) historical overview, the modern treatment of confession evidence in law has evolved through a series of stages. In England, during the 16th and 17th centuries, no restrictions were placed on the use of confessions; all avowals of guilt were accepted at face value. At least to the middle of the 17th century, physical torture was used to extract confessions. By the 19th century, however, the courts had become more skeptical of confessions and were quick to reject them for a lack of reliability. Now, as in much of the 20th century, confessions are not accepted or rejected outright. Instead, they are considered on a case-by-case basis, evaluated by a "totality of the circumstances" and the requirement that they be voluntary. Hence, confessions are supposed to be excluded if elicited by brute force; by deprivation of food, sleep, or other biological needs; by threats of punishment or harm; by promises of immunity or leniency in prosecution; or without apprising a suspect of his or her legal rights (as we discuss shortly, however, some egregious tactics are permitted; in the United States, for example, it is common practice for police to lie to suspects about the evidence). Typically, in any case involving a disputed confession, a preliminary hearing is held so that a judge can determine whether the confession was voluntary and, hence, admissible as evidence. In American courts, the judge will then admit confessions deemed voluntary either without special instruction or with directions to the jury to make an independent judgment of voluntariness and disregard statements they find to be coerced (for a review of American case law, see Kamisar, LaFave, Israel, & King, 2003).

In recent years, social scientists and psychologists from the clinical, personality, developmental, cognitive, and social areas have brought their theories and research methods to bear on an analysis of confession evidence. Some of this work has been conducted in North America, primarily the United States, where the conduct of police interrogations is highly confrontational, involving a great deal of trickery and deceit, and where the presentation of confession evidence at trial is highly adversarial. Other work described in this monograph was conducted in England, Ireland, Iceland, and other countries of Western Europe, where interrogations are less aggressive (e.g., English courts do not permit police to lie to suspects about the evidence; they require that interrogations be tape-recorded), and where confessions are treated with greater caution at trial (e.g., they are more likely to be suppressed; experts are more readily admitted to testify). For a more detailed review of the differences between American and English law, see Gudjonsson (2003b).

Drawing on individual case studies, archival reports, and laboratory and field experiments, we scrutinize the following chain of events: (a) the preinterrogation interview, a process through which police target suspects for interrogation by judging whether they are being truthful or deceptive; (b) the *Miranda* warning waiver, a process by which police apprise suspects of their constitutional rights to silence and to counsel and elicit a waiver of these rights; (c) the interrogation, a process of social influence in which police use various techniques to elicit admissions of guilt; (d) the full narrative confession, and how and why it is given, sometimes by people who are innocent; and (e) the consequences of confession evidence as evaluated by police, prosecutors, judges, juries, and other people. Within this framework, we address a number of specific issues, such as the unique vulnerability of juveniles and other high-risk populations, the role of psychological experts at trial, proposed reforms designed to protect the innocent during police interrogation, and the need for a policy that mandates the videotaping of all interviews and interrogations.

THE PREINTERROGATION INTERVIEW

At a conference on police interviewing that the two of us recently attended, Joseph Buckley (2004)—president of John E. Reid and Associates (a Chicago-based organization that has trained tens of thousands of law-enforcement professionals) and coauthor of the widely cited manual *Criminal Interrogation and Confessions* (Inbau, Reid, Buckley, & Jayne, 2001)—presented the influential Reid technique of interviewing and interrogation (described later). Afterward, an audience member asked if his persuasive methods did not at times cause innocent people to confess. His reply was, "No, because we don't interrogate innocent people."

Functions of the Preinterrogation Interview

To understand the basis of this remark, it is important to know that the highly confrontational, accusatory process of *interrogation* is preceded by a neutral, information-gathering *interview*, the main purpose of which is to help determine if the suspect is guilty or innocent. Sometimes, an initial judgment is reasonably based on information provided by witnesses or informants or on other extrinsic evidence. At other times, it may be based on crime-related schemas or "profiles" about likely perpetrators and motives (Davis & Follette, 2002)—such as the

belief that marital infidelity is probative of a husband's involvement in his wife's murder (Wells, 2003). At still other times, the judgment is based on nothing more than a hunch, a behavioral impression that investigators form during a preinterrogation interview. For example, Inbau et al. (2001) advise investigators to use the "Behavior Analysis Interview" to look for behavioral symptoms or indicators of truth and deception in the form of verbal cues (e.g., long pauses before responding, qualified or rehearsed responses), nonverbal cues (e.g., gaze aversion, frozen posture, slouching, grooming), and behavioral attitudes (e.g., anxious, unconcerned, guarded). They also recommend using specific "behavior provoking questions" designed to elicit responses that are presumed diagnostic of guilt and innocence (e.g., "What do you think should happen to the person who committed this crime?" "Under any circumstances, do you think the person who committed this crime should be given a second chance?"). In these ways, they claim, investigators can be trained to judge truth and deception at an 85% level of accuracy (Inbau et al., 2001)—an average that substantially exceeds human lie-detection performance obtained in any of the world's laboratories. For the person who stands falsely accused, this preliminary judgment is a pivotal choice point, determining whether he or she is interrogated or sent home. Hence, it is important to know how—and how well—this judgment is made.

The risk of error at this stage is illustrated by the case of Tom Sawyer, in Florida. Accused of sexual assault and murder, Sawyer was interrogated for 16 hours, and eventually confessed. His statement was ultimately suppressed by the judge, and the charges were dropped. Sawyer had become a prime suspect because his face flushed and he appeared embarrassed during an initial interview, a reaction interpreted as a sign of deception. Investigators did not know that Sawyer was a recovering alcoholic with a social anxiety disorder that caused him to sweat profusely and blush in evaluative social situations (Leo & Ofshe, 1998). In another case, 14-year-old Michael Crowe and his friend Joshua Treadway were coerced, during lengthy and suggestive interrogations, into confessing to the stabbing death of Michael's sister Stephanie. The charges against the boys were later dropped when a drifter seen in the area that night was found with the victim's blood on his clothing. These boys were targeted in the first place, it seems, because the detectives assigned to the case believed that Crowe had reacted to his sister's death with inappropriately little emotion (Johnson, 2003; Sauer, 2004).

After spending a year with homicide detectives in Baltimore, Simon (1991) may have captured the essence of the problem:

> Nervousness, fear, confusion, hostility, a story that changes or contradicts itself—all are signs that the man in an interrogation room is lying, particularly in the eyes of someone as naturally suspicious as a detective. Unfortunately, these are also signs of a human being in a state of high stress. (p. 219)

Distinguishing Truth and Deception

Despite popular conceptions, psychological research conducted throughout the Western world has failed to support the claim that groups of individuals can attain high average levels of accuracy in judging truth and deception. Most experiments have shown that people perform at no better than chance levels (Memon, Vrij, & Bull, 2003; Vrij, 2000; Zuckerman, DePaulo, & Rosenthal, 1981); that training programs produce, at best, small and inconsistent improvements (Bull, 1989; Kassin & Fong, 1999; Porter, Woodworth, & Birt, 2000; Vrij, 1994; Zuckerman, Koestner, & Alton, 1984); and that police investigators, judges, psychiatrists, customs inspectors, polygraph examiners, and others with relevant job experience perform only slightly better than chance, if at all (Bull, 1989; DePaulo, 1994; DePaulo & Pfeifer, 1986; Ekman & O'Sullivan, 1991; Elaad, 2003; Garrido & Masip, 1999; Garrido, Masip, & Herrero, 2004; Koehnken, 1987; Leach, Talwar, Lee, Bala, & Lindsay, 2004; Porter et al., 2000). In general, professional lie catchers exhibit accuracy rates in the range from 45% to 60%, with a mean of 54% (Vrij, 2000).

One might argue that performance in the laboratory is poor because participating investigators are asked to detect truths and lies told by people who are in relatively low-involvement situations. Indeed, research shows that low-stakes situations can weaken deception cues and make the statements more difficult to judge (DePaulo et al., 2003). But forensic research on the detection of high-stakes lies has thus far produced mixed results. In one study, Vrij and Mann (2001) showed police officers videotaped press conferences of family members pleading for help in finding their missing relatives. It turned that these family members had killed their own relatives, yet even in this high-stakes situation, the officers who participated in the study often failed to identify the deception. In another study, Mann, Vrij, and Bull (2004) found that police did distinguish high-stakes truths and lies in videotaped police interviews at modestly high levels of accuracy. However, these researchers tested subjects on a per-statement basis, rather than assessing global judgments of guilt or innocence. They also did not independently vary the stakes or test a comparison group of laypersons. Hence, the elevated accuracy rates, relative to those found in prior research, may say more about the particular task that was used than about the relative transparency of high-stakes lies or the accuracy of police officers.

One might also argue that professionals would be more accurate if they were to personally conduct the interviews instead of merely observing the sessions. But research does not support this notion. Buller, Strzyzewski, and Hunsaker (1991) had observers watch videotaped conversations between participants, one of whom was instructed to lie or tell the truth. The observers were more accurate in assessing the target than were the subjects who were engaged in the conversation. Hartwig, Granhag, Strömwall, and Vrij (2004) instructed some college students but not others to commit a mock crime. Police officers then either

interviewed the guilty and innocent students or observed videotapes of the interviews. Overall levels of accuracy did not exceed chance-level performance, and the officers who conducted the interviews were not more accurate than those who merely observed them. In short, although many law-enforcement professionals assume that they can make accurate judgments of truth and deception from verbal and nonverbal behavioral cues, there is little scientific evidence to support this claim.

The "Investigator Response Bias"

In a series of studies, Kassin and his colleagues examined the extent to which special training increases people's accuracy in judging suspects' truth and deception during interviews. In one study, Kassin and Fong (1999) trained college students in the detection of truth and deception before obtaining their judgments of mock suspects. The study was unique in two ways. First, some participants but not others were randomly assigned to receive training in the Reid technique using the manual and videotape training materials. Second, judgments were made for a set of videotapes depicting brief interviews and denials by individuals who were truly guilty or innocent of committing one of four mock crimes (shoplifting, breaking and entering, vandalism, and computer break-in). As in studies in nonforensic settings, observers were generally unable to differentiate between the guilty and innocent suspects better than would be expected by chance. In fact, those who underwent training were significantly less accurate than those who did not—though they were more confident in their judgments (on a scale from 1 to 10) and cited more reasons as a basis for these judgments. Closer inspection of the data indicated that the training procedure itself biased observers toward seeing deception, and hence guilt. This experiment suggests the disturbing hypothesis that special training in deception detection may lead investigators to make prejudgments of guilt, with high confidence, that are frequently in error (see Table 1, left and middle columns).

From a practical standpoint, this study was limited by the use of student observers, not experienced detectives, whose training was condensed, and not offered as part of professional development. To address this issue, Meissner and Kassin (2002) conducted a meta-analysis (a statistical analysis combining the results of multiple studies) and a follow-up study examining the performance of real, experienced investigators.

TABLE 1

Truth and Deception Detection Among Students and Police Investigators (Kassin & Fong, 1999; Meissner & Kassin, 2002)

Performance	Naive students (n = 20)	Trained students (n = 20)	Police investigators (n = 44)
Total accuracy	56%	46%	50%
Confidence	5.91	6.55	7.05

First, they used signal detection theory to examine the research literature and separate discrimination accuracy and response bias. As the detection of lies, or any other stimulus for that matter, is jointly determined by the strength of a signal and an observer's tendency to report it, signal detection theory compares the extent to which a person "hits" or "misses" seeing a stimulus (like deception) with his or her tendency to commit "false alarms" by detecting the stimulus when it is not present. In this way, researchers can mathematically determine from detection performance the extent to which a person has a general response bias, as well as an ability to make accurate discriminations (Green & Swets, 1966; Swets, 1996).

Meissner and Kassin (2002) identified six relevant studies: four that compared investigators and naive participants and two that manipulated training. Across studies, they found that investigators and trained participants, relative to naive control participants, exhibited a proclivity to judge targets as deceptive, a tendency they termed the "investigator response bias." In the follow-up study, Meissner and Kassin used Kassin and Fong's (1999) tapes to test police officers from the United States and Canada and found that federal, state, and local investigators—compared with untrained college students—exhibited lower, chance-level accuracy and significantly higher confidence (see Table 1, right column). They also exhibited a strong response bias toward deception. Among the investigators, both years of experience and special training correlated significantly with response bias, but not with accuracy. Evidence of an investigator response bias is now supported by other types of research. Using a standardized self-report instrument, for example, Masip, Alonso, Garrido, and Anton (in press) found that experienced police officers are more likely than laypersons and police recruits to harbor a "generalized communicative suspicion"—a tendency to disbelieve what others have to say.

Although some individuals are intuitively and consistently better than others at lie detection (Ekman, O'Sullivan, & Frank, 1999), high mean levels of performance are rare. Indeed after testing more than 13,000 people from all walks of life, using parallel tasks, O'Sullivan and Ekman (2004) have thus far identified only 15 "wizards" of lie detection who can consistently achieve at least an 80% level of accuracy. Still, it is conceivable in theory that people could be trained to become more accurate judges of truth and deception. It is clear that lying leaves certain behavioral traces (DePaulo et al., 2003). For example, Newman, Pennebaker, Berry, and Richards (2003) asked subjects to lie or tell the truth about various topics—including, in one study, the commission of a mock crime—and found that when people lie, they use fewer first-person pronouns and fewer "exclusive" words (e.g., *except, but, without*), words that indicate cognitive complexity, which requires effort. Similarly, Walczyk, Roper, Seemann, and Humphrey (2003) instructed subjects to answer various personal questions truthfully or deceptively and found, both

within and between subjects, that constructing spontaneous lies—which requires more cognitive effort than telling the truth—increases response time. Perhaps because lying is effortful, observers are more accurate when asked to make judgments that are indirect but diagnostic. Hence, Vrij, Edward, and Bull (2001) found that subjects made more accurate discriminations of truths and lies when asked, "How hard is the person thinking?" than when asked, "Is the person lying?"

In short, it remains a reasonable goal to seek future improvements in training—to make police better interviewers and lie detectors (Bull & Milne, 2004; Granhag & Stromwall, 2004; Vrij, 2004). At present, however, the decision by police to interrogate suspects on the basis of their observable interview behavior is a decision that is fraught with error, bias, and overconfidence. Expressing a particularly cynical but telling point of view, one detective said, "You can tell if a suspect is lying by whether he is moving his lips" (Leo, 1996c, p. 281).

MIRANDA: "YOU HAVE THE RIGHT TO REMAIN SILENT. . ."

With suspects judged deceptive from their interview behavior, the police shift into a highly confrontational process of interrogation characterized by the use of social influence tactics (described in the section on interrogation). There is, however, an important procedural safeguard in place to protect the accused from this transition. In the landmark case of *Miranda v. Arizona* (1966), the U.S. Supreme Court ruled that police must inform all suspects in custody of their constitutional rights to silence (e.g., "You have the right to remain silent; anything you say can and will be held against you in a court of law") and to counsel (e.g., "You are entitled to consult with an attorney; if you cannot afford an attorney, one will be appointed for you").[1] Only if suspects waive these rights "voluntarily, knowingly, and intelligently" as determined in law by consideration of "a totality of the circumstances" can the statements they produce be admitted into evidence.

A number of later rulings narrowed the scope of *Miranda*, carved out exceptions to the rule, and limited the consequences for noncompliance (*Colorado v. Connelly*, 1986; *Harris v. New York*, 1971; *Michigan v. Harvey*, 1990; *New York v. Quarles*, 1984)—developments that have led some legal scholars to question the extent to which police are free to disregard *Miranda* (Clymer, 2002; White, 2003). In one important recent decision, the Supreme Court upheld the basic warning-and-waiver requirement (*Dickerson v. United States*, 2000). In another decision, the court refused to accept confessions that were given after a warning that was tactically delayed to produce an earlier, albeit inadmissible, statement (*Missouri v. Seibert*, 2004).

Miranda issues are a constant source of dispute. On the one hand, critics of *Miranda* maintain that the confession and conviction rates have declined significantly over time as a direct result of the warning-and-waiver requirement, thus triggering the release of dangerous criminals (Cassell, 1996a, 1996b; Cassell & Hayman, 1996). On the other hand, defenders of *Miranda* argue that the actual declines are insubstantial (Schulhofer, 1996) and that the costs to law enforcement are outweighed by social benefits—for example, that *Miranda* has had a civilizing effect on police practices and has increased public awareness of constitutional rights (Leo, 1996a). Inevitably, debate on this issue is influenced by political and ideological points of view. On this point, however, all sides agree: The existing empirical foundation is weak, and more and better research is needed (G.C. Thomas, 1996).

The Capacity to Waive *Miranda* Rights

There are two reasons why Miranda's warning-and-waiver requirement may not have the protective effect for which it was designed. First and foremost is that some number of suspects—because of their youth, intelligence, lack of education, or mental health status—lack the capacity to understand and apply the rights they are given.

On the basis of case law, Grisso (1981) reasoned that a person's capacity to make an informed waiver of the rights to silence and to counsel rests on three abilities: an understanding of the words and phrases contained within the warnings, an accurate perception of the intended functions of the *Miranda* rights (e.g., that interrogation is adversarial, that an attorney is an advocate, that these rights trump police powers), and a capacity to reason about the likely consequences of the decision to waive or invoke these rights. For assessment purposes, Grisso developed four instruments for measuring *Miranda*-related comprehension. Using these instruments, research has shown that juvenile suspects under age 14 do not comprehend their rights as fully or know how to apply them as well as older juveniles and adults (Grisso, 1998; Oberlander & Goldstein, 2001). As performance on these measures is correlated with IQ, the same is true of adults who are mentally retarded (Fulero & Everington, 1995, 2004). At this point, however, it is clear that a suspect's intellectual capacity as measured in these instruments cannot be used alone to assess the quality of his or her decision making in an actual police interrogation, where other factors are at work as well (Grisso, 2004; Rogers, Jordan, & Harrison, 2004). For purposes of clinical application, it is also difficult to rule out the possibility that low scores on these tests may reflect malingering motivated by a desire to avoid prosecution (for a review, see Grisso, 2003).

[1]The precise wording of *Miranda* warnings can vary substantially from one state to the next (Helms, 2003). For example, many jurisdictions have added a fifth warning, which states: "If you decide to answer questions now without a lawyer present, you will still have the right to stop answering at any time until you talk to a lawyer" (see Oberlander & Goldstein, 2001).

How Police Overcome *Miranda*

The second reason that *Miranda* warnings may not afford much protection is that police have learned to use methods that overcome the requirement by eliciting waivers. Given the inherently persuasive nature of a police interrogation, one would surmise that a vast majority of adult suspects would exercise their constitutional rights to silence and to counsel and avoid the perils of interrogation. However, research suggests the opposite tendency. Examining live and videotaped police interrogations, Leo (1996c) found that roughly four out of five suspects waive their rights and submit to questioning (see also Leo & White, 1999). Over the years, archival studies in Great Britain have revealed a similar or somewhat higher rate at which rights are waived (Baldwin, 1993; Moston, Stephenson, & Williamson, 1993; Softley, 1980).

Focusing on the warning-and-waiver process, Leo (1996c) observed that detectives often overcome *Miranda* by offering sympathy and presenting themselves as an ally, and by minimizing the importance of the process by describing it as a mere formality, thus increasing perceived benefits of a waiver relative to costs. He also noted that detectives often begin by making small talk and strategically establishing rapport with the suspect—a social influence tactic that tends to increase compliance with later requests (Nawrat, 2001). Indeed, in some jurisdictions, police are specifically trained to get suspects to talk "outside *Miranda*" even after they invoke their rights. The state cannot use statements taken in this manner as evidence at trial. But such "off the record" disclosures may be used both to generate other admissible evidence and to impeach the defendant if he or she chooses to testify (Philipsborn, 2001; Weisselberg, 2001).

Why the Innocent Waive Their Rights

As the gateway to police interrogation and the production of confessions, which can have far-reaching and rippling effects on the disposition of cases (Leo & Ofshe, 1998), a suspect's decision to invoke or waive *Miranda* rights becomes a pivotal choice in the disposition of his or her case. Yet on the question of which suspects waive their rights and under what circumstances, an interesting and somewhat disturbing signal has emerged from empirical research. Leo (1996b) found that individuals who have no prior felony record are more likely to waive their rights than are those with a history of criminal justice "experience." In light of known recidivism rates in criminal behavior and the corresponding fact that people without a criminal past are less prone to commit crimes than are those who have a criminal past, this demographic difference suggests that innocent people in particular are at risk to waive their rights.

Kassin and Norwick (2004) tested this hypothesis in a controlled laboratory setting. Seventy-two participants who were guilty or innocent of a mock theft of $100 were apprehended for investigation. Motivated to avoid further commitments of time without compensation, they were confronted by a neutral, sympathetic, or hostile male "detective" who sought a waiver of their *Miranda* rights. Overall, 58% of suspects waived their rights. Although the detective's approach had no effect on the waiver rate, participants who were innocent were substantially more likely to sign a waiver than those who were guilty—by a margin of 81% to 36%. This decision-making tendency emerged in all conditions and was so strong that 67% of innocents signed the waiver even when paired with a hostile, closed-minded detective who barked, "I know you did this, and I don't want to hear any lies!" (see Table 2). Kassin and Norwick asked participants afterward to explain the reasons for their decisions. With one exception, all guilty suspects who waived their rights stated strategic self-presentation reasons for that decision (e.g., "If I didn't, he'd think I was guilty," "I would've looked suspicious if I chose not to talk"). Some innocent suspects gave similar strategic explanations, but the vast majority also or solely explained that they waived their rights precisely because they were innocent (e.g., "I did nothing wrong," "I didn't have anything to hide"). From a range of cases and research studies, it appears that people have a naive faith in the power of their own innocence to set them free (for a review, see Kassin, 2005).

The feeling of reassurance that accompanies innocence may be rooted in a generalized and perhaps motivated belief in a just world in which human beings get what they deserve and deserve what they get (Lerner, 1980). It may also be symptomatic of an "illusion of transparency," a tendency for people to overestimate the extent to which their true thoughts, emotions, and other inner states can be seen by others (Gilovich, Savitsky, & Medvec, 1998; Miller & McFarland, 1987). This illusion was evident in a study in which mock suspects erroneously assumed that their guilt or innocence would be judged correctly both by their questioner and by other people who would observe their denials (Kassin & Fong, 1999). Whatever the reason for this effect may be, Kassin and Norwick's (2004) results are consistent with naturalistic observations (e.g., Leo, 1996b) in suggesting that *Miranda* warnings may not adequately protect the citizens who need it most, those accused of crimes they did not commit.

TABLE 2

Percentage of Participants Who Agreed to Waive Their Rights as a Function of Guilt or Innocence and Interrogation Condition (Kassin & Norwick, 2004)

	Interrogation condition			
Suspect	Neutral	Sympathetic	Hostile	Total
Guilty	33	33	42	36
Innocent	83	92	67	81
Total	58	63	54	59

With tragic results, this problem was evident in the classic case of Peter Reilly, an 18-year-old who confessed and internalized guilt for the murder of his mother. Solely on the basis of his confession, Reilly was prosecuted, convicted, and imprisoned until independent evidence revealed that he could not have committed the murder. When asked years later why he did not invoke his *Miranda* rights, Reilly said, "My state of mind was that I hadn't done anything wrong and I felt that only a criminal really needed an attorney, and this was all going to come out in the wash" (Connery, 1996, p. 93). In England, another young and innocent false confessor admitted afterward that he was not sufficiently concerned about confessing to police because he believed, naively and wrongly, that his alibi witnesses would prove his innocence (Gudjonsson & MacKeith, 1990).

MODERN POLICE INTERROGATION

In the past, American police routinely practiced "third degree" methods of custodial interrogation—inflicting physical or mental pain and suffering to extract confessions and other types of information from crime suspects. Among the commonly used coercive methods were prolonged confinement and isolation; explicit threats of harm or punishment; deprivation of sleep, food, and other needs; extreme sensory discomfort (e.g., shining a bright, blinding strobe light on the suspect's face); and assorted forms of physical violence and torture (e.g., suspects were tied to a chair and smacked repeatedly to the side of the head or beaten with a rubber hose, which seldom left visible marks). The use of third-degree methods declined precipitously from the 1930s through the 1960s, to be replaced by a more professional, scientific approach to policing and by interrogation techniques that are psychological (for a review, see Leo, 2004). Still, as the U.S. Supreme Court recognized in *Miranda v. Arizona* (1966), the modern American police interrogation is inherently coercive, relying heavily on a great deal of trickery and deception. After shadowing homicide detectives in Baltimore for a year, Simon (1991) described the modern police interrogator as "a salesman, a huckster as thieving and silver-tongued as any man who ever moved used cars or aluminum siding, more so, in fact, when you consider that he's selling long prison terms to customers who have no genuine need for the product" (p. 213). A notable exception to this historical trend away from physical brutality is found in the use of "smacky-face" and other torturelike techniques that are sometimes used by interrogators gathering intelligence from suspected terrorists (Bowden, 2003).

Interrogation as a Guilt-Presumptive Process

Third-degree tactics may have faded into the annals of criminal justice history, but modern police interrogations are still powerful enough to elicit confessions, sometimes from innocent people. At the most general level, it is clear that the two-step approach employed by Reid-trained investigators and others—in which an interview generates a judgment of truth or deception, which, in turn, determines whether or not to proceed to interrogation—is inherently flawed. Inbau et al. (2001) thus advise: "The successful interrogator must possess a great deal of inner confidence in his ability to detect truth or deception, elicit confessions from the guilty, and stand behind decisions of truthfulness" (p. 78).

By definition, interrogation is a guilt-presumptive process, a theory-driven social interaction led by an authority figure who holds a strong a priori belief about the target and who measures success by the ability to extract an admission from that target. Clearly, this frame of mind can influence an investigator's interaction with suspected offenders (Mortimer & Shepherd, 1999). For innocent people initially misjudged, one would hope that investigators would remain open-minded and reevaluate their beliefs over the course of the interrogation. However, a warehouse of psychology research suggests that once people form a belief, they selectively seek and interpret new data in ways that verify the belief. This distorting cognitive confirmation bias makes beliefs resistant to change, even in the face of contradictory evidence (Nickerson, 1998). It also contributes to the errors committed by forensic examiners, whose judgments of handwriting samples, bite marks, tire marks, ballistics, fingerprints, and other "scientific" evidence are often corrupted by a priori beliefs and expectations, a problem uncovered in many cases in which individuals have been exonerated by DNA (Risinger, Saks, Thompson, & Rosenthal, 2002). To further complicate matters, research shows that once people form a belief, they also unwittingly create behavioral support for that belief. This latter phenomenon—variously referred to by the terms self-fulfilling prophecy, interpersonal expectancy effect, and behavioral confirmation bias—was first demonstrated by Rosenthal and Jacobson (1968) in their classic field study of the effects of teachers' expectancies on students' performance; similar results have also been obtained in military, business, and other organizational settings (McNatt, 2000).

This behavioral confirmation process was demonstrated in an early laboratory experiment by Snyder and Swann (1978), who brought together pairs of participants for a getting-acquainted interview. The interviewers were led to believe that their partners were introverted or extraverted and then selected interview questions from a list. Two key results were obtained. First, interviewers adopted a confirmatory hypothesis-testing strategy, selecting introvert-oriented questions for an introverted partner (e.g., "Have you ever felt left out of a social group?") and extravert-oriented questions for an extraverted partner ("How do you liven up a party?"). Second, interviewers unwittingly manufactured support for their beliefs through the questions they asked, which led neutral observers to infer that the interviewees truly were introverted or extraverted,

according to expectation. Other laboratory experiments have further shown that behavioral confirmation is the outcome of a three-step chain of events in which (a) a perceiver forms a belief about a target person; (b) the perceiver unwittingly behaves toward that person in a manner that conforms to that belief; and (c) the target responds in turn, often behaving in ways that support the perceiver's belief (for reviews, see Darley & Fazio, 1980; Nickerson, 1998; Snyder, 1992; Snyder & Stukas, 1999).

Can the presumption of guilt influence the way police conduct interrogations, perhaps leading them to adopt a questioning style that is confrontational and highly aggressive? If so, can this approach lead innocent people to become anxious and defensive, thereby providing pseudodiagnostic support for the presumption of guilt? Demonstrating that interrogators can condition the behavior of suspects through an automatic process of social mimicry (see Chartrand & Bargh, 1999), Akehurst and Vrij (1999) found that increased movement among police officers triggered movement among interviewees—fidgeting behavior that is perceived as suspicious. In short, without any conscious attempt on the part of police, behavioral confirmation effects may corrupt their interrogations through the presumption of guilt on which they are based.

Kassin, Goldstein, and Savitsky (2003) specifically tested the hypothesis that the presumption of guilt shapes the conduct of student interrogators, their suspects, and ultimately the judgments made by neutral observers. This study was conducted in two phases. In Phase I, participants who were assigned to be suspects stole $100 as part of a mock theft or engaged in a related but innocent act, after which they were interviewed via headphones from a remote location. Serving as investigators, students who conducted these interviews were led to believe either that most suspects are guilty or that most are innocent. The sessions were audiotaped and followed by postinterrogation questionnaires given to all participants. In Phase II, observers who were blind to the manipulations in Phase I listened to the taped interviews, judged the suspects as guilty or innocent, and rated their impressions of both suspects and investigators.

Overall, investigators who were led to expect guilt rather than innocence asked more guilt-presumptive questions, used more techniques, exerted more pressure to get a confession, and made innocent suspects sound more anxious and defensive to observers. They were also more likely to see suspects in incriminating terms, exhibiting 23% more postinterrogation judgments of guilt. Condition-blind observers who later listened to the tapes also perceived suspects in the guilty-expectations condition as more likely to have committed the mock crime. The presumption of guilt, which underlies interrogation, thus set into motion a process of behavioral confirmation, shaping the interrogator's behavior, the suspect's behavior, and ultimately the judgments of neutral observers. Innocent suspects had a particularly interesting and paradoxical effect on the perceiver-target interaction. According to observers, innocent suspects told more plausible denial stories than guilty suspects did. Yet the innocent suspects brought out the worst in the guilt-presumptive interrogators. As rated by all participants, the most pressure-filled sessions occurred when interrogators who presumed guilt were paired with suspects who were innocent (see Fig. 1). Apparently, interrogators who expected that their suspect was likely guilty did not reevaluate this belief even when paired with innocent people who issued plausible denials. Instead, they saw the denials as proof of a guilty person's resistance—and redoubled their efforts to elicit a confession.

Interrogation as a Process of Social Influence

Interrogation is generally guilt-presumptive, but it is also important to scrutinize the specific social influence techniques that are employed that get people to confess—sometimes to crimes they did not commit. In contrast to past interrogations that relied on physical third-degree tactics, modern American police interrogations are presented in a manner that is professional and psychologically oriented (Leo, 2004). Approaches vary across criminal justice, military, and intelligence settings, and numerous training manuals are available to advise and train police in how to get suspects to confess (e.g., Aubry & Caputo, 1980; Gordon & Fleisher, 2002; Holmes, 2003; Walkley, 1987; Walters, 2003). As noted earlier, the most influential manual is *Criminal Interrogation and Confessions*, by Inbau et al. (2001); the first edition of this book, which forms the basis of the Reid technique, was published in 1962 and was cited by the U.S. Supreme Court in *Miranda v. Arizona* (1966).

Inbau et al. (2001) advise interrogators to conduct the questioning in a small, barely furnished, soundproof room housed within the police station. The purpose of this setup is to remove the suspect from familiar surroundings and isolate him or her, denying access to known people and settings, in order to increase the suspect's anxiety and incentive to extricate himself or herself from the situation. To further heighten discomfort, Inbau et al. advise, the interrogator should seat the suspect in a hard, armless, straight-backed chair; keep light switches, thermostats, and other control devices out of reach; and encroach upon the suspect's personal space over the course of interrogation. If possible, the room should be equipped with a one-way mirror so that other detectives can watch for signs of anxiety, fatigue, and withdrawal (see Fig. 2).

Against this physical backdrop, the Reid technique is an operational nine-step process that begins when an interrogator confronts the suspect with unwavering assertions of guilt (Step 1); then develops "themes" that psychologically justify or excuse the crime (Step 2); interrupts all efforts at denial and defense (Step 3); overcomes the suspect's factual, moral, and emotional objections (Step 4); ensures that a passive suspect

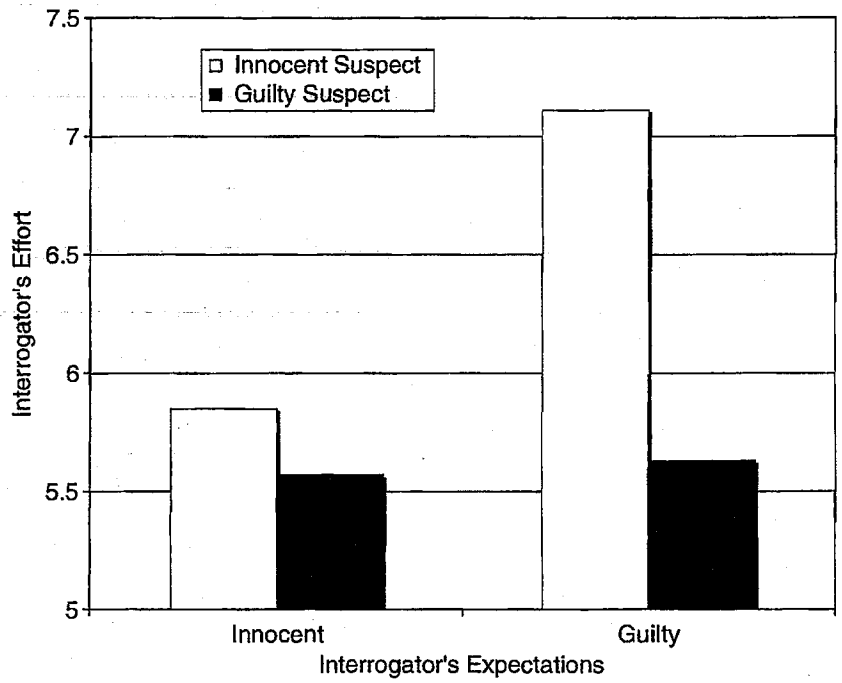

Fig. 1. Observers' ratings of how hard interrogators tried to get a confession as a function of the interrogators' expectations and suspects' guilt or innocence (Kassin, Goldstein, & Savitsky, 2003).

does not withdraw (Step 5); shows sympathy and understanding, and urges the suspect to cooperate (Step 6); offers a face-saving alternative construal of the act under investigation (Step 7); gets the suspect to recount the details of his or her crime (Step 8); and converts the latter statement into a full written or oral confession (Step 9). Conceptually, this procedure is designed to get suspects to incriminate themselves by increasing the anxiety associated with denial, plunging them into a state of despair, and minimizing the perceived consequences of confession. As we describe shortly, these nine steps are essentially reducible to an interplay of three processes: *custody and isolation*, which increases stress and the incentive to extricate oneself from the situation; *confrontation*, in which the interrogator accuses the suspect of the crime, expresses certainty in that opinion, cites real or manufactured evidence, and blocks the suspect from denials; and *minimization*, in which the sympathetic interrogator morally justifies the crime, leading the suspect to infer he or she will be treated leniently and to see confession as the best possible means of "escape."

It is difficult to know the frequency with which these methods of interrogation are used or what effects they have on guilty and innocent suspects. A small number of researchers have conducted naturalistic observations to study the processes and outcomes of actual police interrogations (e.g., Irving, 1980; Moston, Stephenson, & Williamson, 1992). In an article titled "Inside the Interrogation Room," Leo (1996b) reported on his observations of 182 live and videotaped interrogations at three police departments in California. In these interrogations, 64% of suspects made self-incriminating statements. Leo's analysis revealed that detectives used, on average, 5.62 different techniques per interrogation and that Reid-like approaches were particularly common. The 12 tactics he observed most frequently are presented in Table 3. We address the impact of these techniques on suspects and their decision to confess in the following section.

Criminal justice statistics bear witness to the effectiveness of modern methods of interrogation. So does a long tradition of psychological theory and research showing that people are responsive to reinforcement and subject to the principles of conditioning. Of distal relevance to a psychological analysis of interrogation are thousands of operant studies of appetitive, avoidance, and escape learning and human decision making in the behavioral economics paradigm. Looking through a behavioral lens, one is struck by the ways police investigators can shape suspects' behavior, as if they were rats in a Skinner box. At the same time, social psychologists note that people are inherently social beings and vulnerable to influence from other people, who often can elicit self- and other-defeating acts of conformity, compliance, obedience, and persuasion. Latane's (1981) social impact theory would predict high levels of influence by police interrogators—who bring power, proximity, and number to bear on their exchange with a suspect (for

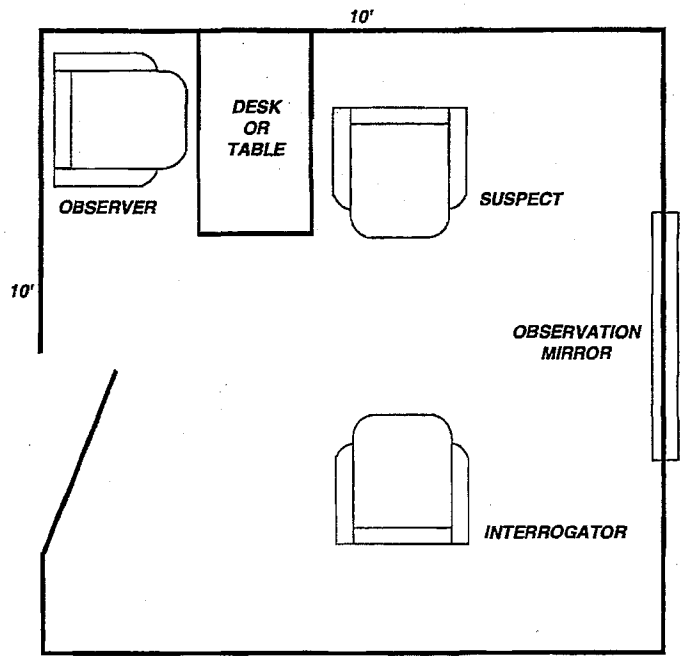

Fig. 2. Physical layout of a police interrogation room, as recommended by Inbau, Reid, Buckley, and Jayne (2001).

social-psychological perspectives on interrogation, see Bem, 1966; Davis & O'Donohue, 2003; Zimbardo, 1967).

THE CONFESSION

In light of research showing that police are prone to misjudge truthful suspects as deceptive, that innocent people are prone to waive their *Miranda* rights, and that interrogators are trained to use highly scripted psychological techniques to elicit confessions, it is important to know whether interrogations are surgically precise, or "diagnostic," in their effects, drawing confessions from suspects who are guilty, but not from those who are innocent. However, there is a perennial debate about the incidence rate of false confessions, with some scholars seeking to calculate estimates (Cassell, 1996b, 1999; Huff, Rattner, & Sagarin, 1986), and others maintaining that accurate incidence rates cannot be derived (e.g., Kassin, 1997b; Leo & Ofshe, 1998, 2001).

TABLE 3

Interrogation Tactics Most Frequently Observed in 182 Police Interrogations (From Leo, 1996b)

1. Appeal to the suspect's self-interest (88%)
2. Confront the suspect with existing evidence of guilt (85%)
3. Undermine the suspect's confidence in his or her denials (43%)
4. Identify contradictions in the suspect's alibi or story (42%)
5. Ask specific "behavioral analysis" interview questions (40%)
6. Appeal to the importance of cooperation (37%)
7. Offer moral justifications and face-saving excuses (34%)
8. Confront the suspect with false evidence of guilt (30%)
9. Praise or flatter the suspect (30%)
10. Appeal to the detective's expertise and authority (29%)
11. Appeal to the suspect's conscience (23%)
12. Minimize the moral seriousness of the offense (22%)

Most interrogation-elicited statements can be categorized into four groups: *true confessions*, *false confessions*, *true denials*, and *false denials* (some are difficult to categorize, being partially true and partially false). The absolute number of cases falling into each group is unknown. What is known, however, is that the overall confession rate among suspects detained for questioning in England has remained close to 60% over the past 25 years and possibly longer (Gudjonsson, 2003b); in the United States, the confession rate seems to range from 42% (Leo, 1996b) up to 45 to 55% (G.C. Thomas, 1996). This difference betrays the underlying role of institutional, cultural, and contextual influences on people's behavior in a criminal justice system. In Japan, for example, where few restraints are placed on police interrogations, and where social norms favor confession as a response to the shame brought by transgression, more than 90% of defendants confess to the crimes of which they are accused (Landers, 2000).

There are two imperfect ways to try to calculate the numbers of confessions and denials. One is to interview suspects soon after their interrogations and ask about the process and about

their guilt or innocence. This clinical methodology could be combined with a careful analysis of all relevant case materials, including tapes of the interrogations, if available. To date, no researcher has used this approach—which, after all, is flawed to the extent that ground truth cannot be established unequivocally. A second method is to conduct a random survey of people in the community, asking them whether the police have ever interrogated them and about their guilt or innocence. Although this approach is limited by its exclusive reliance on self-report, two studies have attempted to estimate base rates in this way. Gudjonsson, Sigurdsson, Bragason, Einarsson, and Valdimarsdottir (2004) studied confessions and denials among 1,080 young college students (mean age of 18 years) in Iceland. Within this group, 25% reported that they had at some time been interrogated by police (as measured by self-report, 67% were guilty and 33% were innocent). Overall, 59% of the students who were interrogated said they made a true confession; 3.7% said they made a false confession. In a similar study of 666 Icelandic University students, an older (mean age of 24) and more educated group, Gudjonsson, Sigurdsson, and Einarsson (2004) again found that 25% of those sampled had been interrogated by police (66% said they were guilty; 34% said they were innocent). Overall, 54% of those who were guilty said they had confessed; 1.2% of those who were innocent said they made a false confession.

One problem in comparing confession rates across studies is that confessions are defined in different ways. Most broadly defined, a confession is any statement that tends to implicate a suspect in a crime. This broad definition, however, may include overt denials that prove incriminating (Gudjonsson, 2003b). A better operational definition, and a more correct legal definition, is provided by *Black's Law Dictionary*, which distinguishes between confession and admission. In this definition, a confession is "a statement admitting or acknowledging all facts necessary for conviction of a crime," whereas an admission is merely "an acknowledgement of a fact or facts tending to prove guilt which falls short of an acknowledgement of all essential elements of the crime" (cited in Drizin & Leo, 2004, p. 892). In short, statements of culpability ("I did it") that lack a coherent or detailed narrative account of the crime are mere admissions, not confessions. To corroborate an admission, investigators and researchers thus seek proof in the form of a postadmission narrative, the proverbial full confession—a story from the suspect that accurately describes what he or she did, how, when, where, and why. An analysis of a postadmission narrative to determine whether it indicates guilt requires answers to two questions: (a) Did the suspect recount crime details that were accurate or, better yet, that led to the discovery of new evidence? And (b) were the accurate details provided derived from personal experience or from exposure to news accounts, leading questions, photographs, and other secondhand sources of information (see Hill, 2003; Ofshe & Leo, 1997a)?

Why People Confess: Theoretical Perspectives

Confessions to crime have potentially devastating consequences. Suspects' self-esteem and integrity are often adversely affected, their liberty is at stake, and they may face other penalties as well (e.g., fines, community service). In some countries, in extreme cases, the death penalty may be imposed. In view of the deleterious consequences that follow from confession, it is perhaps remarkable that suspects ever confess during custodial interrogation. Over the years, a number of theories have been proposed to explain this phenomenon (for a review, see Gudjonsson, 2003b).

From a psychoanalytic perspective, for example, Reik (1959) argued that people have an unconscious compulsion to confess in response to real or imagined transgressions; confession thus provides a way to overcome feelings of guilt and remorse, "an attempt at reconciliation that the superego undertakes in order to settle the quarrel between the ego and the id" (p. 216). Berggren (1975) added that for a satisfactory cathartic effect to occur, one has to confess to a person in authority, such as a priest or police officer. Rogge (1975) further suggested that the motivating feelings of guilt emanate from two sources: the fear of losing love and the fear of retaliation.

Various decision-making models have also been offered to explain why people confess during interrogation. Irving and Hilgendorf (1980) noted that a suspect becomes engaged in a taxing decision-making process, having to decide whether to speak or invoke the rights to silence and an attorney; whether or not to make self-incriminating admissions; whether or not to tell the truth, in part or in whole; and how to answer factual questions. Each decision follows from the suspect's perceptions of the available courses of action, of the probabilities of the relative short-term and long-term consequences, and of the values attached to these consequences. The decision to confess is thus determined by various subjective assessments—which may or may not be accurate (e.g., an innocent person may confess under the misguided belief that he or she will not be prosecuted or convicted). Within this framework, Hilgendorf and Irving (1981) argued that suspects are markedly influenced by threats and inducements, stated or implied, and that interrogators impair a suspect's decision making by manipulating his or her subject assessments (e.g., by maximizing the apparent costs of denial and minimizing the apparent costs associated with confession).

Focusing on the Reid technique, Jayne (1986) described police interrogation as a psychological process designed to undo denial, the presumed equivalent of deception. The Reid model is based on the assumption that people identified for interrogation are guilty and motivated to deceive, and that they will confess when the perceived consequences are more desirable than the anxiety associated with deception. Through the use of such techniques as confrontation, refusal to accept all objections and denials, and presentation of alternative themes that offer moral justification for the crime, interrogators seek to

manipulate these subjective contingencies according to the strengths and weaknesses of a particular suspect.

Ofshe and Leo (1997a) offered a particularly compelling decision-making perspective on police interrogations and how they are structured to move presumed guilty suspects from denial to admission through a two-step process of influence. In the first step, the interrogator accuses the suspect of committing the crime and lying about it, cuts off the suspect's denials, attacks his or her alibi (occasionally attacking the suspect's memory), and often cites real or fabricated evidence to buttress these claims. This step is designed to plunge the suspect into a state of hopelessness and despair and to instill the belief that continued denial is not a means of escape. In the second step, the interrogator suggests inducements that motivate the suspect by altering his or her perceptions of self-interest. The inducements that are used can be arrayed along a spectrum: At the low end are moral or religious inducements suggesting that confession will make the suspect feel better; in the midrange are vague assurances that the suspect's case will be processed more favorably if he or she confesses; at the high end are inducements that more expressly promise or imply leniency in exchange for confession or threaten or imply severe treatment if the suspect refuses to confess. In short, the two-step sequence is designed to manipulate a suspect's perceptions of his or her available choices and the consequences attached to these choices.

Adopting a more cognitive-behavioral perspective, Gudjonsson (2003b) proposed that confessions arise from the suspect's relationship to the environment and significant others in that environment, and can be understood by examining the antecedents and consequences of confessing. These antecedents and consequences may be social (e.g., isolation from family and friends), emotional (e.g., uncertainty associated with confinement, feelings of guilt and shame), cognitive (e.g., the suspect's beliefs about his or her rights, expectations for future treatment), and physiological (e.g., pain, fatigue, withdrawal from drugs, physiological arousal). Focusing more specifically on the social interaction process, Moston et al. (1992) proposed that characteristics of the suspect and case combine to influence the interrogator's style of questioning, which in turn shapes the suspect's behavior.

From a social-psychological perspective, Zimbardo (1967) noted that powerful, if not coercive, methods of social influence are used in police interrogations, producing effects on behavior like those observed in classic studies of conformity and obedience. Interested in "when saying is believing," Bem (1966) theorized that suspects may even come to believe their own police-induced false confessions through a subtle process of self-perception, an outcome that he demonstrated in a laboratory experiment. Picking up on the social psychology of interrogation, Davis and O'Donohue (2003) presented a contemporary and comprehensive analysis of the processes of persuasion that occur during police interrogations through such tactics as the communication of inevitability, repetition, guilt induction, gradual escalation, contrast effects, and imaginational exercises.

To summarize, various theoretical perspectives, although differing in emphasis, share the view that suspects confess when sufficiently motivated to do so; when they perceive, correctly or incorrectly, that the evidence against them is strong; when they need to relieve feelings of guilt or shame; when they have difficulties coping with the pressures of confinement and interrogation; when they are the targets of various social-psychological weapons of influence; and when they focus primarily on the immediate costs and benefits of their actions rather than long-term consequences.

Why People Confess: Research Findings

There are three sources of empirical information that help to explain why suspects confess during custodial interrogation: observational studies, retrospective self-report studies, and laboratory and field experiments (the latter are described later, in the section on false confessions). These kinds of studies complement each other in their strengths and limitations. Taken together, they provide an empirical body of knowledge on the question of why and under what conditions people confess.

Observational Studies

Observational studies of confessions reveal the importance of various characteristics of the suspect and the offense, as well as contextual factors. For example, some of this research suggests that younger suspects confess more readily than older suspects (e.g., Baldwin & McConville, 1980; Medford, Gudjonsson, & Pearse, 2003). Demonstrating the power of the perceived strength of the evidence to leverage confessions, Moston et al. (1992) found that only 23.4% of suspects made self-incriminating admissions when the evidence against them was rated as weak, whereas 66.7% made such admissions when the evidence was rated as strong.

In a unique observational study at two English police stations, more than 170 suspects were assessed by clinical psychologists prior to their interviews with police (Gudjonsson, Clare, Rutter, & Pearse, 1993). All tapes of the interviews were subsequently analyzed to determine what factors were associated with denial and confession (Pearse, Gudjonsson, Claire, & Rutter, 1998). Most of the interviews were short (80% lasted less than 30 minutes; 95% were completed within 1 hour), the confession rate was 58%, little interrogative pressure was applied, and very few suspects who initially denied guilt eventually confessed. A statistical (logistic regression) analysis was performed, with confession versus denial as the dependent variable and an array of suspect and case characteristics as independent variables (strength of the evidence was not measured in this study). The analysis showed that the presence

of a legal advisor and a prior history of imprisonment were highly predictive of denial; self-reported use of illicit drugs within 24 hours of arrest was predictive of confession.

Other observational studies suggest that the duration of detention, the types of interrogation techniques used, and the dynamics of the interaction are related to the severity of the crime being investigated, and it is here that custodial and interrogative factors tap into psychological vulnerabilities. Pearse and Gudjonsson (1999; see Gudjonsson, 2003b, for a review) used The Police Interviewing Analysis Framework (PIAF) to analyze social interactions between interviewers and suspects from tape recordings of real-life interrogations and to identify the techniques associated with moving suspects from denial to confession. Each 5-minute segment of interrogation was coded for tactics that were used and suspects' responses, and the results were factor analyzed to identify clusters of events that correlated with one another. The three most salient factors associated with breaking down resistance were labeled Intimidation (e.g., increasing the suspect's anxiety over denial), Robust Challenge (e.g., aggressively challenging lies and inconsistencies), and Manipulation (e.g., justifying or excusing the offense). In contrast to these relatively coercive techniques, two more sensitive styles were also used, albeit to a lesser degree. Referred to as Appeal and Soft Challenge, these approaches proved particularly effective with sex offenders and did not undermine the admissibility of the confessions, as they were not construed as coercive.

Retrospective Self-Report Studies

In self-report studies, offenders are interviewed about the reasons they confessed to police. This approach thus focuses on the suspects' mental state and motivation at the time they confessed. Gudjonsson and Petursson (1991) published the first work in this area, a study of Icelandic prison inmates that was replicated in Northern Ireland (Gudjonsson & Bownes, 1992) and on a large Icelandic prison population with a 54-item self-report instrument known as the Gudjonsson Confession Questionnaire (GCQ-R; Gudjonsson & Sigurdsson, 1999; Sigurdsson & Gudjonsson, 1994).

This research was guided by the hypothesis that confessions to police are predominantly caused by three factors: (a) *perception of proof*, the suspect's belief that there is no point in denying the offense because the police will eventually prove his or her guilt; (b) *external pressure* to confess, which is associated with police interrogation techniques and behavior and with fear of confinement; and (c) *internal pressure* to confess, the suspect's feelings of guilt about the crime and the resulting need to obtain relief by confessing. In a factor analysis of the GCQ-R, Gudjonsson and Sigurdsson (1999) obtained strong support for this hypothesis (the factors and their items appear in Table 4). Although most suspects confess for a combination of reasons, the most important is their belief about the strength of the evidence against them—which is why the confrontation phase of interrogation is effective at breaking down resistance and why internal and external pressures have their greatest impact when the police have little or no proof. Gudjonsson and

TABLE 4

First Three Factors and Their Items From the Revised Gudjonsson Confession Questionnaire (Gudjonsson & Sigurdsson, 1999)

Factor 1: External Pressure	
7.	Did you confess because of police pressure during the interview?
11.	Are you now pleased that you confessed?
12.	Do you think you would have confessed if at the time you had fully realised the consequences of doing so?
14.	Did you confess because you were afraid about what would happen if you did not confess?
16.	Do you think you confessed to readily or hastily?
17.	Do you feel the police bullied you into confessing?
22.	Did you confess because you were frightened of being locked up?
24.	Did you feel you confessed because you did not cope well with the police interviews?
26.	Do you now regret having confessed?
33.	Did you confess because the police persuaded you it was the right thing to do?
34.	Did you confess because you were frightened of the police?
36.	Did you confess because at the time you believed the police would beat you up if you did not confess?
Factor 2: Internal Pressure	
2.	Did you confess because you felt guilty about the offense?
4.	Did you feel you wanted to get it off your chest?
13.	Did you experience a sense of relief after confessing?
18.	Did you feel tense or nervous whilst being interviewed by the police?
28.	Did the thought that you might be viewed by others as a criminal make you less willing to confess?
29.	Did you confess because you had the need to talk to somebody?
30.	Did you confess because at the time you felt you needed help?
31.	Did you find it difficult to confess because you did not want others to know what you had done?
32.	Did you find it difficult to confess because you did not want to accept what you had done?
38.	Did you find it difficult to confess because you were ashamed about having committed the offense?
39.	Did you confess because you felt isolated from your family and friends?
Factor 3: Perception of Proof	
8.	Would you have confessed to the police if they had not suspected you of the crime?
35.	Did you confess because you saw no point in denying at the time?
43.	Did you confess because it was obvious that you had committed the offense?
44.	Did you confess because you were apprehended committing the offense?
46.	Were you under the influence of alcohol during the police interview?
49.	Were you under the influence of alcohol when you committed the offense?

Sigurdsson also found that the reasons offenders gave for confessing depended on the type of offense committed. For example, sex offenders—despite feelings of shame, which inhibit confession—confessed more frequently than other suspects because of a strong internal need to confess.

Gudjonsson and Sigurdsson (2000) compared the GCQ-R scores of violent offenders, rapists, and child molesters and found that the internal need to confess was greatest among child molesters. There were also significant differences in the perception of proof at the time of interrogation, with the perceived strength of the evidence being strongest among violent offenders. The finding that child molesters report the strongest need to confess despite a low degree of perception of proof has implications for how police should conduct interrogations of such suspects (i.e., a sensitive approach may overcome the child molester's inhibition to confess). A combination of the need to confess and feelings of shame among sex offenders may explain why they are typically reluctant to fully recount their offenses even after making simple admissions. Perhaps this group strikes a personal compromise by satisfying their need to confess while at the same time minimizing feelings of shame (Birgisson, 1996).

Using a similar methodology, but using a mail survey rather than face-to-face contact, Holmberg and Christianson (2002) investigated the perceptions of Swedish prisoners convicted of murder and sexual offenses. Through a factor analysis of police interviewers' style, two factors emerged, referred to as Dominance (impatient, aggressive, and brusque in manner) and Humanity (friendly, respectful, accommodating, and understanding toward the suspect). Interestingly, the interviews in which the police were perceived as dominant were associated with denials, whereas those marked by humanity were associated with admissions.

The findings of self-report studies, combined with those derived from naturalistic observations (e.g., Moston et al., 1992; Pearse & Gudjonsson, 1999), suggest that the outcomes of police interrogations result from a combination of factors, which may differ from case to case, rather than individual factors acting in isolation. For this reason, Gudjonsson (2003a) proposed an interactional perspective on interrogation, which can be used to guide research and the clinical assessment of individual cases. This framework highlights the importance of custodial factors (e.g., the pressure associated with arrest and detention; the interrogation techniques used; the personality, expectations, and behavior of the interrogator; the seriousness and notoriety of the crime; the initial responses of the suspect to the situation), personal vulnerabilities of the detainee (e.g., age; intelligence; physical and mental health; personality traits such as suggestibility, compliance, and antisocial personality), and the presence or absence of a legal advisor and other persons who may provide social support (e.g., parents, friends, and professionals). The impact of a legal advisor is a case in point. There is evidence that the mere presence during interrogation of a responsible adult who is not a lawyer (known in England as an "appropriate adult," a legal requirement in cases involving juveniles and mentally vulnerable suspects), even if he or she does not intervene directly in the process, may positively influence the behavior of the police and legal advisors (Medford et al., 2003).

False Confessions

From a psychological perspective, a false confession is any detailed admission to a criminal act that the confessor did not commit. In light of research showing that police are prone to misjudge truthful suspects as deceptive, that innocent people are prone to waive their *Miranda* rights, and that interrogators are trained to use highly scripted psychological techniques to elicit confessions, it is important to know whether interrogations are discriminating, or diagnostic, in their effects, drawing confessions only from perpetrators of crime, or whether they also elicit confessions from innocent people. As no one knows the frequency of false confessions or has devised an adequate method of calculating precise incidence rates, there is perennial debate over the numbers. Indeed, many false confessions are discovered before there is a trial, are not reported by police, and are not publicized by the media—suggesting that the known cases represent "only the tip of a much larger iceberg" (Drizin & Leo, 2004, p. 919).

Using admittedly limited self-report to estimate the extent of the problem, Gudjonsson and Sigurdsson (1994) and Sigurdsson and Gudjonsson (1996) asked Icelandic prison inmates if they had ever confessed falsely to police. In both studies, 12% claimed to have made a false confession at some time in their lives. Among Icelandic college and university students who said they had been interrogated by police, 3.7% and 1.2%, respectively, claimed to have made a false confession (Gudjonsson, Sigurdsson, Bragason, et al., 2004; Gudjonsson, Sigurdsson, & Einarsson, 2004). As to motives, Sigurdsson and Gudjonsson (1996) found that among prison inmates, the most frequently cited reasons for making false confessions were to escape from police pressure (51%), to protect somebody else (48%), and to avoid detention (40%). In the study of Icelandic college students, 60% said they confessed falsely to protect somebody else (Gudjonsson, Sigurdsson, Bragason, et al., 2004). These latter confessions were seldom retracted, so they often did not come to the attention of the authorities (Gudjonsson, 2003b).

It is important to be clear about the criteria used to determine that a confession previously given was false. The literature on wrongful convictions shows that there are several ways for this determination to be made. Confessions may be deemed false when it is later discovered that no crime was committed (e.g., the presumed murder victim is found alive, the autopsy on a "shaken baby" reveals a natural cause of death); when additional evidence shows that it was physically impossible for

the confessor to have committed the crime (e.g., he or she was demonstrably elsewhere at the time or too young to have produced the semen found on the victim); when the real perpetrator, having no connection to the defendant, is apprehended and linked to the crime (e.g., by intimate knowledge of crime details, ballistics, or physical evidence); and when scientific evidence affirmatively establishes the confessor's innocence (e.g., he or she is excluded by DNA test results on semen, blood, hair, or saliva). Indeed, as noted earlier, there are a disturbing number of cases involving defendants who confessed and were convicted—but were later exonerated by previously untested DNA samples (Innocence Project, 2001; Scheck et al., 2000).

Drizin and Leo (2004) recently analyzed 125 cases of proven false confessions in the United States between 1971 and 2002, the largest sample ever studied. Ninety-three percent of the false confessors were men. Overall, 81% of the confessions occurred in murder cases, followed by rape (8%) and arson (3%). The most common bases for exoneration were that the real perpetrator was identified (74%) or that new scientific evidence was discovered (46%). As for personal vulnerabilities, the sample was younger than the population overall (63% of false confessors were under the age of 25; 32% were under 18), and the numbers of individuals with mental retardation (22%) and diagnosed mental illness (10%) were disproportionately high. Astonishingly, more than one false confession to the same crime was obtained in about 30% of the cases (as in the Central Park jogger case), typically indicating that one false confession was used to coerce others.

At this point, a word of caution is in order. False confessions are the primary cause of wrongful convictions in many cases—especially those involving high-profile murders and sexual offenses (Drizin & Leo, 2004; Gudjonsson, 2003b). At the same time, self-reports of false confessions among Icelandic prison inmates and college and university students suggest that many involved minor crimes, such as theft and property damage. Often these latter false confessions were not retracted because they were volunteered by people seeking to protect somebody else or by people who were naive about the criminal justice system and unable to cope satisfactorily with the pressures of interrogation or confinement. In short, it is clear that the high-profile cases of false confession that capture public attention represent only a partial sample (see also Gross et al., 2004).

Types of False Confessions

Munsterberg (1908) was the first psychologist to write about false confessions. In a full chapter titled "Untrue Confessions," he viewed these statements as a normal behavioral reaction that was triggered by unusual circumstances—such as the emotional shock of being arrested, detained, and interrogated. Munsterberg's writings were quite limited, however, and did not take into consideration the variety and complexity of false confessions.

Many years later, Kassin and Wrightsman (1985) proposed a taxonomy of false confessions. Reviewing case reports that have stained the pages of legal history, and drawing on social-psychological theories of attitude change, they distinguished among three types of false confessions: voluntary, coerced-compliant, and coerced-internalized (see also Kassin, 1997b; Wrightsman & Kassin, 1993). This classification scheme has provided a useful framework for the study of false confessions. As we show later, it has since been used, critiqued, extended, and refined by researchers and law-enforcement professionals (Conti, 1999; Gudjonsson, 1992, 2003b; Inbau et al., 2001; Kassin, 1997b; Lassiter, 2004; McCann, 1998; Ofshe & Leo, 1997b).

Voluntary False Confessions. Sometimes innocent people offer confessions without much prompting or pressure from police. When Charles Lindbergh's baby was kidnapped in 1932, some 200 people stepped forward to confess. In the 1980s, Henry Lee Lucas falsely confessed to hundreds of unsolved murders, making him the most prolific serial confessor in history. There are several possible reasons why people might voluntarily give a false confession, including a pathological desire for notoriety, especially in high-profile cases reported in the news media; a conscious or unconscious need for self-punishment to expiate feelings of guilt over prior transgressions; an inability to distinguish fact from fantasy due to a breakdown in reality monitoring, a common feature of major mental illness; and a desire to aid and protect the real criminal. The possible motives for voluntary false confessions are limited only by the imagination. Radelet et al. (1992), for example, described one case in which an innocent man confessed to murder to impress his girlfriend and another in which a woman pled guilty to provide an alibi for her whereabouts while having extramarital sex. Gudjonsson (2003b) described the case of a man who confessed to murder because he was angry at having been arrested while drinking at a party and wanted to mislead police in an act of revenge.

Compliant False Confessions. In contrast to voluntary false confessions are those in which suspects are induced through police interrogation to confess to a crime they did not commit. In these cases, the suspect acquiesces to the demand for a confession for instrumental purposes: to escape an aversive situation, to avoid an explicit or implied threat, or to gain a promised or implied reward. Demonstrating the form of influence observed in Asch's (1956) initial studies of conformity, Milgram's (1974) research on obedience to authority, Cialdini's (2001) studies of compliance, and Latane's (1981) social impact theory, this type of confession is a mere act of public compliance by a suspect who comes to believe that the short-term benefits of confession relative to denial outweigh the long-term costs.

The pages of legal history are filled with stories of this type of confession—as in the Salem witch trials of 1692, during which

roughly 50 women confessed to being witches, some, in the words of one observer, after being "tyed... Neck and Heels till the Blood was ready to come out of their Noses" (Karlsen, 1989, p. 101), and as in *Brown v. Mississippi* (1936), a case in which three Black tenant farmers confessed to murder after they were whipped with a steel-studded leather belt. This type of false confession is also illustrated in the Central Park jogger case, in which each of the boys retracted his confession immediately upon arrest and said he had confessed because he had expected to be allowed to go home. From a review of other cases, Gudjonsson (2003b) identified some very specific incentives for this type of compliance—such as being allowed to sleep, eat, make a phone call, go home, or, in the case of drug addicts, feed a drug habit. The desire to bring the interview to an end and avoid additional confinement may be particularly pressing for people who are young, desperate, socially dependent, or phobic of being locked up in a police station.

Internalized False Confessions. Internalized false confessions are those in which innocent but vulnerable suspects, under the influence of highly suggestive interrogation tactics, come not only to capitulate in their behavior, but also to believe that they committed the crime in question, sometimes confabulating false memories in the process (for a description of the process, see Kassin, in press).

Gudjonsson and MacKeith (1982) argued that this kind of false confession results from "memory distrust syndrome," a condition in which people develop a profound distrust of their memory, which renders them vulnerable to influence from external cues and suggestions. Kassin (1997a) likened this process of influence during interrogation to the creation of false memories sometimes seen in psychotherapy patients. In both situations, an authority figure claims to have privileged insight into the individual's past, the individual is in a heightened state of malleability, all interactions between the expert and individual occur in a private and socially isolated setting devoid of external reality cues, and the expert ultimately convinces the individual to accept a negative and painful self-insight by invoking concepts like dissociation or repression (for a more in-depth analysis, see Ost, Costall, & Bull, 2001). Linking this phenomenon to research on the biasing effects on autobiographical memory of photographs (Lindsay, Hagen, Read, Wade, & Garry, 2004), imagination exercises (Mazzoni & Memon, 2003; A.K. Thomas & Loftus, 2002), reports of co-witnesses (Gabbert, Memon, & Allan, 2003), and dream interpretation (Mazzoni, Loftus, & Seitz, 1999), all of which lead people to become confused about the source of a memory, Henkel and Coffman (2004) argued that the reality-distorting processes of interrogation provide fertile ground for internalized false confessions.

A number of cases illustrate this phenomenon. The case of 18-year-old Peter Reilly, mentioned earlier, provides a classic example. Reilly immediately called the police when he found that his mother had been murdered, but he was suspected of matricide. After gaining his trust, the police told Reilly that he failed a lie-detector test, which was not true, and that the test indicated he was guilty despite his lack of a conscious recollection of committing the crime. After hours of relentless interrogation, Reilly underwent a chilling transformation from adamant denial through confusion, self-doubt, conversion ("Well, it really looks like I did it"), and eventual utterance of a full confession ("I remember slashing once at my mother's throat with a straight razor I used for model airplanes. . . . I also remember jumping on my mother's legs"). Two years later, independent evidence revealed that Reilly could not have committed the murder, and that the confession he came to believe was false (Barthel, 1976; Connery, 1977).

The case of 14-year-old Michael Crowe and his friend Joshua Treadway provides a more recent example. At first, Michael vehemently denied that he had stabbed his sister Stephanie. Eventually, however, he conceded that he was a killer: "I'm not sure how I did it. All I know is I did it" (see Drizin & Colgan, 2004, p. 141). This admission followed three interrogation sessions during which Michael was told that his hair was found in Stephanie's grasp, that her blood was in his bedroom, that all means of entry to the house were locked, and that he had failed a lie test—all claims that were false. Failing to recall the stabbing, Michael was persuaded that he had a split personality, that "good Michael" had blocked out the incident, and that he should try to imagine how "bad Michael" had killed Stephanie. As noted earlier, the charges against the boys were later dropped when a local vagrant seen in the area that night was found with Stephanie's blood on his clothing (Drizin & Colgan, 2004).

Critiques and Refinement. Kassin and Wrightsman's (1985) model has played an important heuristic role in understanding false confessions. Indeed, Inbau et al. (2001) used this typology to structure a cautionary chapter on false confessions in the fourth edition of their interrogation manual. In some ways, however, this model has proved limited, prompting refinements in definition and categorization.

One limitation is that some confessions to police that appear voluntary were in fact pressured at an earlier time, in non-custodial settings—by family members, friends, ministers, cell mates, and other persons (McCann, 1998). Kassin (1998) thus noted that the typology might usefully be revised to distinguish confessions according to both the eliciting process and the source. A second issue concerns the concept of internalization. Arguing that the change in the innocent confessor's beliefs tends to be temporary and unstable, and that internalized false confessions are often characterized by tentative expressions that betray uncertainty and inference (e.g., "I must have," "I think I did," and "I probably committed this crime"), Ofshe and Leo (1997b) questioned whether an innocent confessor's false belief is ever fully internalized. We believe this criticism

is misplaced (see also Kassin, in press). To be sure, a person under the influence of interrogation may internalize false beliefs about his or her culpability with more or less certainty and with more or less stability over time. Still, internalization was evident in several cases, as in that of Paul Ingram, a false confessor who was "brainwashed" over the course of 5 months of interrogations into thinking he had committed horrific acts of violence as part of a satanic cult (Ofshe & Watters, 1994; Wright, 1994). Indeed, Munsterberg (1908) long ago wrote about a Salem witch confession involving "illusions of memory" in which "a split-off second personality began to form itself with its own connected life story built up from the absurd superstitions which had been suggested to her through the hypnotising examinations" (p. 147).

Albeit on a lesser scale, internalization has also been observed in laboratory studies (described later) in which college students who confessed to a prohibited act they did not commit came to believe they had done it, and in some cases confabulated narrative accounts of how they did it (e.g., Kassin & Kiechel, 1996). This type of internalization also bears close resemblance to documented suggestibility effects in children (e.g., Bruck & Ceci, 1999; Ceci & Bruck, 1995), the creation of false memories for words in a list (e.g., Roediger & McDermott, 1995) and richly textured autobiographical experiences that did not occur (Loftus, 1997, 2003; Nourkova, Bernstein, & Loftus, 2004), the "thought reform" effects of indoctrination in prisoners of war (Lifton, 1956; Schein, Schneier, & Barker, 1961), and the recovery of false trauma "memories" in psychotherapy patients (de Rivera, 1997; Ost et al., 2001).

To address the various concerns, and to make finer distinctions among different sources of influence, some researchers have proposed alternative typologies of false confession (McCann, 1998; Ofshe & Leo, 1997b). Most recently, Gudjonsson (2003b) proposed a modified version of the original typology that also takes into account personal or internal sources of influence, as well as external sources outside the police station. Specifically, he suggested a classification system that distinguishes among the three types of false confessions (voluntary, compliant, and internalized) and three sources of pressure (internal, custodial, and noncustodial). Regardless of which taxonomy most efficiently describes and distinguishes among false confessions, it is now eminently clear from case studies of miscarriages of justice that this phenomenon occurs in different ways and for different reasons. It is also now clear that certain dispositional and situational factors increase both interrogative influence in general and the risk of false confessions in particular (Drizin & Leo, 2004; Gudjonsson, 2003b).

Personal Risk Factors

Clearly, in terms of how people react to the pressures inside the interrogation room, all suspects are not created equal. Personality, age, intelligence, and psychopathology all influence individuals' susceptibility to making false confessions.

Personality Characteristics. Some people are more vulnerable than others to respond with compliance or suggestibility to interrogative pressure. This is illustrated by the Birmingham Six, the case described earlier in which the two appellants who had maintained their innocence during intensive interrogations were far less compliant and suggestible, according to personality test scores, than the four appellants who capitulated and gave written confessions (Gudjonsson, 2003b).

Individuals prone to exhibit compliance in social situations may be particularly vulnerable in the interrogation room. According to Gudjonsson (1989), compliance comprises two main components: an eagerness to please and to protect self-esteem in the company of other people, and a desire to avoid confrontation and conflict with others, particularly those in positions of perceived authority. The Gudjonsson Compliance Scale (GCS) is a 20-item true/false instrument that measures individual differences in compliance via statements such as "I give in easily to people when I am pressured" and "I tend to go along with what people tell me even when I know that they are wrong." The GCS has satisfactory reliability, which means that people's scores are reasonably stable when the test is repeated over time (see Gudjonsson, 1997). When the predictive validity of the GCS was tested by administering it to 20 crime suspects who refused to confess and to 20 who confessed to police but later retracted their statements, the confessors scored higher than did those who refused to capitulate (Gudjonsson, 1991). In this study, the GCS was administered only after interrogation, not beforehand. As GCS scores may be affected by suspects' response to interrogation, more research is needed to establish the predictive validity of this instrument.

The Gudjonsson Suggestibility Scale (Gudjonsson, 1984) is a memory-related instrument that assesses individual differences in interrogative suggestibility (there are two parallel forms, GSS 1 and GSS 2). This test involves reading a narrative paragraph to a subject, who then recalls the story, immediately and after a brief delay, and answers 20 memory questions—including 15 that are subtly misleading. After receiving feedback indicating that he or she made several errors, the subject is retested, presumably for the purpose of obtaining a higher level of accuracy. Through this test-retest paradigm, researchers can measure the extent to which subjects exhibit a general *shift* in memory, as well as a tendency to *yield* to misleading questions in the first and second tests. Added together, these two scores are used to determine a subject's Total Suggestibility (see Gudjonsson, 1997). A video-based test developed by Scullin and Ceci (2001) is also now available to measure individual differences in suggestibility among preschool children.

As a general rule, individuals with high scores on interrogative suggestibility also tend to exhibit poor memories, high

levels of anxiety, low self-esteem, and a lack of assertiveness. In a study of crime suspects, "alleged false confessors" (those who confessed to police but later retracted the statements) obtained higher suggestibility scores than the general population, whereas "resistors" (those who maintained their innocence throughout interrogation) obtained lower scores (Gudjonsson, 1991). Not surprisingly, experimental research shows that interrogative-suggestibility scores increase with prolonged sleep deprivation, a state that often plagues suspects who are interrogated late at night (Blagrove, 1996), and with alcohol withdrawal, also a common problem among crime suspects (Gudjonsson, Hannesdottir, et al., 2004).

Sigurdsson and Gudjonsson (1996) compared the personality test scores of 62 prison inmates who claimed to have confessed falsely to police with those of other prison inmates. As a group, the alleged false confessors were more anxious, more compliant, and more personality disordered than other inmates, but they did not differ significantly with regard to intelligence, verbal memory, and suggestibility. An analysis of all the psychological tests administered showed that the Gough Socialization Scale and the GCS discriminated best between the alleged false confessors and the other inmates. When the alleged false confessors were classified according to the type of false confession they appear to have given (10 of the 62 described internalized confessions), the internalizers had significantly higher suggestibility scores on the GSS 1 than the others did (Sigurdsson & Gudjonsson, 2001).

Youth: Juveniles at Risk. Youth is also a substantial risk factor for false confessions. As illustrated by the Central Park jogger case, in which all five false confessors were 14 to 16 years old, one of the most troubling aspects of false-confession data bases is the number of juveniles, including preadolescent children, who implicate themselves (Drizin & Leo, 2004). In a particularly shocking but instructive case, the badly beaten body of 11-year-old Ryan Harris was discovered in a lot in Chicago. Two weeks later, two boys who were questioned by police in unrecorded sessions independently described how they knocked the girl off her bike, hit her in the head with a brick, dragged her into weeds, and sexually molested her, leaving her to die—facts that matched the crime scene. The boys were 7 and 8 years old. One month later, prosecutors dropped the charges when the crime lab discovered semen on the victim that matched the DNA of a local sex offender (Kotlowitz, 1999; for a chilling investigation of two similar false confessions by children many years ago, see Fisher, 1996).

It is clear that juvenile suspects are highly vulnerable to false confessions, particularly when interrogated by police and other figures of authority. In a related forensic context, research shows that child witnesses are more compliant and more suggestible than adult witnesses, and more likely to subscribe to memories of fictitious events when exposed to repetition, leading questions, peer pressure, and other social influence tactics (Bruck & Ceci, 1999; Ceci & Bruck, 1995). Juveniles are particularly susceptible to interrogative pressure and negative feedback from persons in a position of authority (see Gudjonsson, 2003b). In the context of police interrogation, research described earlier shows that many juveniles have less comprehension of their Miranda rights and are less likely to invoke them, relative to adults. Examining police records from 491 felony cases referred to juvenile court, Grisso (1981) found that only 9% of the suspects exercised their right to silence, with 91% agreeing to talk to police, potentially incriminating themselves by confession or denial. Asked about their reasons for waiving their rights, most juveniles indicated that they were primarily concerned about their immediate predicament (i.e., detention or release) and secondarily concerned about longer-range consequences (e.g., whether the police would infer guilt from silence, search for additional evidence, and initiate legal proceedings). Interestingly, the presence of an "interested adult" (parent, guardian, friend), which is required in many states to protect juvenile suspects, does not lower the waiver rate, as many parents offer no advice in this situation or urge their children to cooperate with police (see Oberlander & Goldstein, 2001).

Moving from the decision to waive *Miranda* rights to the decision to confess, researchers have found that juveniles may be more likely than adults to confess. In one study, roughly 1,400 youths and adults were questioned about the "best choice" for a vignette character subjected to police interrogation: confess, deny, or remain silent. More than half of all 11- to 13-year-olds in this sample selected confession, and the proportion of subjects who made this choice diminished with age, to only one fifth of adults (Grisso et al., 2003). In a second study, delinquent boys from a residential postadjudication facility, who ranged in age from 13 to 18, role-played a suspect being questioned in a series of hypothetical police-interrogation scenarios involving a mugging incident. After each situation, subjects reported the likelihood that they would confess if guilty and if innocent. Overall, 25% said they would definitely give a false confession in at least one scenario. A statistical analysis controlling for IQ showed that this willingness to confess falsely was more pronounced among 13- to 15-year-old boys than among their 16- to 18-year-old peers (Goldstein, Condie, Kalbeitzer, Osman, & Geier, 2003).

Using the behavioral laboratory paradigm introduced by Kassin and Kiechel (1996), Redlich and Goodman (2003) sought to elicit false confessions among juvenile and adult subjects, ages 12 through 26. In this study, subjects took part in a reaction time task using a computer keyboard. They were then accused of pressing a prohibited key on the keyboard, causing the computer to crash. Half the subjects were then presented with false evidence in the form of a bogus computer printout showing that they had pressed a key they were warned not to touch. All subjects were innocent, and all were prompted to sign a confession. The results highlighted the importance of

age as a vulnerability factor—with false confession rates of 78% among 12- to 13-year-olds, 72% among 15- to 16-year-olds, and 59% among young adults (ages 18–26). Across age groups, dispositional suggestibility, as measured by GSS scores, was also predictive of the tendency of subjects to confess to a prohibited act they did not commit (for more comprehensive reviews of cases and research on child confessions, and implications for juvenile justice, see Drizin & Colgan, 2004; Redlich, Silverman, Chen, & Steiner, 2004).

Mental Retardation. People who are intellectually impaired are also disproportionately represented in databases of actual false confessions. Drizin and Leo (2004) identified at least 28 mentally retarded defendants in their sample of 125 false confessions, and they were quick to note that this 22% likely underestimates the problem (intelligence test scores were not available or reported in most cases). This risk factor is not surprising. As noted earlier, *Miranda* comprehension scores on standardized instruments correlate significantly with IQ, so most people who are mentally retarded, being limited in their cognitive and linguistic abilities, cannot adequately comprehend their rights or know how to apply them in their own actions (Everington & Fulero, 1999; Fulero & Everington, 1995)—leading some researchers to describe the *Miranda* warnings to individuals with this disability as "words without meaning" (Cloud, Shepherd, Barkoff, & Shur, 2002).

The disproportionate numbers of mentally retarded individuals in the population of proven false confessors suggests that they are also at risk in the interrogation room. As discussed earlier, it is possible to distinguish between police-induced false confessions involving compliance and those involving internalization (Kassin & Wrightsman, 1985). With regard to tendencies toward compliance, people who are mentally retarded exhibit a high need for approval, particularly from others in positions of authority, which is manifested in an acquiescence response bias, a tendency to say "yes" (Shaw & Budd, 1982). Indeed, research shows that people who are mentally retarded exhibit a strong tendency to answer "yes" to a whole range of questions—even when an affirmative response is incorrect and inappropriate, and even in response to absurd questions such as "Does it ever snow here in the summer?" (Finlay & Lyons, 2002). This heightened suggestibility in response to misleading information, which can increase the risk of internalized false confessions, is particularly problematic. Research shows that witnesses with mental deficiencies are highly influenced by questions that contain leading and misleading information (Perlman, Ericson, Esses, & Isaacs, 1994). In studies conducted in England and the United States, respectively, Gudjonsson and Henry (2003) and Everington and Fulero (1999) found that people who are mentally retarded as a group score significantly higher than average on the GSS measure of interrogative suggestibility. Also of relevance to behavior in the interrogation room, people who are mentally retarded are limited in their capacity to foresee the consequences of their actions when making legal decisions (Clare & Gudjonsson, 1995; for a review of all these issues, see Fulero & Everington, 2004).

Links to Psychopathology. Distorted perceptions and memories, a breakdown in reality monitoring, impaired judgment, anxiety, mood disturbance, and lack of self-control are common symptoms of many categories of mental illness. Individually or in combination, these symptoms may lead people to offer misleading information, including false confessions, to police during interviews and interrogations. Gudjonsson (2003b) described a number of false-confession cases involving people with diagnosed mental disorders. In one case, a clinically depressed man falsely implicated himself in murder as a way to relieve strong feelings of free-floating guilt; in another case, a man who experienced extreme anxiety confessed as an act of compliance to terminate a stressful interrogation. Drizin and Leo (2004) described the case of a homeless woman with a history of psychiatric disorders who confessed in vivid detail to giving birth, killing, and discarding her newborn baby—until DNA tests proved that she was not the baby's mother. Clearly, certain types of psychopathology appear to be implicated in false confessions. At this point, however, more systematic research is needed to identify the problematic disorders and the specific ways in which they impair crime suspects (Redlich, 2004).

Situational Risk Factors

In addition to the personal factors that can increase a suspect's vulnerability to false confessions, certain situational factors increase this vulnerability. In the Reid technique, as described earlier, the nine steps of interrogation are essentially reducible to an interplay of three processes: custody and isolation, confrontation, and minimization. In this section, we discuss research suggesting that certain uses of these techniques can put innocent people at risk to make false confessions.

Physical Custody and Isolation. By design, interrogators are trained to remove suspects from their familiar surroundings and question them in the police station, ideally in the type of specially constructed interrogation room described earlier. Looking at police interrogations, Zimbardo (1967) observed that such isolation heightens the anxiety associated with custodial interrogation and, over extended periods of time, increases a suspect's incentive to escape. Controlled laboratory experiments show that fatigue and sleep deprivation, which accompany prolonged periods of isolation, can heighten susceptibility to influence and impair decision-making abilities in complex tasks (Blagrove, 1996; Harrison & Horne, 2000). As prolonged detention causes fatigue, uncertainty, and despair, it comes as little surprise that whereas police interrogations routinely last for less than 2 hours (Leo, 1996b), a study of documented false-confession cases in which interrogation time

was recorded showed that 34% lasted 6 to 12 hours and 39% lasted 12 to 24 hours, and that the mean was 16.3 hours (Drizin & Leo, 2004).

Irving and Hilgendorf (1980) identified three kinds of stressors associated with the custodial environment that can adversely affect the detainee's mental state and decision making: (a) certain physical characteristics of the environment, (b) social isolation from peers, and (c) submission to authority. Studying 171 suspects who had been detained for questioning in run-of-the-mill cases at two English police stations, Gudjonsson et al. (1993) observed that these stressors were accompanied by a strong sense of uncertainty about the future, lack of control, and lack of autonomy. Uncertainty about the near-term future was a particularly acute source of distress. Clinical and psychological testing revealed that 35% of the detainees in this sample were in an "abnormal" mental state, with 20% suffering from exceptionally high levels of anxiety. In short, these findings suggest that the custodial environment is highly stressful to those who are accused, even in minor cases, a problem that is exacerbated by the fact that people detained for questioning are as a group particularly vulnerable because of relatively poor intellectual functioning and mental health problems (see Gudjonsson, 2003b, for a detailed review).

The Process of Confrontation. Once suspects are isolated, interrogators begin by confronting them with strong assertions of their guilt designed to communicate that resistance is futile. This begins the confrontation process, during which interrogators exploit the psychology of inevitability to drive suspects into a state of despair. As a general rule, research shows that once people see an outcome as inevitable, cognitive and motivational forces conspire to promote their acceptance, compliance with, and even approval of the outcome (Aronson, 2003). In the case of interrogation, the process of confrontation also encompasses interrupting the suspect's denials, refuting alibis, and even at times presenting the suspect with supposedly incontrovertible evidence of his or her guilt (e.g., a fingerprint, blood or hair sample, eyewitness identification, or failed polygraph)—regardless of whether such evidence truly exists. In the United States, unlike in most European countries, this latter form of trickery is permissible (*Frazier v. Cupp*, 1969), provisionally recommended (Inbau et al., 2001), and frequently used (Leo, 1996b). Yet laboratory experiments have shown that lying about evidence increases the risk that innocent people confess to acts they did not commit—and even, at times, internalize blame for outcomes they did not produce.

In the first such study, Kassin and Kiechel (1996) tested the hypothesis that the presentation of false evidence can lead individuals who are rendered vulnerable to confess to a prohibited act they did not commit, to internalize responsibility for that act, and to confabulate details consistent with that belief. In this experiment, subjects typed letters on a keyboard in what was supposed to be a reaction time study. They were then accused of causing the experimenter's computer to crash by pressing a key they were instructed to avoid—at which point they were asked to sign a confession. All subjects were innocent, and all initially denied the charge. Two factors were independently varied. First, the subject's vulnerability was manipulated by varying the pace of the task, fast or slow. Second, the presentation of false evidence was manipulated by having a confederate tell the experimenter either that she did or that she did not witness the subject hit the forbidden key.

Three levels of influence were assessed. To elicit *compliance*, the experimenter handwrote a confession and asked subjects to sign it. To measure *internalization*, he secretly tape-recorded whether subjects took responsibility when they later described the experience to a waiting subject, actually a second confederate (e.g., "I hit a key I wasn't supposed to and ruined the program"). To measure *confabulation*, the experimenter brought subjects back into the lab and asked if they could reconstruct what happened to see if they would manufacture details (e.g., "yes, here, I hit it with the side of my hand right after you called out the 'A'"). Overall, 69% of all subjects signed the confession, 28% internalized guilt, and 9% confabulated details to support their false beliefs (see Table 5). More important were the effects of the independent variables. In the baseline condition, when the pace was slow and there was no witness, 35% of subjects signed the note—but not a single one exhibited internalization or confabulation. In contrast, when the pace was fast and there was allegedly a witness, all subjects signed the confession, 65% internalized guilt, and 35% concocted supportive details. Clearly, people can be induced to confess and to internalize guilt for an outcome they did not produce—and this risk is increased by the presentation of false evidence, a trick often used by police and sanctioned by the courts.

Follow-up studies using this computer-crash paradigm have replicated and extended the false-evidence effect. In an experiment conducted in the Netherlands, Horselenberg, Merckelbach, and Josephs (2003) accused college students of causing a computer to crash by hitting a prohibited key and obtained even higher rates of coerced-compliant false confessions, internalization, and confabulation—even when subjects were led to believe that confession would bear a financial consequence. Redlich and Goodman (2003) also obtained high rates of compliance in this paradigm despite leading subjects

TABLE 5

Percentage of Subjects Who Exhibited the Three Types of Influence in False Confessions (Kassin & Kiechel, 1996)

	No witness		Witness	
Type of influence	Slow pace	Fast pace	Slow pace	Fast pace
Compliance	35	65	89	100
Internalization	0	12	44	65
Confabulation	0	0	6	35

to believe that they would have to return for 10 hours without compensation to reenter the lost data. Demonstrating a limitation of this effect, Klaver, Gordon, and Lee (2003) found that the false-confession rate declined from 59% when subjects were accused of hitting the "ALT" key, as in the original study, to 13% when they were accused of hitting the "Esc" key, which was less plausible by virtue of its placement in the top left corner of the keyboard. Focusing on individual differences in vulnerability, other researchers observed particularly high false-confession rates in response to false evidence among stress-induced males (Forrest, Wadkins, & Miller, 2002) and among juveniles 12 to 16 years old (Redlich & Goodman, 2003).

It is important to note that as a historical matter, the polygraph has played a key role in the interrogation tactic of presenting false evidence. The polygraph is best known for its use as a lie-detector test, but because polygraph evidence is not admissible in most courts, police use it primarily to induce suspects to confess. In numerous cases over the years, compliant and internalized false confessions have been extracted by police examiners who told suspects they had failed a lie-detector test—even when they had not (e.g., the Peter Reilly and Michael Crowe cases described earlier). This problem is so common that Lykken (1998) coined the term "fourth degree" to describe the tactic (p. 235). Indeed, the National Research Council Committee to Review the Scientific Evidence on the Polygraph recently warned of the risk of polygraph-induced false confessions (National Research Council, 2003). In a laboratory demonstration that illustrates the point, Meyer and Youngjohn (1991) elicited false confessions to the theft of an experimenter's pencil from 17% of subjects told that they had failed a polygraph test on that question.

Minimization: Promises Implied but Not Spoken. After suspects are thrust into a state of despair by confrontation and the presentation of false evidence, the next step is to minimize the crime through "theme development," a process of providing moral justification or face-saving excuses, making confession seem like an expedient means of escape. Interrogators are thus trained to suggest to suspects that their actions were spontaneous, accidental, provoked, peer pressured, drug induced, or otherwise justifiable by external factors. In the Central Park jogger case, every boy gave a false confession that placed his cohorts at center stage and minimized his own involvement (e.g., Kharey Wise said he felt pressured by peers)—and each said afterward that he thought he would go home after confessing.[2] Research shows that minimization tactics may lead people to infer that leniency in sentencing will follow from confession, even in the absence of an explicit promise. Kassin and McNall (1991) had subjects read a transcript of an interrogation of a murder suspect (the text was taken from an actual New York City interrogation). The transcript was edited to produce three versions in which the detective made a contingent promise of leniency, used the technique of minimization by blaming the victim, or used neither technique. Subjects read one version and then estimated the sentence that they thought would be imposed on the suspect. The result: As if explicit promises had been made, minimization lowered sentencing expectations relative to when no technique was used.

To assess the behavioral effects of minimization and to assess the diagnosticity of the resulting confession (a technique has "diagnosticity" to the extent that it increases the ratio of true to false confessions), Russano, Meissner, Kassin, and Narchet (in press) devised a new laboratory paradigm. In their study, subjects were paired with a confederate for a problem-solving study and instructed to work alone on some trials and jointly on others. In the *guilty* condition, the confederate sought help on a problem that was supposed to be solved alone, inducing a violation of the experimental prohibition; in the *innocent* condition, the confederate did not make this request to induce the crime. The experimenter soon "discovered" a similarity in their solutions, separated the subject and confederate, and accused the subject of cheating. The experimenter tried to get the subject to sign an admission by overtly promising leniency (research credit in exchange for a return session without penalty), making minimizing remarks ("I'm sure you didn't realize what a big deal it was"), using both tactics, or using no tactics. By providing for the independent variation of guilt and innocence, as well as the use of different tactics, this paradigm enables researchers to assess the diagnosticity of various interrogation techniques.

Overall, the confession rate was higher among guilty subjects than innocent, when leniency was promised than when it was not, and when minimization was used than when it was not. Table 6 shows that diagnosticity was highest when no tactics were used (46% of guilty suspects confessed vs. only 6% of innocents) and that minimization—just like an explicit offer of leniency—reduced diagnosticity by increasing not only the rate of true confessions (81%) but also the rate of false confessions (18%). In short, minimization provides police with a loophole in the rules of evidence by serving as the implicit but functional equivalent to a promise of leniency (which itself renders a confession inadmissible). The net result is to put innocents at risk to make false confessions.

Personal and Situational Risk Factors as Sufficient, Not Necessary

Our review of the literature compels the conclusion that people sometimes confess to crimes they did not commit and that the reasons for such false confessions are numerous and multifaceted (e.g., a wish to be released from custody, an inability to cope with police pressure, a failure to distinguish fact from fantasy, a desire for notoriety, a desire to protect someone else).

[2]As drawn from the Inbau et al. (2001) manual, the following excerpts illustrate this technique: "Joe, no woman should be on the street alone at night looking as sexy as she did. . . . It's too much a temptation for any normal man. If she hadn't gone around dressed like that you wouldn't be in this room now" (p. 257).

TABLE 6

Percentage of True and False Confessions and Resulting Diagnosticity Ratio as a Function of Interrogation Condition (Russano, Meissner, Kassin, & Narchet, in press)

Condition	True confessions (%)	False confessions (%)	Diagnosticity ratio
No tactic (control)	46	6	7.67
Explicit leniency	72	14	5.14
Minimization	81	18	4.50
Both	87	43	2.02

Gudjonsson (2002) reviewed 23 leading murder cases in Great Britain in which convictions were quashed between 1989 and 2002 because of unreliable confession evidence and found that 14 of the convictions (61%) were overturned on the basis of psychological or psychiatric evidence of the defendants' personal vulnerability and 9 (39%) because of situational factors involving police impropriety or malpractice.

The multifaceted nature of false confessions raises an important point. At times, an individual may be so dispositionally naive, compliant, suggestible, delusional, anxious, or otherwise impaired that little interrogative pressure is required to produce a false confession. Hence, investigators must seek external corroboration for voluntary confessions in order to determine that the confessor's knowledge of the crime is accurate, not erroneous, and that it results from personal experience, not secondhand sources. In these cases, clinical testing and assessment may be useful in determining whether an individual suspect is prone to confess. At other times, however, normal adults, not overly naive or impaired, confess to crimes they did not commit as a way of coping with the stress of police interrogation. Decades of social-psychology research have shown that human beings are profoundly influenced by figures of authority and other aspects of their social surroundings—and can be induced to behave in ways that are detrimental to themselves and others. In short, both personal and situational risk factors may be sufficient, and neither is necessary, to increase the risk of a false confession.

CONFESSION EVIDENCE IN COURT

An important problem revealed by confession-based wrongful convictions is that juries routinely believe false confessions, as do the police and prosecutors who precede them. This section examines the way people perceive confessions and the question of what advisory role, if any, psychological experts can play.

In cases involving a disputed confession, a preliminary hearing is held for a judge to determine its voluntariness and admissibility. In American courts, confessions deemed voluntary are then either admitted without special instruction or presented to the jury with the instruction that they should make an independent judgment of voluntariness before using the evidence toward a verdict. Until recently, convictions were supposed to be routinely reversed when it was determined upon appeal that a judge had erroneously admitted a coerced confession into evidence. In *Arizona v. Fulminante* (1991), however, the U.S. Supreme Court ruled that the error of a wrongly admitted confession may, under certain conditions (e.g., when the confession is cumulative with other sufficient evidence), be "harmless," not "prejudicial"—and hence, not grounds for a new trial. Some legal scholars have criticized the *Fulminante* ruling on constitutional grounds (Ogletree, 1991), on the pragmatic argument that it will encourage police coercion (Kamisar, 1995), and on the belief that appeals court judges are cognitively ill equipped to project the strength of the state's case without the inadmissible confession that is already known to them (Mueller & Kirkpatrick, 1995). Regardless of the soundness of *Fulminante*, one point is clear: Juries are expected, implicitly or explicitly, in light of the totality of the circumstances, to consider the voluntariness of confessions and discount those they see as coerced.

Confessions and the Jury

Most wrongful convictions in which false confessions are in evidence are the product of two sources of error. The first is that certain police interrogation techniques lead innocent people to confess; the second is that trial juries, like other parties in the criminal justice system who precede them, are influenced by these confessions. Archival analyses of actual cases containing confessions later proved false tell a horrific tale. When the false confessors pled not guilty and proceeded to trial, the jury conviction rates ranged from 73% (Leo & Ofshe, 1998) to 81% (Drizin & Leo, 2004). These figures led Drizin and Leo (2004) to describe confession evidence as "inherently prejudicial and highly damaging to a defendant, even if it is the product of coercive interrogation, even if it is supported by no other evidence, and even if it is ultimately proven false beyond any reasonable doubt" (p. 959).

Are juries uncritically accepting of confessions despite the circumstances under which they were given? Common sense leads people to expect self-serving behavior in others—and hence, to trust confessions. Across a range of settings, research shows that jurors may not discount (i.e., attach zero weight to) confessions elicited by high-pressure methods of interrogation. Over the years, studies have shown that people frequently fall prey to what Ross (1977) called the *fundamental attribution error*—that is, they tend to make dispositional attributions for a person's actions (i.e., to see behavior as arising from the person's nature), while underestimating the role of situational factors (Jones, 1990). Gilbert and Malone (1995) offered several possible explanations for this bias, the most compelling of which is that people tend to draw quick and relatively automatic dispositional inferences, taking behavior at face value,

but then because of a lack of motivation or cognitive capacity fail to adjust or correct for situational influences.

Controlled research corroborates the apparent impact of confession evidence. Mock-jury studies have shown that confessions have more impact than eyewitness and character testimony, other powerful forms of evidence (Kassin & Neumann, 1997). This result is not surprising. The problem is that people do not fully discount confession evidence even when it is logically and legally appropriate to do so. In an early series of studies, for example, Kassin and Wrightsman (1980) examined the persuasive impact of confessions elicited by explicit promises and threats. After reading trial transcripts, their subjects rendered verdicts of guilt or innocence. If the defendant had confessed in response to a threat of harm or punishment, they fully rejected the confession in their verdicts. When the defendant confessed after a promise of leniency, however, subjects did not fully reject the information. In this condition, they conceded that the confession was involuntary by law but voted "guilty" anyway. Subsequent research showed that this bias persists even when subjects are specifically admonished to discount an involuntary confession (Kassin & Wrightsman, 1981) and even when they deliberate to a verdict in six-person groups (see Kassin & Wrightsman, 1985).

More recent studies as well have shown that juries may be corrupted by confessions whether they judge them to be voluntary or coerced. Kassin and Sukel (1997) presented subjects with one of three versions of a murder trial. In a low-pressure version, the defendant was said to have confessed to police immediately upon questioning. In a high-pressure version, subjects read that the suspect was in pain and interrogated aggressively by a detective who waved his gun in a menacing manner. In a control version, there was no confession in evidence. Confronted with the high-pressure confession, subjects appeared to respond in the legally prescribed manner, at least as assessed by two measures: They judged the statement to be involuntary and said it did not influence their decisions. Yet when it came to the all-important measure of verdicts, this confession significantly boosted the conviction rate (see Table 7). This pattern appeared even in a condition (not shown) in which subjects were specifically admonished by the judge to disregard confessions they found to be coerced.

TABLE 7

Percentage of Mock Jurors in Each Condition Who Judged the Confession Voluntary, Said That It Influenced Their Verdicts, and Voted for Conviction (Kassin & Sukel, 1997)

	Confession condition		
Juror response	Low pressure	High pressure	No confession
Voluntariness	88	44	—
Self-influence	68	56	—
Guilty votes	63	50	19

The Myth That "I'd Know a False Confession if I Saw One"

The problem of the impact of false confessions is not limited to the jury. Archival analyses reveal that confessions tend to overwhelm other information, such as alibis and other evidence of innocence, resulting in a chain of adverse legal consequences—from arrest through guilty pleas, prosecution, conviction, and incarceration (Drizin & Leo, 2004; Leo & Ofshe, 1998). Sometimes, district attorneys stubbornly refuse to admit the innocence of a suspect who confessed even after DNA tests unequivocally exonerate him or her. In one case, Bruce Godschalk was exonerated of two rape convictions after 15 years in prison when laboratories for both the state and the defendant tested the semen and found that he was not the rapist. Yet the district attorney whose office had convicted Godschalk argued that the DNA tests were flawed and refused at first to release him. When asked what basis he had for this decision, this district attorney asserted, "I have no scientific basis. I know because I trust my detective and his tape-recorded confession. Therefore the results must be flawed until someone proves to me otherwise" (Rimer, 2002, p. A14).

To safeguard against the adverse consequences that occur when police detectives, attorneys, and judges believe false confessions, it is vitally important that confessions be accurately assessed prior to the onset of court proceedings. Earlier, we discussed research showing that human beings cannot readily distinguish true from false denials. But can people in general, and law-enforcement professionals in particular, distinguish true from false confessions?

There are several reasons to expect that people might not be very good at detecting a false confession. First, research on the fundamental attribution error indicates that people tend to make dispositional attributions for a person's actions, taking behavior at face value, while overlooking the role of situational factors, so that they are biased to perceive confessions as being true. Second, common sense compels the more specific belief that people do not engage in self-destructive behaviors—like confessing to a crime they did not commit. Third, people are generally not proficient at deception detection—they are unable, for example, to distinguish true and false denials. Fourth, police-induced confessions are uniquely corrupted by the guilt-presumptive process of interrogation, which can make suspects appear guilty through various cognitive and behavioral confirmation biases.

On the question of whether people can recognize false confessions, recent research has yielded sobering results. In one study, Lassiter, Clark, Daniels, and Soinski (2004) modified Kassin and Kiechel's (1996) computer-crash paradigm to elicit both true and false oral confessions in the laboratory, confessions that were videotaped for other people to judge. Overall, student observers were not better than chance at

differentiating the confessions of guilty and innocent participants.

Moving from laypeople and laboratory confessions to police and confessions to actual crimes, Kassin, Meissner, and Norwick (2005) conducted a study in which they recruited male prison inmates to take part in a pair of videotaped interviews. For one interview, each inmate was instructed to give a full confession to the crime for which he was incarcerated, a narrative that was followed by his answers to a standardized list of questions. In a second interview, each inmate received a skeletal, one-sentence description of a crime committed by another inmate and was asked to concoct a false confession and reply to the same questions. The study used a yoked design in which the inmates were paired such that each inmate's true confession served as the basis of his paired inmate's false confession. Using five of the true confessions and their false counterparts, the researchers created a videotape that depicted 10 different inmates confessing to aggravated assault, armed robbery, burglary, breaking and entering, or automobile theft. In light of research showing that people are better lie detectors when they use auditory cues rather than visual cues, which are often misleading (Anderson, DePaulo, Ansfield, Tickle, & Green, 1999; DePaulo, Lassiter, & Stone, 1982), audiotapes of the same confessions were also created. In both media, the statements were judged by college students and police investigators.

The results paralleled those found for judgments of denials (see Table 8). Neither group exhibited high levels of accuracy, though the police were significantly more confident than the students in their performance. Accuracy rates were higher when subjects listened to audiotaped confessions than when they watched the videotapes. Students, but not police, exceeded chance-level performance in this condition—though the police were more confident. A signal detection analysis further revealed that police did not differ from students in their hit rate, but they committed significantly more false-positive errors. This response bias was most evident among those with extensive law-enforcement experience and those specially trained in interviewing and interrogation. Note that this response bias did not predispose police to see deception per se, but rather to infer guilt—an inference that rested upon a tendency to believe false confessions.

There are two possible explanations for why police did not better distinguish true and false confessions and why they were less accurate than naive college students. The first is that law-enforcement work may introduce a systematic bias that reduces overall judgment accuracy (Meissner & Kassin, 2004). This hypothesis is consistent with the finding that police as a group are generally suspicious and primed to see deception in other people (Masip et al., in press). It is also not surprising in light of the behavioral deception cues that many police are trained to use (Vrij, 2000). For example, Inbau et al. (2001) advocate the use of such visual cues as gaze aversion, nonfrontal posture, slouching, and grooming gestures that are not, as an empirical matter, diagnostic of truth or deception (DePaulo et al., 2003). Another possibility is that investigators' judgment accuracy was compromised by an experimental paradigm in which half the stimulus confessions were false. To the extent that law-enforcement work reasonably leads police to presume that most confessions are true, the response bias they import from the police station to the laboratory may mislead them.

To test the hypothesis that the investigators' judgment accuracy was depressed because of these expectations, Kassin et al. (2005) conducted a second study in which they neutralized the response bias by instructing subjects prior to the task that half the statements were true and half were false. This manipulation did reduce the overall number of "true" judgments, and it did reduce the number of false-positive errors. Overall, however, the police maintained a pattern of low accuracy and high confidence relative to the students (see Table 8).

Psychologists as Expert Witnesses

In the absence of an adequate safety net in law or in practice, clinical and research psychologists have often intervened as consultants in cases involving disputed confessions, at times testifying as experts in suppression hearings and at trials. Psychologists—through their research and expert testimony—have had a substantial impact in recent years on law, police practice, trial verdicts, and appellate decisions in Great Britain (Gudjonsson, 2003a). In the United States, however—where judges serve as active gatekeepers of scientific evidence by ascertaining whether an expert proffers information that is

TABLE 8

Truth-Lie Detection of Students and Police Investigators in the Prisoner-Confession Study (Kassin, Meissner, & Norwick, 2005)

	Students (n = 82)			Investigators (n = 77)		
Performance	Videotape	Audiotape	50-50	Videotape	Audiotape	50-50
Accuracy	53.4%	64.1%	53.8%	42.1%	54.5%	48.5%
Confidence	6.18	6.25	5.74	7.65	7.06	7.03

Note. Subjects in the 50-50 condition were shown the videotapes and instructed that half the confessions were true and half were false.

scientific (e.g., testable, peer reviewed, reliable, valid, and generally accepted) and useful to the trier of fact (*Daubert v. Merrell Dow Pharmaceuticals*, 1993; *Kumho Tire Co., Ltd. v. Carmichael et al.*, 1999)—psychology's impact is more difficult to gauge.

To date, psychologists have testified in hundreds of criminal and civil trials that generated no written opinions. Yet in other cases they have been excluded on various grounds. For example, one appeals court stated that the phenomena associated with false confessions are already known to juries as a matter of common sense (*State v. Free*, 2002). This rationale for the exclusion of expert testimony is wholly without merit and overlooks the fact that all confession-based wrongful convictions represent tales not only of suspects who give false confessions, but also of lawyers, judges, and juries who erroneously trusted those confessions. This commonsense argument also contradicts a broad and varied range of research findings. As noted earlier, a voluminous body of research indicates that people tend to accept the dispositional implications of another person's behavior without sufficiently accounting for the impact of situational factors (Gilbert & Malone, 1995; Jones, 1990). The fact that this bias has been dubbed the fundamental attribution error is an indication of how pervasive and potentially misleading it is (Ross, 1977). In the realm of social influence, Milgram (1974) observed a profound form of this bias in finding that laypeople vastly underpredicted the percentage of subjects who would exhibit total obedience in his experiment. In mock-jury studies, Kassin and Sukel (1997) found that the presence of a confession significantly increased the conviction rate—even when it was seen as coerced, and even when jurors said it had no influence. In archival studies of actual cases containing confessions later proved false, the jury conviction rates at trial ranged from 73% (Leo & Ofshe, 1998) to 81% (Drizin & Leo, 2004).

Although case law continues to evolve in state, federal, and military courts, it appears that expert testimony is often, though not always, permitted for the purpose of informing a jury about police interrogations, false confessions, personal and situational risk factors, and other relevant general principles—but not for the purpose of rendering an opinion about the veracity of a particular confession, a judgment that juries are supposed to make (*United States v. Hall*, 1997; for a review, see Fulero, 2004). Several years ago, Kassin (1997b) suggested that "the current empirical foundation may be too meager to support recommendations for reform or qualify as a subject of scientific knowledge" (p. 231). In this new era of DNA exonerations, however, it is now clear that such testimony is amply supported not only by anecdotes and case studies of wrongful convictions, but also by a long history of basic psychology and an extensive forensic science literature, as summarized not only in this monograph but also in several recently published books (e.g., Gudjonsson, 2003b; Lassiter, 2004; Memon et al., 2003).

FUTURE PROSPECTS

The Central Park jogger case and others like it demonstrate that confessions present the following series of problems: Police often see innocent people as deceptive, targeting them for interrogation; modern police interrogations involve the use of high-impact social influence techniques; sometimes people under the influence of certain techniques can be induced to confess to crimes they did not commit; people cannot readily distinguish between true and false confessions and do not fully discount confession evidence even when it is logically and legally appropriate to do so. When it comes to judges, juries, and others who must assess a defendant's statements, part of the problem is that police-induced false confessions often contain vivid and accurate sensory details about the crime scene and victim acquired through secondhand sources; they often contain self-reports of revenge, jealousy, desperation, peer pressure, and other prototypical motives; and they even at times include apologies and expressions of remorse (Kharey Wise, a defendant in the Central Park jogger case, promised in his false confession that he would not rape again). To naive observers, the statements appear to be voluntary, accurate, and the product of personal experience. It is all too easy, however, to mistake illusion for reality and not realize that a police-induced confession is like a Hollywood drama: scripted by the interrogator's theory of the case, shaped through questioning and rehearsal, directed by the questioner, and enacted by the suspect (see Kassin, 2004a).

Toward the Reform of Interrogation Practices

In light of the recent high-profile wrongful convictions involving false confessions, as well as advances in psychological research in this area, the time is ripe for a true collaborative effort among law-enforcement professionals, district attorneys, defense lawyers, judges, social scientists, and policymakers to evaluate the methods of interrogation that are commonly deployed. All of these parties would agree that the surgical objective of interrogation is to secure confessions from suspects who are guilty, but not from those, misjudged, who are innocent. Hence, the process should be structured in theory and in practice to produce outcomes that are diagnostic, as measured by the observed ratio of true to false confessions. Yet except for physical brutality or deprivation, explicit threats of harm or punishment, explicit promises of leniency or immunity, and flagrant violations of *Miranda*, no objective criteria or limits are currently placed on this process. Instead, American courts historically have taken a "totality of the circumstances" approach to judging voluntariness and admissibility, as articulated in *Culombe v. Connecticut* (1961), in which Justice Frankfurter asserted that "there is no simple litmus-paper test" (p. 601). With all that is now known about the existence and psychology of false confessions, perhaps the time has come to revisit this previously eschewed concept of a litmus test.

Although more research is needed, the existing literature does suggest that certain interrogation practices diminish diagnosticity by posing a risk to the innocent. One such factor concerns time in custody and interrogation. The human needs for belonging, affiliation, and social support, especially in times of stress, are a fundamental human motive (Baumeister & Leary, 1996). Prolonged isolation from significant others thus constitutes a form of deprivation that can heighten a suspect's distress and incentive to remove himself or herself from the situation. Excessive time in custody is also likely to be accompanied by fatigue and feelings of helplessness, as well as the deprivation of sleep, food, and other biological needs. Yet although most interrogations last for less than 2 hours (Leo, 1996b), and although Inbau et al. (2001) suggested that 3 or 4 hours is generally sufficient, research shows that in proven false-confession cases in which records were available, the interrogations lasted for an average of 16.3 hours (Drizin & Leo, 2004). In the Central Park jogger case, the five boys had been in custody and under some constancy of interrogation for 14 to 30 hours by the time they confessed (*New York v. Wise et al.*, 2002). Following the Police and Criminal Evidence Act of 1984 (PACE) in Great Britain (Home Office, 1985), policy discussions should begin with a proposal for the imposition of time limits, or at least flexible guidelines, when it comes to detention and interrogation, as well as periodic breaks from questioning for rest and meals.

A second problem concerns the tactic of presenting false evidence, which often takes the form of outright lying to suspects—for example, about an eyewitness identification that was not actually made; fingerprints, hair, or blood that was not found; or polygraph tests they did not really fail. The decision to confess is influenced by a suspect's expectations about the relative consequences of confession and denial, and research shows that people capitulate when they believe that the authorities have strong evidence against them (Moston et al., 1992). Because police are more likely in general to have direct and circumstantial proof of guilt against perpetrators and credible alibis on behalf of those who are falsely accused, the practice of confronting suspects with real evidence, or even their own inconsistent statements, should increase the diagnosticity of the confessions that are ultimately elicited. To the extent that police are permitted to misrepresent the evidence, however, guilty and innocent suspects become equally trapped and similarly treated, reducing diagnosticity.

In *Frazier v. Cupp* (1969), the U.S. Supreme Court considered a case in which police falsely told the defendant that his cousin, who was to provide his alibi, had confessed. The court tacitly sanctioned use of this type of deception—seeing it as relevant to voluntariness but not disqualifying. Since then, the court has repeatedly declined the opportunity to reconsider the issue (Magid, 2001). Since that time, however, controlled studies have shown that the presentation of false evidence substantially increases false confessions (Horselenberg et al., 2003; Kassin & Kiechel, 1996; Redlich & Goodman, 2003). In light of this research, as well as the numerous proven false-confession cases in which this tactic was used, the court should revisit the wisdom of its prior ruling and declare: "Thou shalt not lie."

A third risk factor concerns the use of minimization. Over the years, the courts have generally rejected as involuntary confessions that are extracted by direct threats or promises, acknowledging that they may cause innocent people to confess. But the courts have not similarly excluded confessions drawn with threats and promises that were merely implied—as when police suggest to a suspect that the conduct in question was provoked, an accident, or otherwise morally justified (White, 2003). Research shows that minimization tactics lead people to infer that they will be treated with leniency if they confess, as if explicit promises had been made (Kassin & McNall, 1991), and that these tactics significantly reduce diagnosticity by eliciting more false confessions (Russano et al., in press). Although more work is needed to isolate the active ingredients of minimization and compare the effects of the different possible scripts (e.g., that the suspect was provoked, pressured, or under the influence of drugs; that the crime was spontaneous or accidental), it appears that this tactic as practiced circumvents the exclusion in principle of promise-elicited confessions by enabling police to communicate leniency by covert implication.

Videotaping Interrogations: A Policy Whose Time Has Come

To accurately assess a confession, police, judges, lawyers, and juries should have access to a videotape recording of all interviews and interrogations in their entirety. In Great Britain, PACE mandated that all sessions be fully taped (Home Office, 1985). In the United States, only four states—Minnesota, Alaska, Illinois, and Maine—presently have mandatory videotaping requirements. In many other jurisdictions, police record their interviews and interrogations on a voluntary basis (for an excellent historical overview of this practice, see Drizin & Reich, 2004). In a recent development that raises interesting empirical questions, the Supreme Judicial Court of Massachusetts stopped short of a mandatory videotaping requirement but ruled that any confession resulting from an unrecorded interrogation will entitle the defendant upon request to a jury instruction that urges caution in the use of that confession (*Commonwealth of Massachusetts v. DiGiambattista*, 2004).

There are numerous advantages to a videotaping policy, which should create a more effective safety net. First, the presence of a camera will deter police from conducting overly lengthy interrogations and using the most egregious tactics. Second, videotaping will deter frivolous defense claims of coercion. Third, a videotaped record provides an objective and accurate record of all that transpired, thus avoiding the

disputes that often arise from some combination of forgetting and self-serving distortions in memory. In a study that illustrates this need for an accurate record, Morgan et al. (2004) randomly assigned trainees in a military survival school to undergo a realistic high-stress or low-stress mock interrogation and found, 24 hours later, that those in the high-stress condition had more difficulty identifying their interrogators in a lineup. In real criminal cases, questions about whether rights were administered and waived, whether detectives shouted or physically intimidated the suspect, whether promises or threats were made or implied, and whether the details in a confession emanated from the police or suspect are also among the issues that need to be recalled. Videotaping should thus increase the fact-finding accuracy of judges and juries. For all these reasons, a mandatory videotaping requirement has many advocates (Cassell, 1996b; Drizin & Colgan, 2001; Drizin & Leo, 2004; Gudjonsson, 2003b; Kassin, 2004b; Shuy, 1998; Slobogin, 2003).

In the United States, a National Institute of Justice study revealed that many police and sheriff's departments on their own have videotaped interrogations—and the vast majority found the practice useful (Geller, 1993). More recently, T.P. Sullivan (2004) interviewed officials from 238 police and sheriff's departments in 38 states who voluntarily recorded custodial interrogations and found that they enthusiastically favored the practice. Among the reasons cited were that recording permits detectives to focus on the suspect rather than take copious notes, increases accountability, provides an instant replay of the suspect's statement that reveals information initially overlooked, and reduces the amount of time detectives spend in court defending their interrogation conduct. Countering the most common criticisms, the respondents in this study said that videotaping interrogations is not costly and does not inhibit suspects from talking to police and confessing.

As a matter of policy, it is important not only that entire sessions be recorded, but also that the camera adopt a neutral "equal focus" perspective that shows both the accused and his or her interrogators. In an important program of research, Lassiter and his colleagues taped mock interrogations from three different camera angles so that the suspect, the interrogator, or both were visible to mock jurors. Those who saw only the suspect judged the situation as less coercive than those focused on the interrogator. By directing visual attention toward the accused, the camera can lead jurors to underestimate the amount of pressure actually exerted by the "hidden" detective (Lassiter & Irvine, 1986; Lassiter, Slaw, Briggs, & Scanlan, 1992). Additional studies have confirmed that people are more attuned to the situational factors that elicit confessions when the interrogator is visible on camera than when the focus is solely on the suspect (Lassiter & Geers, 2004; Lassiter, Geers, Munhall, Handley, & Beers, 2001). Under these neutral or balanced circumstances, juries make more informed attributions of voluntariness and guilt when they see not only the final confession but also the conditions under which it was elicited (Lassiter, Geers, Handley, Weiland, & Munhall, 2002).

REFERENCES

Akehurst, L., & Vrij, A. (1999). Creating suspects in police interviews. *Journal of Applied Social Psychology, 29*, 192–210.

Anderson, D.E., DePaulo, B.M., Ansfield, M.E., Tickle, J.J., & Green, E. (1999). Beliefs about cues to deception: Mindless stereotypes or untapped wisdom? *Journal of Nonverbal Behavior, 23*, 67–89.

Arizona v. Fulminante, 111 S. Ct. 1246 (1991).

Aronson, E. (2003). *The social animal* (9th ed.). New York: W.H. Freeman.

Asch, S.E. (1956). Studies of independence and conformity: A minority of one against a unanimous majority. *Psychological Monographs, 70*, 416.

Aubry, A.S., & Caputo, R.R. (1980). *Criminal interrogation* (3rd ed.). Springfield, IL: Charles C. Thomas.

Baldwin, J. (1993). Police interviewing techniques: Establishing truth or proof? *The British Journal of Criminology, 33*, 325–352.

Baldwin, J., & McConville, M. (1980). *Confessions in crown court trials* (Royal Commission on Criminal Procedure Research Study No. 5). London: Her Majesty's Stationery Office.

Barthel, J. (1976). *A death in Canaan*. New York: Dutton.

Baumeister, R.F., & Leary, M.R. (1996). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497–529.

Bedau, H.A., & Radelet, M.L. (1987). Miscarriages of justice in potentially capital cases. *Stanford Law Review, 40*, 21–179.

Bem, D.J. (1966). Inducing belief in false confessions. *Journal of Personality and Social Psychology, 3*, 707–710.

Berggren, E. (1975). *The psychology of confessions*. Leiden, the Netherlands: E.J. Brill.

Birgisson, G.H. (1996). Differences of personality, defensiveness, and compliance between admitting and denying male sex offenders. *Journal of Interpersonal Violence, 11*, 118–125.

Blagrove, M. (1996). Effects of length of sleep deprivation on interrogative suggestibility. *Journal of Experimental Psychology: Applied, 2*, 48–59.

Borchard, E.M. (1932). *Convicting the innocent: Errors of criminal justice*. New Haven, CT: Yale University Press.

Bowden, M. (2003, October). The dark art of interrogation. *The Atlantic Monthly*, pp. 51–76.

Breuer, J., & Freud, S. (1955). Studies on hysteria. In J. Strachey (Ed. & Trans.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol 2). London: Hogarth Press. (Original work published 1895).

Brooks, P. (2000). *Troubling confessions*. Chicago: University of Chicago Press.

Brown v. Mississippi, 297 U.S. 278 (1936).

Bruck, M., & Ceci, S.J. (1999). The suggestibility of children's memory. *Annual Review of Psychology, 50*, 419–439.

Buckley, J.P. (2004, February). *The Reid technique: Challenges and opportunities*. Paper presented at the International Symposium on Police Interviewing, Nicolet, Quebec, Canada.

Bull, R. (1989). Can training enhance the detection of deception? In J.C. Yuille (Ed.), *Credibility assessment* (pp. 83–99). London: Kluwer Academic.

Bull, R., & Milne, B. (2004). Attempts to improve the police interviewing of suspects. In G.D. Lassiter (Ed.), *Interrogations, confessions, and entrapment* (pp. 181–196). New York: Kluwer Academic.

Buller, D.B., Strzyzewski, K.D., & Hunsaker, F.G. (1991). Interpersonal deception: II. The inferiority of conversational participants as deception detectors. *Communication Monographs, 58*, 25–40.

Cassell, P.G. (1996a). All benefits, no costs: The grand illusion of Miranda's defenders. *Northwestern University Law Review, 90*, 1084–1124.

Cassell, P.G. (1996b). *Miranda's* social costs: An empirical reassessment. *Northwestern University Law Review, 90*, 387–499.

Cassell, P.G. (1999). The guilty and the "innocent": An examination of alleged cases of wrongful conviction from false confessions. *Harvard Journal of Law and Public Policy, 22*, 523.

Cassell, P.G., & Hayman, B.S. (1996). Police interrogation in the 1990s: An empirical study of the effects of Miranda. *UCLA Law Review, 43*, 839–931.

Ceci, S.J., & Bruck, M. (1995). *Jeopardy in the courtroom: A scientific analysis of children's testimony.* Washington, DC: American Psychological Association.

Chartrand, T.L., & Bargh, J.A. (1999). The chameleon effect: The social perception-behavior link and social interaction. *Journal of Personality and Social Psychology, 76*, 893–910.

Cialdini, R.B. (2001). *Influence: Science and practice* (4th ed.). Needham Heights, MA: Allyn & Bacon.

Clare, I.C.H., & Gudjonsson, G.H. (1995). The vulnerability of suspects with intellectual disabilities during police interviews: A review and experimental study of decision-making. *Mental Handicap Research, 8*, 110–128.

Cloud, M., Shepherd, G.B., Barkoff, A.N., & Shur, J.V. (2002). Words without meaning: The Constitution, confessions, and mentally retarded suspects. *University of Chicago Law Review, 69*, 495–624.

Clymer, S.D. (2002). Are police free to disregard Miranda? *Yale Law Journal, 112*, 447–552.

Cole, S.W., Kemeny, M.E., Taylor, S.E., Visscher, B.R., & Fahey, J.L. (1996). Accelerated course of human immunodeficiency virus infection in gay men who conceal their homosexual identity. *Psychosomatic Medicine, 58*, 219–231.

Colorado v. Connelly, 479 U.S. 157 (1986).

Commonwealth of Massachusetts v. DiGiambattista (2004), Slip opinion SJC -09155, August 16, 2004.

Connery, D.S. (1977). *Guilty until proven innocent.* New York: G.P. Putnam's.

Connery, D.S. (Ed.). (1996). *Convicting the innocent.* Cambridge, MA: Brookline.

Conti, R. (1999). The psychology of false confessions. *Journal of Credibility Assessment and Witness Psychology, 2*, 14–36.

Culombe v. Connecticut, 367 U.S. 568 (1961).

Darley, J.M., & Fazio, R.H. (1980). Expectancy confirmation processes arising in the social interaction sequence. *American Psychologist, 35*, 867–881.

Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579 (1993).

Davis, D., & Follette, W.C. (2002). Rethinking probative value of evidence: Base rates, intuitive profiling and the postdiction of behavior. *Law and Human Behavior, 26*, 133–158.

Davis, D., & O'Donohue, W. (2003). The road to perdition: "Extreme influence" tactics in the interrogation room. In W. O'Donohue, P. Laws, & C. Hollin (Eds.), *Handbook of forensic psychology* (pp. 897–996). New York: Basic Books.

DePaulo, B.M. (1994). Spotting lies: Can humans learn to do better? *Current Directions in Psychological Science, 3*, 83–86.

DePaulo, B.M., Lassiter, G.D., & Stone, J.I. (1982). Attentional determinants of success at detecting deception and truth. *Personality and Social Psychology Bulletin, 8*, 273–279.

DePaulo, B.M., Lindsay, J.J., Malone, B.E., Muhlenbruck, L., Charlton, K., & Cooper, H. (2003). Cues to deception. *Psychological Bulletin, 129*, 74–112.

DePaulo, B.M., & Pfeifer, R.L. (1986). On-the-job experience and skill at detecting deception. *Journal of Applied Social Psychology, 16*, 249–267.

de Rivera, J. (1997). The construction of false memory syndrome: The experience of retractors. *Psychological Inquiry, 8*, 271–292.

Dickerson v. United States, 120 S. Ct. 2326 (2000).

Drizin, S.A., & Colgan, B.A. (2001). Let the cameras roll: Mandatory videotaping of interrogations is the solution to Illinois' problem of false confessions. *Loyola University Chicago Law Journal, 32*, 337–424.

Drizin, S.A., & Colgan, B.A. (2004). Tales from the juvenile confessions front. In G.D. Lassiter (Ed.), *Interrogations, confessions, and entrapment* (pp. 127–162). New York: Kluwer Academic.

Drizin, S.A., & Leo, R.A. (2004). The problem of false confessions in the post-DNA world. *North Carolina Law Review, 82*, 891–1007.

Drizin, S.A., & Reich, M.J. (2004). Heeding the lessons of history: The need for mandatory recording of police interrogations to accurately assess the reliability and voluntariness of confessions. *Drake Law Review, 52*, 619–646.

Ekman, P., & O'Sullivan, M. (1991). Who can catch a liar? *American Psychologist, 46*, 913–920.

Ekman, P., O'Sullivan, M., & Frank, M.G. (1999). A few can catch a liar. *Psychological Science, 10*, 263–266.

Elaad, R. (2003). Effects of feedback on the overestimated capacity to detect lies and the underestimated ability to tell lies. *Applied Cognitive Psychology, 17*, 349–363.

Everington, C., & Fulero, S. (1999). Competence to confess: Measuring understanding and suggestibility of defendants with mental retardation. *Mental Retardation, 37*, 212–220.

Faigman, D.L., Kaye, D.H., Saks, M.J., & Sanders, J. (2002). *Science in the law: Forensic science issues.* St. Paul, MN: West.

Finlay, W., & Lyons, E. (2002). Acquiescence in interviews with people who have mental retardation. *Mental Retardation, 40*, 14–29.

Fisher, J. (1996). *Fall guys: False confessions and the politics of murder.* Carbondale: Southern Illinois University Press.

Forrest, K.D., Wadkins, T.A., & Miller, R.L. (2002). The role of preexisting stress on false confessions: An empirical study. *Journal of Credibility Assessment and Witness Psychology, 3*, 23–45.

Frazier v. Cupp, 394 U.S. 731 (1969).

Fulero, S.M. (2004). Expert psychological testimony on the psychology of interrogations and confessions. In G.D. Lassiter (Ed.), *Interrogations, confessions, and entrapment* (pp. 247–263). New York: Kluwer Academic.

Fulero, S.M., & Everington, C. (1995). Assessing competency to waive *Miranda* rights in defendants with mental retardation. *Law and Human Behavior, 19*, 533–543.

Fulero, S.M., & Everington, C. (2004). Mental retardation, competency to waive *Miranda* rights, and false confessions. In G.D. Lassiter (Ed.), *Interrogations, confessions, and entrapment* (pp. 163–179). New York: Kluwer Academic.

Gabbert, F., Memon, A., & Allan, K. (2003). Memory conformity: Can eyewitnesses influence each other's memories for an event? *Applied Cognitive Psychology, 17*, 533–544.

Garrido, E., & Masip, J. (1999). How good are police officers at spotting lies? *Forensic Update, 58*, 14–21.

Garrido, E., Masip, J., & Herrero, C. (2004). Police officers' credibility judgments: Accuracy and estimated ability. *International Journal of Psychology, 39*, 254–275.

Geller, W.A. (1993). *Videotaping interrogations and confessions* (National Institute of Justice Research in Brief). Washington, DC: U.S. Department of Justice.

Gilbert, D.T., & Malone, P.S. (1995). The correspondence bias. *Psychological Bulletin, 117*, 21–38.

Gilovich, T., Savitsky, K., & Medvec, V.H. (1998). The illusion of transparency: Biased assessments of others' ability to read one's emotional states. *Journal of Personality and Social Psychology, 75*, 332–346.

Goldstein, N.E.S., Condie, L.O., Kalbeitzer, R., Osman, D., & Geier, J.L. (2003). Juvenile offenders' Miranda rights comprehension and self-reported likelihood of offering false confessions. *Assessment, 10*, 359–369.

Gordon, N., & Fleisher, W. (2002). *Effective interviewing and interrogation techniques*. San Diego, CA: Academic Press.

Granhag, P.A., & Stromwall, L.A. (Eds.). (2004). *The detection of deception in forensic contexts*. Cambridge, England: Cambridge University Press.

Green, D.M., & Swets, J.A. (1966). *Signal detection theory and psychophysics*. New York: Wiley.

Grisso, T. (1981). *Juveniles' waiver of rights: Legal and psychological competence*. New York: Plenum.

Grisso, T. (1998). *Forensic evaluation of juveniles*. Sarasota, FL: Professional Resource Press.

Grisso, T. (2003). *Evaluating competencies: Forensic assessments and instruments* (2nd ed.). New York: Kluwer Academic.

Grisso, T. (2004). Reply to "A critical review of published competency-to-confess measures." *Law and Human Behavior, 28*, 719–724.

Grisso, T., Steinberg, L., Woolard, J., Cauffman, E., Scott, E., Graham, S., Lexcen, F., Reppuci, N.D., & Schwartz, R. (2003). Juveniles' competence to stand trial: A comparison of adolescents' and adults' capacities as trial defendants. *Law and Human Behavior, 27*, 333–363.

Gross, S.R., Jacoby, K., Matheson, D.J., Montgomery, N., & Patel, S. (2004). *Exonerations in the United States 1989 through 2003*. Unpublished manuscript, University of Michigan Law School.

Gudjonsson, G.H. (1984). A new scale of interrogative suggestibility. *Personality and Individual Differences, 5*, 303–314.

Gudjonsson, G.H. (1989). Compliance in an interrogation situation: A new scale. *Personality and Individual Differences, 10*, 535–540.

Gudjonsson, G.H. (1991). Suggestibility and compliance among alleged false confessors and resisters in criminal trials. *Medicine, Science, and the Law, 31*, 147–151.

Gudjonsson, G.H. (1992). *The psychology of interrogations, confessions, and testimony*. London: Wiley.

Gudjonsson, G.H. (1997). *The Gudjonsson Suggestibility Scales manual*. Hove, England: Psychology Press.

Gudjonsson, G.H. (2002). Unreliable confessions and miscarriages of justice in Britain. *International Journal of Police Science and Management, 4*, 332–343.

Gudjonsson, G.H. (2003a). Psychology brings justice. The science of forensic psychology. *Criminal Behaviour and Mental Health, 13*, 159–167.

Gudjonsson, G.H. (2003b). *The psychology of interrogations and confessions: A handbook*. Chichester, England: John Wiley & Sons.

Gudjonsson, G.H., & Bownes, I. (1992). The reasons why suspects confess during custodial interrogation: Data for Northern Ireland. *Medicine, Science, and the Law, 32*, 204–212.

Gudjonsson, G.H., Clare, I., Rutter, S., & Pearse, J. (1993). *Persons at risk during interviews in police custody: The identification of vulnerabilities* (Royal Commission on Criminal Justice Research Study No. 12). London: Her Majesty's Stationery Office.

Gudjonsson, G.H., Hannesdottir, K., Agustsson, T.þ., Sigurdsson, J.F., Gudmundsdottir, A., þordardottir, þ., Tyrfingsson, þ., & Petursson, H. (2004). The relationship of alcohol withdrawal symptoms to suggestibility and compliance. *Psychology, Crime and Law, 10*, 169–177.

Gudjonsson, G.H., & Henry, L.A. (2003). Child and adult witnesses with learning disabilities: The importance of suggestibility. *Legal and Criminological Psychology, 8*, 241–252.

Gudjonsson, G.H., & MacKeith, J.A.C. (1982). False confessions: Psychological effects of interrogation. In A. Trankell (Ed.), *Reconstructing the past: The role of psychologists in criminal trials* (pp. 253–269). Deventer, the Netherlands: Kluwer.

Gudjonsson, G.H., & MacKeith, J.A.C. (1990). A proven case of false confession: Psychological aspects of the coerced-compliant type. *Medicine, Science, and the Law, 30*, 329–335.

Gudjonsson, G.H., & Petursson, H. (1991). Custodial interrogation: Why do suspects confess and how does it relate to their crime, attitude and personality? *Personality and Individual Differences, 12*, 295–306.

Gudjonsson, G.H., & Sigurdsson, J.F. (1994). How frequently do false confessions occur? An empirical study among prison inmates. *Psychology, Crime and Law, 1*, 21–26.

Gudjonsson, G.H., & Sigurdsson, J.F. (1999). The Gudjonsson Confession Questionnaire-Revised (GCQ-R): Factor structure and its relationship with personality. *Personality and Individual Differences, 27*, 953–968.

Gudjonsson, G.H., & Sigurdsson, J.F. (2000). Differences and similarities between violent offenders and sex offenders. *Child Abuse and Neglect, 24*, 363–372.

Gudjonsson, G.H., Sigurdsson, J.F., Bragason, O.O., Einarsson, E., & Valdimarsdottir, E.B. (2004). Confessions and denials and the relationship with personality. *Legal and Criminological Psychology, 9*, 121–133.

Gudjonsson, G.H., Sigurdsson, J.F., & Einarsson, E. (2004). The role of personality in relation to confessions and denials. *Psychology, Crime and Law, 10*, 125–135.

Harris v. New York, 401 U.S. 222 (1971).

Harrison, Y., & Horne, J.A. (2000). The impact of sleep deprivation on decision making: A review. *Journal of Experimental Psychology: Applied, 6*, 236–249.

Hartwig, M., Granhag, P.A., Strömwall, L.A., & Vrij, A. (2004). Police officers' lie detection accuracy: Interrogating freely vs. observing video. *Police Quarterly, 7*, 429–456.

Helms, J.L. (2003). Analysis of Miranda reading levels across jurisdictions: Implications for evaluating waiver competency. *Journal of Forensic Psychology and Practice, 3*, 25–37.

Henkel, L.A., & Coffman, K.J. (2004). Memory distortions in coerced false confessions: A source monitoring framework analysis. *Applied Cognitive Psychology, 18*, 567–588.

Hilgendorf, E.L., & Irving, M. (1981). A decision-making model of confessions. In M. Lloyd-Bostock (Ed.), *Psychology in legal contexts: Applications and limitations* (pp. 67–84). London: MacMillan.

Hill, M.D. (2003). Identifying the source of critical details in confessions. *Forensic Linguistics, 10*, 23–61.

Holmberg, U., & Christianson, S.-A. (2002). Murderers' and sexual offenders' experiences of police interviews and their inclination to admit and deny crimes. *Behavioral Sciences and the Law, 20*, 31–45.

Holmes, W. (2003). *Criminal interrogation: A modern format for interrogating criminal suspects based on the intellectual approach.* Springfield, IL: Thomas.

Home Office. (1985). *Police and Criminal Evidence Act of 1984.* London: Her Majesty's Stationery Office.

Horselenberg, R., Merckelbach, H., & Josephs, S. (2003). Individual differences and false confessions: A conceptual replication of Kassin and Kiechel (1996). *Psychology, Crime and Law, 9*, 1–18.

Huff, C.R., Rattner, A., & Sagarin, E. (1986). Guilty until proven innocent: Wrongful conviction and public policy. *Crime and Delinquency, 32*, 518–544.

Inbau, F.E., Reid, J.E., Buckley, J.P., & Jayne, B.C. (2001). *Criminal interrogation and confessions* (4th ed.). Gaithersberg, MD: Aspen.

Innocence Project. (2001). [Home page]. Retrieved March 11, 2005, from http://www.innocenceproject.org/

Irving, B. (1980). *Police interrogation: A case study of current practice* (Royal Commission on Criminal Procedure Research Study No. 2). London: Her Majesty's Stationery Office.

Irving, B., & Hilgendorf, L. (1980). *Police interrogation: The psychological approach* (Royal Commission on Criminal Procedure Research Study No. 1). London: Her Majesty's Stationery Office.

Jayne, B.C. (1986). The psychological principles of criminal interrogation. In F. Inbau, J. Reid, & J. Buckley (Eds.), *Criminal interrogation and confessions* (3rd ed., pp. 327–347). Baltimore: Williams & Wilkins.

Johnson, M.B. (2003). The interrogation of Michael Crowe: A film review focused on education and training. *American Journal of Forensic Psychology, 21*, 71–79.

Jones, E.E. (1990). *Interpersonal perception.* New York: Freeman.

Kamisar, Y. (1995). On the "fruits" of Miranda violations, coerced confessions and compelled testimony. *Michigan Law Review, 93*, 929–1010.

Kamisar, Y., LaFave, W.R., Israel, J.H., & King, N.J. (2003). *Modern criminal procedure* (10th ed.). St. Paul, MN: West Publishing.

Karlsen, C.F. (1989). *The devil in the shape of a woman: Witchcraft in colonial New England.* New York: Vintage.

Kassin, S.M. (1997a). False memories against the self. *Psychological Inquiry, 8*, 300–302.

Kassin, S.M. (1997b). The psychology of confession evidence. *American Psychologist, 52*, 221–233.

Kassin, S.M. (1998). More on the psychology of false confessions. *American Psychologist, 53*, 320–321.

Kassin, S.M. (2002, November 1). False confessions and the jogger case. *New York Times*, p. A31.

Kassin, S.M. (2004a). True or false: "I'd know a false confession if I saw one." In P. Granhag & L. Strömwall (Eds.), *Deception detection in forensic contexts* (pp. 172–194). Cambridge, England: Cambridge University Press.

Kassin, S.M. (2004b, April 26). Videotape police interrogations. *The Boston Globe*, p. A13.

Kassin, S.M. (2005). On the psychology of confessions: Does *innocence* put *innocents* at risk? *American Psychologist, 60*, 215–228.

Kassin, S.M. (in press). Coerced-internalized false confessions. In M. Toglia, R. Lindsay, D. Ross, & J. Read (Eds.), *Handbook of eyewitness psychology: Vol. 1. Memory for events.* Mahwah, NJ: Erlbaum.

Kassin, S.M., & Fong, C.T. (1999). "I'm innocent!" Effects of training on judgments of truth and deception in the interrogation room. *Law and Human Behavior, 23*, 499–516.

Kassin, S.M., Goldstein, C.J., & Savitsky, K. (2003). Behavioral confirmation in the interrogation room: On the dangers of presuming guilt. *Law and Human Behavior, 27*, 187–203.

Kassin, S.M., & Kiechel, K.L. (1996). The social psychology of false confessions: Compliance, internalization, and confabulation. *Psychological Science, 7*, 125–128.

Kassin, S.M., & McNall, K. (1991). Police interrogations and confessions: Communicating promises and threats by pragmatic implication. *Law and Human Behavior, 15*, 233–251.

Kassin, S.M., Meissner, C.A., & Norwick, R.J. (2005). "I'd know a false confession if I saw one": A comparative study of college students and police investigators. *Law and Human Behavior, 29*, 211–227.

Kassin, S.M., & Neumann, K. (1997). On the power of confession evidence: An experimental test of the "fundamental difference" hypothesis. *Law and Human Behavior, 21*, 469–484.

Kassin, S.M., & Norwick, R.J. (2004). Why suspects waive their Miranda rights: The power of innocence. *Law and Human Behavior, 28*, 211–221.

Kassin, S.M., & Sukel, H. (1997). Coerced confessions and the jury: An experimental test of the "harmless error" rule. *Law and Human Behavior, 21*, 27–46.

Kassin, S.M., & Wrightsman, L.S. (1980). Prior confessions and mock juror verdicts. *Journal of Applied Social Psychology, 10*, 133–146.

Kassin, S.M., & Wrightsman, L.S. (1981). Coerced confessions, judicial instruction, and mock juror verdicts. *Journal of Applied Social Psychology, 11*, 489–506.

Kassin, S.M., & Wrightsman, L.S. (1985). Confession evidence. In S.M. Kassin & L.S. Wrightsman (Eds.), *The psychology of evidence and trial procedure* (pp. 67–94). Beverly Hills, CA: Sage.

Klaver, J., Gordon, R.V., & Lee, Z. (2003, July). *Differential effects of minimization and maximization interrogation techniques and the role of plausibility in an experimental false confession paradigm.* Paper presented at the International and Interdisciplinary Psychology & Law Conference, Edinburgh, Scotland.

Koehnken, G. (1987). Training police officers to detect deceptive eyewitness statements: Does it work? *Social Behavior, 2*, 1–17.

Kotlowitz, A. (1999, February 8). The unprotected. *The New Yorker*, pp. 42–53.

Kumho Tire Co., Ltd. v. Carmichael et al., 526 U.S.137 (1999).

La Barre, W. (1964). Confession as cathartic therapy in American Indian tribes. In A. Kiev (Ed.), *Magic, faith, and healing: Studies in primitive psychiatry today* (pp. 36–49). New York: Free Press.

Landers, P. (2000, October 6). A false confession jailed Mr. Yakushiji; then fate intervened. *The Wall Street Journal*, pp. A1, A8–A9.

Lassiter, G.D. (Ed.). (2004). *Interrogations, confessions, and entrapment.* New York: Kluwer Academic.

Lassiter, G.D., Clark, J.K., Daniels, L.E., & Soinski, M. (2004, March). *Can we recognize false confessions and does the presen-*

tation format make a difference? Paper presented at the annual meeting of the American Psychology-Law Society, Scottsdale, AZ.

Lassiter, G.D., & Geers, A.L. (2004). Evaluation of confession evidence: Effects of presentation format. In G.D. Lassiter (Ed.), *Interrogations, confessions, and entrapment* (pp. 197–214). New York: Kluwer Academic.

Lassiter, G.D., Geers, A.L., Handley, I.M., Weiland, P.E., & Munhall, P.J. (2002). Videotaped confessions and interrogations: A simple change in camera perspective alters verdicts in simulated trials. *Journal of Applied Psychology, 87*, 867–874.

Lassiter, G.D., Geers, A.L., Munhall, P.J., Handley, I.M., & Beers, M.J. (2001). Videotaped confessions: Is guilt in the eye of the camera? *Advances in Experimental Social Psychology, 33*, 189–254.

Lassiter, G.D., & Irvine, A.A. (1986). Videotaped confessions: The impact of camera point of view on judgments of coercion. *Journal of Applied Social Psychology, 16*, 268–276.

Lassiter, G.D., Slaw, R.D., Briggs, M.A., & Scanlan, C.R. (1992). The potential for bias in videotaped confessions. *Journal of Applied Social Psychology, 22*, 1838–1851.

Latane, B. (1981). The psychology of social impact. *American Psychologist, 36*, 343–356.

Leach, A.-M., Talwar, V., Lee, K., Bala, N., & Lindsay, R.C.L. (2004). "Intuitive" lie detection and children's deception by law enforcement officials and university students. *Law and Human Behavior, 28*, 661–685.

Leo, R.A. (1996a). The impact of *Miranda* revisited. *The Journal of Criminal Law and Criminology, 86*, 621–692.

Leo, R.A. (1996b). Inside the interrogation room. *The Journal of Criminal Law and Criminology, 86*, 266–303.

Leo, R.A. (1996c). *Miranda*'s revenge: Police interrogation as a confidence game. *Law and Society Review, 30*, 259–288.

Leo, R.A. (2004). The third degree. In G.D. Lassiter (Ed.), *Interrogations, confessions, and entrapment* (pp. 37–84). New York: Kluwer Academic.

Leo, R.A., & Ofshe, R.J. (1998). The consequences of false confessions: Deprivations of liberty and miscarriages of justice in the age of psychological interrogation. *Journal of Criminal Law and Criminology, 88*, 429–496.

Leo, R.A., & Ofshe, R.J. (2001). The truth about false confessions and advocacy scholarship. *The Criminal Law Bulletin, 37*, 293–370.

Leo, R.A., & White, W.S. (1999). Adapting to Miranda: Modern interrogators' strategies for dealing with the obstacles posed by Miranda. *Minnesota Law Review, 84*, 397–472.

Lerner, M.J. (1980). *The belief in a just world.* New York: Plenum.

Lifton, R.J. (1956). "Thought reform" of Western civilians in Chinese prisons. *American Journal of Psychiatry, 110*, 732–739.

Lindsay, D.S., Hagen, L., Read, J.D., Wade, K.A., & Garry, M. (2004). True photographs and false memories. *Psychological Science, 15*, 149–154.

Loftus, E.F. (1997). Creating false memories. *Scientific American, 277*, 70–75.

Loftus, E.F. (2003). Make-believe memories. *American Psychologist, 58*, 864–873.

Lykken, D.T. (1998). *A tremor in the blood: Uses and abuses of the lie detector.* Reading, MA: Perseus Books.

Magid, L. (2001). Deceptive police interrogation practices: How far is too far? *Michigan Law Review, 99*, 1168–1210.

Major, B., & Gramzow, R.H. (1999). Abortion as stigma: Cognitive and emotional implications of concealment. *Journal of Personality and Social Psychology, 77*, 735–745.

Mann, S., Vrij, A., & Bull, R. (2004). Detecting true lies: Police officers' ability to detect suspects' lies. *Journal of Applied Psychology, 89*, 137–149.

Markman, S.J., & Cassell, P.G. (1988). Protecting the innocent: A response to the Bedau-Radelet study. *Stanford Law Review, 41*, 121.

Masip, J., Alonso, H., Garrido, E., & Anton, C. (in press). Generalized Communicative Suspicion (GCS) among police officers: Accounting for the investigator bias effect. *Journal of Applied Social Psychology.*

Mazzoni, G., Loftus, E.F., & Seitz, A. (1999). Changing beliefs and memories through dream interpretation. *Applied Cognitive Psychology, 13*, 125–144.

Mazzoni, G., & Memon, A. (2003). Imagination can create false autobiographical memories. *Psychological Science, 14*, 186–188.

McCann, J.T. (1998). A conceptual framework for identifying various types of confessions. *Behavioral Sciences and the Law, 16*, 441–453.

McCormick, C.T. (1972). *Handbook of the law of evidence* (2nd ed.). St. Paul, MN: West.

McNatt, D.B. (2000). Ancient Pygmalion joins contemporary management: A meta-analysis of the result. *Journal of Applied Psychology, 85*, 314–322.

Medford, S., Gudjonsson, G.H., & Pearse, J. (2003). The efficacy of the appropriate adult safeguard during police interviewing. *Legal and Criminological Psychology, 8*, 253–266.

Meili, T. (2003). *I am the Central Park jogger: A story of hope and possibility.* New York: Scribner.

Meissner, C.A., & Kassin, S.M. (2002). "He's guilty!": Investigator bias in judgments of truth and deception. *Law and Human Behavior, 26*, 469–480.

Meissner, C.A., & Kassin, S.M. (2004). "You're guilty, so just confess!" Cognitive and behavioral confirmation biases in the interrogation room. In D. Lassiter (Ed.), *Interrogations, confessions, and entrapment* (pp. 85–106). New York: Kluwer Academic.

Memon, A., Vrij, A., & Bull, R. (2003). *Psychology and law: Truthfulness, accuracy and credibility.* London: Jossey-Bass.

Meyer, R.G., & Youngjohn, J.R. (1991). Effects of feedback and validity expectancy on response in a lie detector interview. *Forensic Reports, 4*, 235–244.

Michigan v. Harvey, 494 U.S. 344 (1990).

Milgram, S. (1974). *Obedience to authority: An experimental view.* New York: Harper & Row.

Miller, D.T., & McFarland, C. (1987). Pluralistic ignorance: When similarity is interpreted as dissimilarity. *Journal of Personality and Social Psychology, 53*, 298–305.

Miranda v. Arizona, 384 U.S. 336 (1966).

Missouri v. Seibert, 542 U.S. (2004).

Morgan, C.A., III, Hazlett, G., Doran, A., Garrett, S., Hoyt, G., Thomas, P., Baranoski, M., & Southwick, S.M. (2004). Accuracy of eyewitness memory for persons encountered during exposure to highly intense stress. *International Journal of Law and Psychiatry, 27*, 265–279.

Mortimer, A., & Shepherd, E. (1999). Frames of mind: Schemata guiding cognition and conduct in the interviewing of suspected offenders. In A. Memon & R. Bull (Eds.), *Handbook of the psychology of interviewing* (pp. 293–315). Chichester, England: Wiley.

Moston, S., Stephenson, G.M., & Williamson, T.M. (1992). The effects of case characteristics on suspect behaviour during questioning. *British Journal of Criminology, 32*, 23–40.

Moston, S., Stephenson, G.M., & Williamson, T.M. (1993). The incidence, antecedents and consequences of the use of the right to silence during police questioning. *Criminal Behavior and Mental Health, 3*, 30–47.

Mueller, C.B., & Kirkpatrick, L.C. (1995). *Modern evidence: Doctrine and practice*. Boston: Little, Brown & Co.

Munsterberg, H. (1908). *On the witness stand*. Garden City, NY: Doubleday.

National Research Council, Committee to Review the Scientific Evidence on the Polygraph, Division of Behavioral and Social Sciences and Education. (2003). *The polygraph and lie detection*. Washington, DC: National Academies Press.

Nawrat, I.R. (2001). Dialogue involvement as a social influence technique. *Personality and Social Psychology Bulletin, 27*, 1395–1406.

New York v. Quarles, 467 U.S. 649 (1984).

New York v. Wise, Richardson, McCray, Salaam, & Santana: Affirmation in Response to Motion to Vacate Judgment of Conviction, Indictment No. 4762/89 (December 5, 2002).

Newman, M.L., Pennebaker, J.W., Berry, D.S., & Richards, J.M. (2003). Lying words: Predicting deception from linguistic styles. *Personality and Social Psychology Bulletin, 29*, 665–675.

Nickerson, R.S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology, 2*, 175–220.

Nourkova, V.V., Bernstein, D.M., & Loftus, E.F. (2004). Biography becomes autobiography: Distorting the subjective past. *American Journal of Psychology, 117*, 65–80.

Oberlander, L.B., & Goldstein, N.E. (2001). A review and update on the practice of evaluating *Miranda* comprehension. *Behavioral Sciences and the Law, 19*, 453–471.

Ofshe, R.J., & Leo, R.A. (1997a). The decision to confess falsely: Rational choice and irrational action. *Denver University Law Review, 74*, 979–1122.

Ofshe, R.J., & Leo, R.A. (1997b). The social psychology of police interrogation. The theory and classification of true and false confessions. *Studies in Law, Politics and Society, 16*, 189–251.

Ofshe, R.J., & Watters, E. (1994). *Making monsters: False memories, psychotherapy, and sexual hysteria*. New York: Scribner.

Ogletree, C.J. (1991). *Arizona v. Fulminante*: The harm of applying harmless error to coerced confessions. *Harvard Law Review, 105*, 152–175.

Ost, J., Costall, A., & Bull, R. (2001). False confessions and false memories: A model for understanding retractors' experiences. *Journal of Forensic Psychiatry, 12*, 549–579.

O'Sullivan, M., & Ekman, P. (2004). The wizards of deception detection. In P.A. Granhag & L.A. Strömwall (Eds.), *Deception detection in forensic contexts* (pp. 269–286). Cambridge, England: Cambridge University Press.

Pearse, J., & Gudjonsson, G.H. (1999). Measuring influential police interviewing tactics: A factor analytic approach. *Legal and Criminological Psychology, 4*, 221–238.

Pearse, J., Gudjonsson, G.H., Clare, I.C.H., & Rutter, S. (1998). Police interviewing and psychological vulnerabilities: Predicting the likelihood of a confession. *Journal of Community and Applied Social Psychology, 8*, 1–21.

Pennebaker, J.W. (1997). *Opening up: The healing power of expressing emotions*. New York: Guilford Press.

Pennebaker, J.W. (2002). Writing, social processes, and psychotherapy: From past to future. In S.J. Lepore & J.M. Smyth (Eds.), *The writing cure: How expressive writing promotes health and emotional well-being* (pp. 281–291). Washington, DC: American Psychological Association.

Perlman, N.B., Ericson, K.I., Esses, V.M., & Isaacs, B.J. (1994). The developmentally handicapped witness: Competency as a function of question format. *Law and Human Behavior, 18*, 171–187.

Petrie, K.J., Booth, R.J., & Pennebaker, J.W. (1998). The immunological effects of thought suppression. *Journal of Personality and Social Psychology, 75*, 1264–1272.

Philipsborn, J.T. (2001, January/February). Interrogation tactics in the post-Dickerson era. *The Champion*, pp. 18–22, 75–78.

Porter, S., Woodworth, M., & Birt, A.R. (2000). Truth, lies, and videotape: An investigation of the ability of federal parole officers to detect deception. *Law and Human Behavior, 24*, 643–658.

Radelet, M.L., Bedau, H.A., & Putnam, C.E. (1992). *In spite of innocence: Erroneous convictions in capital cases*. Boston: Northeastern University Press.

Rattner, A. (1988). Convicted but innocent: Wrongful conviction and the criminal justice system. *Law and Human Behavior, 12*, 283–293.

Redlich, A.D. (2004). Mental illness, police interrogations, and the potential for false confession. *Law and Psychiatry, 55*, 19–21.

Redlich, A.D., & Goodman, G.S. (2003). Taking responsibility for an act not committed: The influence of age and suggestibility. *Law and Human Behavior, 27*, 141–156.

Redlich, A.D., Silverman, M., Chen, J., & Steiner, H. (2004). The police interrogation of children and adolescents. In G.D. Lassiter (Ed.), *Interrogations, confessions, and entrapment* (pp. 107–125). New York: Kluwer Academic.

Reik, T. (1959). *The compulsion to confess: On the psychoanalysis of crime and punishment*. New York: Farrar, Straus & Cudahy.

Rimer, S. (2002, February 6). Convict's DNA sways labs, not a determined prosecutor. *New York Times*, p. A14.

Risinger, D.M., Saks, M.J., Thompson, W.C., & Rosenthal, R. (2002). The *Daubert/Kumho* implications of observer effects in forensic science: Hidden problems of expectation and suggestion. *California Law Review, 90*, 1–56.

Roediger, H.L., III, & McDermott, K.B. (1995). Creating false memories: Remembering words not presented in lists. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 21*, 803–814.

Rogers, R., Jordan, M.J., & Harrison, K.S. (2004). A critical review of published competency-to-confess measures. *Law and Human Behavior, 28*, 707–718.

Rogge, O.J. (1975). *Why men confess*. New York: Da Capo Press.

Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development*. New York: Holt, Rinehart, & Winston.

Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. *Advances in Experimental Social Psychology, 10*, 174–221.

Russano, M.B., Meissner, C.A., Narchet, F.M., & Kassin, S.M. (in press). Investigating true and false confessions within a novel experimental paradigm. *Psychological Science*.

Sauer, M. (2004, March 26). Former detective won't say Tuite was overlooked. *San Diego Union-Tribune*, p. B1.

Saulny, S. (2002, December 8). Why confess to what you didn't do? *New York Times*, Section 4, p. 5.

Scheck, B., Neufeld, P., & Dwyer, J. (2000). *Actual innocence*. Garden City, NY: Doubleday.

Schein, E.H., Schneier, I., & Barker, C.H. (1961). *Coercive persuasion: A socio-psychological analysis of the "brainwashing" of American civilian prisoners by the Chinese Communists*. New York: Norton.

Schulhofer, S.J. (1996). Miranda's practical effect: Substantial benefits and vanishingly small social costs. *Northwestern University Law Review, 90*, 500–564.

Scullin, M.H., & Ceci, S.J. (2001). A suggestibility scale for children. *Personality and Individual Differences, 30*, 843–856.

Shaw, J.A., & Budd, E.D. (1982). Determinants of acquiescence and nay saying of mentally retarded persons. *American Journal of Mental Deficiency, 87*, 108–110.

Shuy, R.W. (1998). *The language of confession, interrogation, and deception*. Thousand Oaks, CA: Sage Publications.

Sigurdsson, J.F., & Gudjonsson, G.H. (1994). Alcohol and drug intoxication during police interrogation and the reasons why suspects confess to the police. *Addiction, 89*, 985–997.

Sigurdsson, J.F., & Gudjonsson, G.H. (1996). Psychological characteristics of "false confessors": A study among Icelandic prison inmates and juvenile offenders. *Personality and Individual Differences, 20*, 321–329.

Sigurdsson, J.F., & Gudjonsson, G.H. (2001). False confessions: The relative importance of psychological, criminological and substance abuse variables. *Psychology, Crime and Law, 7*, 275–289.

Simon, D. (1991). *Homicide: A year on the killing streets*. New York: Ivy Books.

Slobogin, C. (2003). Toward taping. *Ohio State Journal of Criminal Law, 1*, 309–322.

Smyth, J.M. (1998). Written emotional expression: Effect sizes, outcome types, and moderating variables. *Journal of Consulting and Clinical Psychology, 66*, 174–184.

Snyder, M. (1992). Motivational foundations of behavioral confirmation. *Advances in Experimental Social Psychology, 25*, 67–114.

Snyder, M., & Stukas, A. (1999). Interpersonal processes: The interplay of cognitive, motivational, and behavioral activities in social interaction. *Annual Review of Psychology, 50*, 273–303.

Snyder, M., & Swann, W.B., Jr. (1978). Hypothesis-testing processes in social interaction. *Journal of Personality and Social Psychology, 36*, 1202–1212.

Softley, P. (1980). *Police interrogation: An observational study in four police stations* (Home Office Research Study No. 61). London: Her Majesty's Stationery Office.

State v. Free, 798 A.2d 83 (NJ 2002).

Sullivan, T. (1992). *Unequal verdicts: The Central Park jogger trials*. New York: Simon & Schuster.

Sullivan, T.P. (2004). *Police experiences with recording custodial interrogations*. Chicago: Northwestern University School of Law, Center on Wrongful Convictions.

Swets, J.A. (1996). *Signal detection theory and ROC analysis in psychology and diagnostics*. Mahwah, NJ: Erlbaum.

Thomas, A.K., & Loftus, E.F. (2002). Creating bizarre false memories through imagination. *Memory & Cognition, 30*, 423–431.

Thomas, G.C. (1996). Is Miranda a real-world failure?: A plea for more (and better) empirical evidence. *UCLA Law Review, 43*, 821.

United States v. Hall, 974 F. Supp. 1198 (7th Cir. 1997).

Vrij, A. (1994). The impact of information and setting on detection of deception by police detectives. *Journal of Nonverbal Behavior, 18*, 117–132.

Vrij, A. (2000). *Detecting lies and deceit: The psychology of lying and the implications for professional practice*. London: Wiley.

Vrij, A. (2004). Why professionals fail to catch liars and how they can improve. *Legal and Criminal Psychology, 9*, 159–181.

Vrij, A., Edward, K., & Bull, R. (2001). Police officers' ability to detect deceit: The benefit of indirect deception detection measures. *Legal and Criminological Psychology, 6*, 185–197.

Vrij, A., & Mann, S. (2001). Who killed my relative?: Police officers' ability to detect real-life high-stake lies. *Psychology, Crime and Law, 7*, 119–132.

Walczyk, J.J., Roper, K.S., Seemann, E., & Humphrey, A.M. (2003). Cognitive mechanisms underlying lying to questions: Response time as a cue to deception. *Applied Cognitive Psychology, 17*, 755–774.

Walkley, J. (1987). *Police interrogation: Handbook for investigators*. London: Police Review Publication.

Walters, S. (2003). *Principles of kinesic interview and interrogation* (2nd ed.). Boca Raton, FL: CRC Press.

Weisselberg, C.D. (2001). In the stationhouse after Dickerson. *Michigan Law Review, 99*, 1121–1167.

Wells, G.L. (2003). Murder, extramarital affairs, and the issue of probative value. *Law and Human Behavior, 27*, 623–627.

Wells, G.L., Malpass, R.S., Lindsay, R.C.L., Fisher, R.P., Turtle, J.W., & Fulero, S.M. (2000). From the lab to the police station: A successful application of eyewitness research. *American Psychologist, 55*, 581–598.

Wells, G.L., & Olson, E. (2003). Eyewitness identification. *Annual Review of Psychology, 54*, 277–295.

White, W.S. (2003). *Miranda's waning protections: Police interrogation practices after Dickerson*. Ann Arbor: University of Michigan Press.

Wigmore, J.H. (1970). *Evidence* (Vol. 3, rev. by J. H. Chadbourn). Boston: Little, Brown.

Wright, L. (1994). *Remembering Satan*. New York: Alfred A. Knopf.

Wrightsman, L.S., & Kassin, S.M. (1993). *Confessions in the courtroom*. Newbury Park, CA: Sage Publications.

Zimbardo, P.G. (1967, June). The psychology of police confessions. *Psychology Today, 1*, 17–20, 25–27.

Zuckerman, M., DePaulo, B.M., & Rosenthal, R. (1981). Verbal and nonverbal communication of deception. *Advances in Experimental Social Psychology, 14*, 1–59.

Zuckerman, M., Koestner, R., & Alton, A.O. (1984). Learning to detect deception. *Journal of Personality and Social Psychology, 46*, 519–528.