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The Psychology of Confessions

*A Review
of the
Literature
& Issues*

by Saul M. Kassin and Gisli H. Gudjonsson
Editorial by Elizabeth F. Loftus

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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.

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

Saul M. Kassin and Gisli H. Gudjonsson

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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.

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The Psychology of Confessions

A Review of the Literature and Issues

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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.

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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 larger 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; Elass, 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 out 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)

	Naive students (<i>n</i> = 20)	Trained students (<i>n</i> = 20)	Police investigators (<i>n</i> = 44)
Performance			
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 con-

fessions 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).

¹The 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 appre-

hended 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)

Suspect	Interrogation condition			Total
	Neutral	Sympathetic	Hostile	
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 re-evaluate 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 live 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 paradox-

ical 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

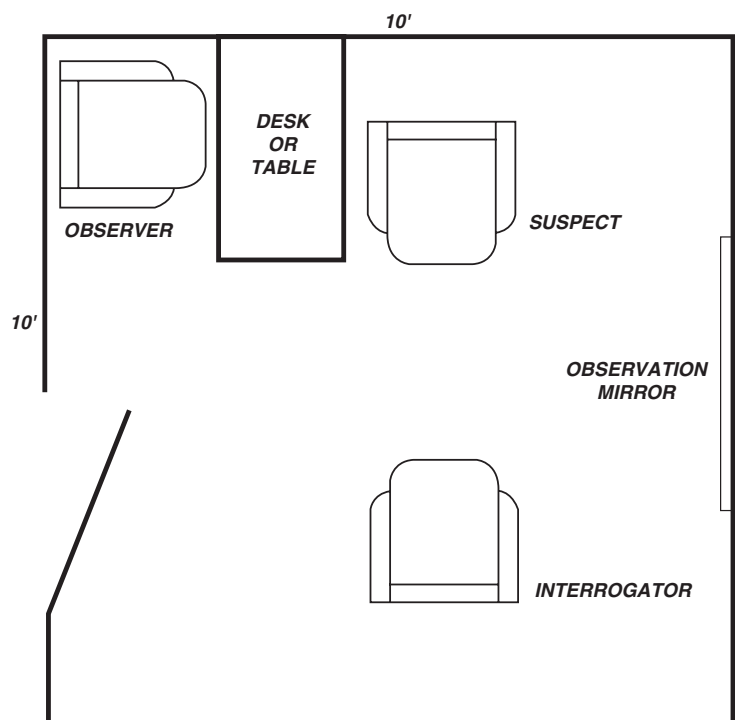


Fig. 2. Physical layout of a police interrogation room, as recommended by Inbau, Reid, Buckley, and Jayne (2001).

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

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%) |

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).

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 imaginal 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

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?
-
-

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

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. Per-

sonality, 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)

Type of influence	No witness		Witness	
	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).

²As 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.

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

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)

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

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)

Performance	Students (n = 82)			Investigators (n = 77)		
	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).

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