The Psychology of Confessions

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Abstract

Despite the potency of confession evidence in criminal law, recent DNA exonerations indicate that false confessions are a contributing factor in numerous wrongful convictions. After distinguishing between voluntary, compliant, and internalized false confessions, this article reviews research implicating a sequence of three processes responsible for false confessions and the adverse consequences of these confessions. First, police often target innocent people for interrogation because of erroneous judgments of truth and deception made during preinterrogation interviews. Second, innocent people are sometimes induced to confess as a function of certain police interrogation tactics, dispositional suspect vulnerabilities, and naive mental state that accompanies innocence. Third, people cannot readily distinguish between true and false confessions and often fail to discount those confessions they perceive to be coerced. At present, researchers are seeking ways to improve the accuracy of confession evidence and its evaluation in the courtroom.

In criminal law, confession evidence is common, potent, and so highly regarded as a matter of common sense that, as one legal scholar stated, "the introduction of a confession makes the other aspects of a trial in court superfluous" (McCormick 1972, p. 316). Yet confessions are fallible. Dating back to the Salem witch trials of 1692, during which roughly 50 women confessed to witchcraft, countless numbers of people have been wrongfully prosecuted, convicted, imprisoned, and sometimes sentenced to death after confessing to crimes they did not commit. Then in 1989, Gary Dotson became the first wrongfully convicted person to be exonerated by DNA testing. Since that time, the Innocence Project has been involved in more than 200 postconviction DNA exonerations. In nearly 25% of these convictions of the factually innocent, false confessions were a contributing factor (Scheck et al. 2000, Garrett 2008; see also **http://www.innocenceproject.org**).

A false confession is an admission of guilt followed by a narrative statement of what, how, and why the confessor committed the crime. Over the years, confessions have been proven false in a number of ways, as when it is discovered that the confessed crime was not committed; when new evidence shows it was physically impossible for the confessor to have committed the crime; when the real perpetrator, having no connection to the defendant, is captured and implicated; and when DNA and other scientific evidence affirmatively establish the confessor's innocence. Through these methods, and contrary to the widespread belief that people do not confess to crimes they did not commit, the pages of American history betray large numbers of men and women who were wrongfully prosecuted, convicted, imprisoned, and sometimes sentenced to death on the basis of false confessions (for reviews, see Drizin & Leo 2004; Gudjonsson 1992, 2003; Kassin 1997a, 2005, 2008; Kassin & Gudjonsson 2004; Kassin & Wrightsman 1985; Lassiter 2004; Leo 2008; Leo & Ofshe 1998; Wrightsman & Kassin 1993).

Although many researchers have aggregated large numbers of false confession cases in recent years, it is not possible to project from these cases the frequency with which innocent people in general confess to crimes they did not commit. First, within the U.S. criminal justice system, the postconviction cases discovered by the Innocence Project and others do not include the numerous false confessions that are disproved subsequent to arrest but before trial, those that result in a false guilty plea, those to minor crimes that attract no postconviction scrutiny, and those that involve juveniles in which confidentiality provisions are in place. For these reasons, the cases that are discovered represent the tip of an iceberg the size of which is unknown (Drizin & Leo 2004, Gross et al. 2005). Second, whereas most case studies are based in the United States, proven false confessions have also been documented in countries all over the world—including Canada, Great Britain, Norway, Holland, Sweden, Iceland, Ireland, Australia, New Zealand, China, and Japan. Third, although most known false confessions occur in a criminal justice venue, they also occur with unknown frequency in military intelligence settings, where intensely coercive tactics are sometimes used, and in corporate loss-prevention settings, where employees are often prompted by supervisors to confess to theft, whereupon the employees agree to return the money (Nader 2006).

Seeking to grasp the size of the iceberg submerged beneath the surface, researchers have used self-report methods as well. Gudjonsson & Sigurdsson (1994) conducted self-report studies of prison inmates in Iceland and found that 12% claimed to have made a false confession to police at some time in their lives. Similar studies have been conducted in student samples within Iceland and Denmark. Among those interrogated by police, the self-reported false confession rates ranged from 3.7% to 7% among college students (Gudjonsson et al. 2004, 2006; Steingrimsdottir et al. 2007) and 1.2% for older university students (Gudjonsson et al. 2004). In a North American survey of 631 police investigators, respondents estimated from their own experience that 4.78% of innocent

suspects confess during interrogation (Kassin et al. 2007).

THE STUDY OF CONFESSIONS

By necessity, the scholarly study of confession evidence has drawn on a wide range of methodologies—most commonly individual and aggregated case studies, self-report interviews and surveys, naturalistic observational studies, field studies, and laboratory experiments.

Over the years, researchers have reported on numerous accounts of proven false confessions, producing a vast literature of case studies. As reported in books, newspapers, TV documentaries, and analyses of actual case files, these stories reveal that false confessions occur with some unknown frequency, that they share certain common features, and that they seem more likely to occur in some types of people and under some conditions than others (e.g., see Gudjonsson 1992, 2003). From these descriptive analyses of specific instances and associations, one cannot draw conclusions about the causes of false confessions. Nevertheless, case studies of this nature have proven invaluable in the development of this area. By comparing and contrasting several known cases throughout history, for example, Kassin & Wrightsman (1985) introduced a taxonomy that distinguished among three types of false confessions: voluntary, coerced-compliant, and coerced-internalized.

Voluntary false confessions are those in which people claim responsibility for crimes they did not commit without prompting or pressure from police. Often this occurs in high-profile cases. When Charles Lindbergh's infant son was kidnapped in 1932, an estimated 200 people volunteered confessions. When "Black Dahlia" actress Elizabeth Short was murdered in 1947, more than 50 people confessed. In 2006, John Mark Karr confessed to the unsolved murder of young JonBenet Ramsey. Researchers have not systematically studied these types of false confessions, in part because they are typically disproved at the outset by the confessor's ignorance and inability to furnish corroborating details about the crime. There are several reasons why innocent people might volunteer confessions, such as a pathological need for attention or self-punishment; feelings of guilt or delusions; the perception of tangible gain; or the desire to protect a parent, child, or someone else.

In contrast, people may be induced to confess through the processes of police interrogation. In compliant false confessions, the suspect capitulates in order to escape a stressful custodial situation, avoid physical or legal punishment, or gain a promised or implied reward. Based on a review of cases, Gudjonsson (2003) identified some concrete incentives for this type of confession, such as being allowed to sleep, eat, make a phone call, go home, or, in the case of drug addicts, feed a drug habit. Like the classic forms of influence observed in psychological studies of conformity, compliance, and obedience to authority, this type of confession is an act of public capitulation by a suspect who knows that he or she is innocent but perceives that the short-term benefits of confession (e.g., being left alone, fed, or released) outweigh the long-term costs (e.g., a loss of reputation, conviction, and incarceration). This phenomenon was dramatically illustrated in the 1692 Salem witch trials, in which women confessed to witchcraft (Karlsen 1989); in *Brown v. Mississippi* (1936), a classic case in which three black tenant farmers confessed to murder after they were whipped with a steel-studded leather belt; and in the infamous Central Park jogger case, in which five New York City teenagers, in 1989, confessed after lengthy interrogations, each claiming he expected to go home afterward. All the boys were convicted and sent to prison, only to be exonerated in 2002 when the real rapist gave a confession that was confirmed by DNA evidence.

Third, internalized false confessions are those in which innocent but vulnerable suspects confess and come to believe they committed the crime in question, a belief that is sometimes accompanied by false memories (for a description of the process, see Kassin 2007).

Voluntary false confessions: confessions, often in high-profile cases, made by innocents without prompting by police

Compliant false confessions: confessions in which innocent suspects capitulate in order to escape a stressful situation, avoid punishment, or gain a reward

Internalized false confessions: confessions in which innocent but vulnerable suspects, presented with false evidence of guilt, come to believe they in fact committed the crime

Gudjonsson & MacKeith (1982) argued that this kind of false confession results from "memory distrust syndrome," whereby people develop a profound distrust of their own memory that renders them vulnerable to manipulation from external cues. Kassin (1997b) likened this process of influence to the creation of false memories sometimes seen in psychotherapy patients. In both situations, an authority figure claims a privileged insight into the individual's past, the individual is isolated from others and in a heightened state of malleability, and the expert ultimately convinces the individual to accept a painful self-insight by invoking concepts like dissociation or repression (see also Ost et al. 2001). The case of 14-year-old Michael Crowe, whose sister was stabbed to death, illustrates this phenomenon. After lengthy interrogations, during which Michael was misled by lies into thinking there was substantial physical evidence of his guilt, he concluded that he was a killer: "I'm not sure how I did it. All I know is I did it." Eventually, he was convinced that he had a split personality—that "bad Michael" acted out of jealous rage, while "good Michael" blocked the incident from consciousness. The charges against Crowe were later dropped when a drifter from the neighborhood was found with his sister's blood on his clothing (Drizin & Colgan 2004).

Using an aggregated case study method, Leo & Ofshe (1998) compared and contrasted 60 proven or probable false confession cases, triggering a critique and rejoinder concerning the actual innocence of many of the confessors included in their analysis (Cassell 1999, Leo & Ofshe 2001). Later focusing on a larger, more rigorous sample of proven exonerations, Drizin & Leo (2004) were able to describe the characteristics of 125 cases of proven false confession in the United States from 1971 and 2002. They found that 93% of the false confessors were men. Overall, the vast majority occurred in murder cases (81%), distantly followed by rape (8%) and arson (3%). The most frequent bases of exoneration were that the real perpetrator was identified (74%) or that new scientific evidence was discovered (46%). Surprisingly, 30% of the cases involved confessions from multiple innocent suspects to the same crime, often indicating that one false confession was used to extract others. Not surprisingly, the sample was disproportionately more youthful than the population as a whole (63% of false confessors were younger than 25; 32% were under 18). Indicating the power of confession evidence, four out of the five false confessors in this sample who took their case to trial were convicted.

In addition to a case study approach, multiple empirical methods are used to investigate the processes of interviewing, interrogation, and the elicitation of confessions. Leo (1996a) and Feld (2006) in the United States and Moston et al. (1992) and others in Great Britain used naturalistic observations to study processes and outcomes in live and videotaped police interrogations. Gudjonsson (1992, 2003) and colleagues have also used self-report methods to examine correlations between various personal suspect characteristics—such as interrogative compliance and suggestibility—and the tendency to confess or resist confession. My colleagues and I have developed experimental paradigms to assess how accurately investigators make preinterrogation judgments of truth and deception (Kassin & Fong 1999, Meissner & Kassin 2002), to test specific causal hypotheses about interrogation tactics that increase the risk of false confessions (Kassin & Kiechel 1996, Russano et al. 2005), and to assess the impact of confession evidence on juries (Kassin & Neumann 1997, Kassin & Sukel 1997).

Every tale of a confession-based wrongful conviction raises three sets of questions and has inspired a great deal of recent research: (*a*) Why are innocent people often misidentified for interrogation as a result of judgments of them made in a preinterrogation interview, (*b*) what personal characteristics of a suspect and what situational aspects of the interrogation put innocents at risk to confess, and (*c*) how accurate are judges, juries, and others at assessing confession evidence in the courtroom? Each of these questions is addressed below.

THE PREINTERROGATION INTERVIEW

During the course of an investigation, police identify one or more suspects for interrogation. Sometimes, this identification is reasonably based on witnesses, informants, a suspect's own history, or other extrinsic evidence. Often, however, it is based on a clinical hunch formed during a preinterrogation interview. In *Criminal Interrogations and Confessions*, an influential manual on interrogation first published in 1962 and now in its fourth edition, Inbau et al. (2001) propose a two-step process by which 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.

To help investigators determine whether their suspects are telling the truth or lying, Inbau et al. (2001) train investigators to use the Behavior Analysis Interview, or BAI. Using this approach, investigators are advised to ask a series of special behavior-provoking questions, the responses to which are presumed to be diagnostic of guilt and innocence (e.g., "Do you know who did take the money?" or "What do you think should happen to the person who took the money?"), and then to observe changes in the suspect's verbal and nonverbal behavior (e.g., eye contact, pauses, posture, fidgety movements) to divine whether he or she is telling the truth or lying. For a person who is under suspicion, an investigator's judgment at this stage becomes a pivotal choice point, determining whether the suspect is interrogated or sent home.

Inbau et al. (2001) claim that training in the Reid technique produces an exceedingly high (85%) level of accuracy (this claim is also explicitly made in training sessions). Yet the data for this proposition come from a single flawed study that is also grossly out of step with basic science. In that study, Horvath et al. (1994) selected 60 interview tapes from the Reid collection, the ground truths of which could not be established with certainty. Then they edited the tapes, showed these edited tapes to four experienced in-house staff members of John E. Reid and Associates, and concluded from their judgments that the Reid technique produced high levels of accuracy (no comparison group of untrained or lay evaluators was included). Yet in laboratories all over the world, research has consistently shown that most of the demeanor cues touted by the Reid technique do not empirically discriminate between truth telling and deception (DePaulo et al. 2003). Not surprisingly, therefore, laypeople on average are only 54% accurate; training produces little improvement compared with naive control groups; and police, judges, psychiatrists, customs inspectors, and other so-called experts perform only slightly better than laypeople, if at all (for recent reviews, see Bond & DePaulo 2006, Vrij 2008).

In studies specifically aimed at evaluating the Reid approach to lie detection, the results are not impressive. Vrij et al. (2006b) had some subjects but not others commit a mock crime they were motivated to deny. All subjects were then interviewed using the BAI interview protocol. The results showed that responses to the behavior-provoking questions did not significantly distinguish between truth tellers and liars in the predicted manner (e.g., the liars were not more anxious or less helpful). In principle, it is reasonable to expect that special questions can be developed that would discriminate between truthful and deceptive suspects. For example, recent research indicates that innocent people are more likely than perpetrators to waive their rights to silence, to counsel, and to a lineup, and to agree to cooperative acts, such as undergoing a polygraph, physical examination, or house search, that may betray the lesser fear that accompanies innocence than guilt (Kassin 2005). However, there is no empirical support for the diagnostic value of the BAI questions that are currently used.

There is also no evidence to support the diagnostic value of the verbal and nonverbal cues that investigators are trained to observe. For example, Kassin & Fong (1999) randomly trained some college students but not others to use the

"behavioral symptoms" cited by the Reid technique. All students then watched videotaped interviews of mock suspects, some of whom committed one of four mock crimes (shoplifting, breaking and entering, vandalism, and computer break-in) and others of whom did not. Upon questioning, all suspects denied their involvement. As in the typical nonforensic laboratory experiment, observers could not reliably differentiate between the two groups of suspects. In fact, those who underwent training were significantly less accurate, more confident, and more biased toward seeing deception. Using these same taped interviews, Meissner & Kassin (2002) next tested experienced samples of police detectives and found that they exhibited these same erroneous and biased tendencies. Other research as well suggests that police tend to make prejudgments of guilt, with confidence, that are frequently in error (e.g., Elaad 2003, Garrido et al. 2004, Leach et al. 2004). As a consequence, 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 single-mindedly measures success by his or her ability to extract a confession (Kassin et al. 2003).

At present, forensically relevant research on human lie detection is focused on two sets of issues. The first concerns whether certain individuals are uniquely talented in their lie detection skills as a function of either their intuitive abilities or exposure to special training. To be sure, the distribution of lie detection accuracy scores suggests that some individuals are generally more accurate than others (Ekman et al. 1999). After testing approximately 13,000 people from all walks of life, using parallel tasks, O'Sullivan & Ekman (2004) reported identifying 15 "wizards" of lie detection who achieved at least an 80% level of accuracy in two or three parallel tests. Recently, however, CF Bond & Uysal (2007) challenged both the poorly controlled procedures through which these test scores were derived and the statistical significance of the so-called wizards (for a rejoinder, see O'Sullivan 2007). With regard to methods, it appears that O'Sullivan & Ekman (2004) collected much of their data at lie detection workshops they had conducted, that the tests were often self-scored, and that follow-up stimulus tests were often mailed to subjects and taken without supervision. As for the results, CF Bond & Uysal (2007) argued that the small number of high performers who emerged from the testing were statistical flukes and that the number did not exceed chance expectations in light of the thousands of subjects tested and the criterion set for wizardry. In a more recent effort to identify experts, G Bond (2007) tested 234 law enforcement professionals and college students, tested subjects in a controlled setting, and adopted a more stringent criterion (80% accuracy on four different tests, each administered twice). Using this procedure, two "experts" emerged whose performance was unlikely to have been achieved by chance. Clearly, more research is needed on this issue.

Assuming that some people prove to be highly proficient at lie detection, it remains to be seen whether their wisdom can be articulated and taught as part of professional training. This question relates to the second set of issues that currently preoccupies researchers in this area: Whether it is possible to improve police lie detection performance—either through the use of emerging brain imaging technologies (e.g., Kozel et al. 2005) or by developing new empirically derived approaches to human truth and lie judgments. In one line of the latter research, Hartwig et al. (2005) found that interviewers make more accurate judgments by withholding crime details while questioning suspects, a strategy that traps guilty liars in discernible inconsistencies when these facts are later disclosed. Interviewers who are trained in this "strategic disclosure" technique thus become more accurate in their judgments (Hartwig et al. 2006). In a second line of research, Vrij et al. (2006a) theorized that lying is more effortful than telling the truth, so interviewers should tax a suspect's cognitive load and attend to cues that betray effort. Hence, when interviewers had truth tellers and liars recount their stories in reverse chronological order, the interviewers became more

accurate in their ability to distinguish between the truthful and deceptive accounts (Vrij et al. 2008).

SAFEGUARD: *MIRANDA* WARNINGS

Before police can transition from a diagnostic preinterrogation interview to an accusatorial interrogation, they must safeguard the suspect's constitutional rights. In the landmark case of *Miranda v. Arizona* (1966), the U.S. Supreme Court ruled that police must inform 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"). 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 be admitted into evidence.

A number of rulings subsequently narrowed the scope of *Miranda*, carved out exceptions to the rule, and limited the consequences for noncompliance—developments that have led some commentators to question the extent to which police are free to disregard *Miranda* (Clymer 2002, White 2003). In one important recent decision, however, the Supreme Court upheld the basic warning-and-waiver requirement (*Dickerson v. United States* 2000). In another opinion, the Court refused to accept confessions that were given after a warning that was tactically delayed in order to produce an earlier inadmissible statement (*Missouri v. Seibert* 2004).

Miranda issues are often a source of dispute in the courts, particularly whether the warning-and-waiver requirement is sufficiently protective of the accused. First and foremost is the argument that some suspects—because of their youth, lack of intelligence, lack of education, or mental health status—lack the capacity to understand and apply the rights they are given. Grisso (1981) reasoned that a person's capacity to make an informed waiver requires three abilities: an understanding of the words and phrases contained within the warnings, an accurate perception of their intended functions (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 and research purposes, Grisso developed four instruments for measuring *Miranda*-related comprehension. Research with these instruments has shown that adolescent suspects under age 15 do not comprehend their rights as fully or know how to apply them as well as older adolescents and adults (Goldstein et al. 2003, Grisso 1998, Oberlander & Goldstein 2001, Viljoen & Roesch 2005, Viljoen et al. 2007). As performance on these measures is correlated with IQ, the same is true of adults who are mentally retarded (Clare & Gudjonsson 1995, Everington & Fulero 1999, O'Connell et al. 2005).

These concerns about comprehension are reinforced by the empirical fact that although the *Miranda* Court ruled that suspects must be apprised of their rights, it did not furnish specifically worded warnings. Consequently, a recent study identified 560 different *Miranda* warning forms used by police throughout the United States (Rogers et al. 2007). The warnings varied substantially in content, wording, and format. For example, their reading-level requirements ranged from a simple third-grade level to the verbal complexity of postgraduate textbooks (see Kahn et al. 2006, Rogers et al. 2008). With at least some warnings, serious questions may be raised as to whether knowing and intelligent waivers of rights are possible by suspects who are "informed" of those rights.

A second reason that the *Miranda* ritual may not adequately protect the accused is that people routinely waive their rights. In light of the forceful nature of interrogation, one would think that most adults would exercise their constitutional rights to silence and counsel and avoid the perils of interrogation. However, research suggests that people exhibit the opposite tendency. On the basis of observations of

live and videotaped police interrogations, Leo (1996a) found that roughly four out of five suspects waive their rights. Over the years, archival studies in Great Britain have revealed a similar or somewhat higher waiver rate (Baldwin 1993, Moston et al. 1993, Softley 1980). Providing converging evidence, North American police investigators who were recently surveyed estimated that 81% of suspects waive their *Miranda* rights (Kassin et al. 2007).

There are two possible explanations for the surprisingly high waiver rate. First, police have learned how to elicit waivers. Leo (1996b) observed that detectives often overcome *Miranda* by establishing a rapport with the suspect, presenting themselves as sympathetic allies, and minimizing the importance of the process—all serving to increase the perceived benefits of a waiver relative to costs. Second, Kassin (2005) has argued that innocent people naively trust that the process of interrogation will uncover their innocence.

Several studies have examined this latter explanation. Leo (1996b) observed that individuals who have no criminal record are more likely than prior felons to waive their rights. In light of known recidivism rates and the corresponding fact that people without a record are less likely to commit crimes, Kassin & Norwick (2004) designed a laboratory experiment to test the hypothesis that innocent people in particular are at risk to waive their rights. In their experiment, some subjects but not others committed a mock theft of $100. Upon questioning, those who were innocent were more likely to sign a waiver to speak than those who were guilty, 81% to 36%. Afterward, the vast majority of innocent subjects explained that they waived their rights precisely because they were innocent: "I did nothing wrong," "I had nothing to hide." This same pattern was found in a study recently conducted in Canada (Moore & Gagnier 2008). In addition, Kassin et al. (2007) asked American police investigators to estimate separately, from their own experience, how both guilty and innocent suspects react to *Miranda*. Consistent with these laboratory results, respondents estimated that more innocent suspects than guilty suspects waive their rights (84% to 73%).

MODERN POLICE INTERROGATIONS

In the past, American police routinely practiced "third degree" methods of custodial interrogation—inflicting physical pain or mental anguish 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; deprivations 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 on the side of the head or beaten with a rubber hose, which seldom left visible marks). Except for the harsh, torture-like techniques that have sometimes been used on suspected terrorists, third degree methods of interrogation declined precipitously from the 1930s through the 1960s and were replaced by a more professional approach to policing and a more social psychological approach to interrogation—one that relies heavily on control, trickery, and deception (Davis & O'Donahue 2004, Kassin 1997a, Wrightsman & Kassin 1993, Zimbardo 1967; for a recent description and analysis, see Leo 2008).

In theory, the process of interrogation is designed to overcome the anticipated resistance of individual suspects who have been judged liars and presumed guilty. To achieve these goals, police employ a number of tactics that involve using a combination of negative and positive incentives. In the influential Reid technique described by Inbau et al. (2001), investigators are advised to isolate the suspect in a small, private room, which increases his or her anxiety and incentive to escape. A nine-step process then ensues in which an interrogator employs both negative and positive incentives: on the one hand confronting the suspect with strong accusations of guilt, without opportunity for denial,

assertions that may be bolstered by evidence, real or manufactured; and on the other hand offering sympathy and moral justification, normalizing and minimizing the crime and leading suspects to see confession as an expedient means of escape. Finally, when a suspect is persuaded to admit guilt, the trained interrogator seeks to convert that admission into a full narrative confession—on tape or in writing—that details what the suspect did, how, and why.

Both observational studies and police self-report surveys suggest that these techniques are commonly employed. In an article titled "Inside the Interrogation Room," Leo (1996a) reported on his observations of 182 live and videotaped interrogations at three police departments in California and found that detectives used, on average, 5.62 different techniques per interrogation and that Reid-like approaches were particularly common. Similar results were obtained in an observational study of juvenile interrogations in Minnesota (Feld 2006). Moreover, police investigators recently surveyed estimated that their most frequent tactics, in order, were (*a*) to physically isolate the suspect from family and friends, typically in a small private room; (*b*) to identify contradictions in the suspect's account; (*c*) to try to establish rapport in order to gain the suspect's trust; (*d*) to confront the suspect with evidence of his or her guilt; and (*e*) to appeal to his or her self-interests (Kassin et al. 2007).

As indicated by numerous confession-based wrongful convictions, there are times when normal adults confess to crimes they did not commit as a way of coping with the stressors and demands of police interrogation. Indeed, classic social-psychology research has 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. Yet at other times, an innocent person is so young, dispositionally naive and immature, compliant, suggestible, delusional, anxious, or otherwise impaired that he or she may confess voluntarily or in response to relatively little interrogative pressure. In these cases, psychological testing and assessment may be useful to determine whether an individual suspect is uniquely prone to confess during an interrogation. In short, the research to be reviewed in the following pages indicates that both situational and dispositional risk factors are sufficient, that neither is necessary, and that the combination is powerful, to increase the risk of a false confession.

Tactical-Situational Risk Factors

The practice of interrogation involves three essential elements that, if overused, may induce innocent persons to confess. The first risk factor concerns custody and interrogation time. Observational studies in the United States have consistently shown that most interrogations last from 30 minutes to 2 hours (Wald et al. 1967, Leo 1996a, Feld 2006). In the self-report survey described above, North American investigators estimated from experience that the mean length of a typical interrogation is 1.60 hours and that their longest interrogations last an average of 4.21 hours (Kassin et al. 2007). Thus, interrogations that exceed 6 hours are often considered "coercive" (Blair 2005, Feld 2006). In light of the fact that protracted interrogation can cause fatigue, uncertainty, despair, and a possible deprivation of sleep and other need states, it comes as little surprise that police-induced false confessions routinely exceed normative time frames. In their study of 125 proven false confessions, Drizin & Leo (2004) found, in cases in which interrogation time was recorded, that 34% lasted 6 to 12 hours, that 39% lasted 12 to 24 hours, and that the mean was 16.3 hours.

A second interrogation tactic that can induce confessions from innocent people is the false evidence ploy. In confronting suspects, American police will sometimes present supposedly incontrovertible evidence of guilt (e.g., a fingerprint, blood or hair sample, eyewitness identification, or failed polygraph), even if that presentation is false. In the United States, it is permissible for police to outright lie to suspects about the evidence (*Frazier v. Cupp* 1969).

Over the years, legal scholars have speculated and debated the merits of trickery and deception in the interrogation room (e.g., see Gohara 2006, Grano 1994, Magid 2001, Slobogin 2007, Thomas 2007, Young 1998). Yet empirical research clearly warns of the risk. Two sources of evidence support the argument that presenting false evidence can lead innocent people to confess. First, numerous proven false confession cases featured the use of the false evidence ploy. In an illustrative and high-profile case, 17-year-old Marty Tankleff was accused of murdering his parents, despite the complete absence of evidence against him. Tankleff vehemently denied the charges for several hours. Then his interrogator told him that his hair was found on his mother, that a "humidity test" indicated he had showered (hence, the lack of blood on him), and that his hospitalized father had emerged from his coma to say that Marty was his assailant—all lies (the father never regained consciousness and died shortly thereafter). Following these lies, which Tankleff presumed to be true, he became disoriented and confessed. Solely on the basis of that confession, Tankleff was convicted in 1989, only to have his conviction vacated in 2008, after spending more than half his life in prison (Lambert 2007). This effect on suspects of false evidence is not terribly surprising. In self-report studies, many actual suspects state that the reason they had confessed is that they perceived themselves to be trapped by the weight of evidence (Moston et al. 1992, Gudjonsson & Sigurdsson 1999).

The second source of evidence comes from the research laboratory. More than 100 years of basic psychology research have shown that human malleability to influence through misinformation is broad and pervasive. By misrepresenting reality—via confederates, bogus norms, false physiological feedback, counterfeit test results, and the like—one can substantially alter people's visual perceptions (Asch 1956), beliefs (Anderson et al. 1980), behaviors (Rosenthal & Jacobson 1968), emotions (Schachter & Singer 1962), feelings of physical attraction (Valins 1966), self-assessments (Crocker et al. 1991), memories of both observed and experienced events (Loftus 1997), and even certain medical outcomes, as seen in studies of the placebo effect (Brown 1998).

Studies specifically aimed at inducing false confessions have similarly shown that the presentation of false evidence increases the rate at which innocent research participants confess to prohibited acts they did not commit. In the first such study, Kassin & Kiechel (1996) accused college students typing on a keyboard of causing the computer to crash by pressing a key they were preinstructed to avoid. Despite their innocence and initial denials, subjects were asked to sign a confession. In some sessions but not others, a confederate said she witnessed the subject hit the forbidden key. This false evidence nearly doubled the number of students who signed a written confession, from 48% to 94%. Some of these students also went on to internalize the belief in their own culpability. Follow-up experiments have replicated the effect even when the confession was said to bear a financial consequence or future commitment of time (Horselenberg et al. 2003, 2006; Redlich & Goodman 2003), and particularly among children and juveniles who tend to be both more compliant and more suggestible than adults (Redlich & Goodman 2003, Candel et al. 2005). Recently, Nash & Wade (2008) used digital editing equipment to fabricate video evidence of subjects in a computerized gambling experiment taking money that did not belong to them. Presented with this false evidence, all subjects confessed—and most internalized the belief in their guilt.

A third risk factor concerns the use of minimization. With suspects weakened by the highly confrontational stages of interrogation, interrogators are trained to minimize the crime through "theme development," a process of providing moral justification or face-saving excuses for the crime, 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. Research shows that minimization tactics may

lead people to infer by pragmatic implication that leniency in sentencing will follow from confession—even without an explicit promise. Kassin & McNall (1991) had subjects read a transcript of an interrogation of a murder suspect. Three versions of the transcript were produced in which the detective (*a*) made a conditional promise of leniency, (*b*) used the technique of minimization by blaming the victim, or (*c*) used neither technique. Subjects read one version and estimated the sentence that they thought would be imposed on the suspect upon confession. The result: Minimization lowered sentencing expectations as if an explicit promise had been made.

To measure the behavioral effects of minimization, Russano et al. (2005) devised a laboratory paradigm in which subjects were paired with a confederate for a problem-solving study and instructed to work alone on some trials and jointly on others. In a guilty condition, the confederate sought help on a problem that was supposed to be solved alone, inducing a violation of the experimental prohibition; in an 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 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. 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. Importantly, minimization by itself—just like an explicit offer of leniency—reduced the diagnosticity outcomes by increasing not only the rate of true confessions (from 46% to 81%) but also the rate of false confessions (from 6% to 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 increase the rate of false confessions.

Suspect-Dispositional Risk Factors

Some suspects are dispositionally more vulnerable to influence than others and are thus at greater risk for false confessions. Focusing on personality traits, Gudjonsson (2003) has found that individuals who are prone to compliance in social situations are especially vulnerable because of their eagerness to please others and a desire to avoid confrontation, particularly with those in authority. Individuals who are prone to suggestibility—whose memories can be altered by misleading questions and negative feedback—are also more likely to confess under interrogation. Most importantly, Gudjonsson notes that people who are highly anxious, fearful, depressed, delusional, or otherwise psychologically disordered are often at a heightened risk to confess under pressure.

Any discussion of dispositional risk factors must begin with a consideration of the suspect's age and cognitive maturity. The infamous Central Park jogger case illustrates the point. In 1989, a female jogger was beaten senseless, raped, and left for dead in New York City's Central Park. She managed to survive but was—and still is—amnesic for the incident (Meili 2003). Within 48 hours, after intense interrogations, five African American and Hispanic American boys, 14 to 16 years old, confessed to the attack. Solely on the basis of these confessions, all were ultimately tried, convicted, and sentenced to prison. Four of the 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 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 said that he will never do it again. Collectively, the taped confessions persuaded police, prosecutors, two trial juries,

a city, and a nation (for details, see Sullivan 1992).

Thirteen years later, Matias Reyes, in prison for three rapes and a murder committed after 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 district attorney's office questioned Reyes and discovered that he had accurate knowledge of the crime not previously known to investigators. Moreover, DNA testing revealed that Reyes was the source of the semen samples recovered from the victim—which, early on, had excluded the boys as donors. 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).

Sometimes the innocent suspects who confess during interrogation are younger children. This is what happened when 11-year-old Ryan Harris was discovered dead in a Chicago lot a few years ago. 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 had to drop the charges when the crime lab discovered semen on the victim, which the boys were too young to produce and which matched the DNA of a local sex offender (Kotlowitz 1999; for accounts of other false confessions by children, see Fisher 1996).

Based on the overrepresentation of youths in the population of proven false confessions and other psychological evidence to be described shortly, juveniles are clearly at an increased risk for false confessions in the interrogation room (for reviews, see Drizin & Colgan 2004, Owen-Kostelnik et al. 2006, Scott-Hayward 2007). Two numbers are compelling in this regard. First, within the sample of 125 proven false confessions that they analyzed, Drizin & Leo (2004) found that 35% were under 18 years old, and more than half within this latter group were 15 or younger (of all persons arrested for murder and rape, only 8% and 16%, respectively, are juveniles; Snyder 2006). Second, whereas an estimated 14% to 25% of all wrongful convictions historically contain false confessions in evidence, 44% of exonerated juveniles are wrongly convicted because of false confessions—and this number increases to 75% among the youngest juveniles, 12 to 15 years old (Gross et al. 2005).

These statistics are supported by a strong convergence of self-report studies and laboratory experiments (Candel et al. 2005, Goldstein et al. 2003, Grisso et al. 2003, Gudjonsson 2003, Redlich & Goodman 2003, Steinberg & Cauffman 1996, Steinberg & Scott 2003, Viljoen et al. 2005; for reviews of this research and its implications, see Owen-Kostelnik et al. 2006). Hence, it is common knowledge within the law enforcement community that juveniles are more malleable than adults, more vulnerable to manipulation, and hence at greater risk in the interrogation room (e.g., Inbau et al. 2001, Zulawski & Wicklander 1993). In a recent survey, for example, 332 law enforcement officers in Baltimore County, Maryland, agreed that juveniles relative to adults were immature in their decision making, focused on immediate versus future consequences, malleable, and easily influenced by others (Meyer & Reppucci 2007). Importantly, youth as a risk factor is not a uniquely American problem but is, rather, a universal phenomenon (Gudjonsson et al. 2008).

Basic research in developmental psychology provides ready explanations for these findings. The fact that juveniles are at heightened risk in the interrogation room is consistent with 100 years of basic research showing that adolescents are cognitively and psychosocially less mature than adults—exhibiting an "immaturity of judgment" that manifests itself in impulsive decision making, decreased ability to consider long-term consequences, and increased susceptibility to influence from external sources (Cauffman & Steinberg 2000, Grisso et al.

2003, Nurmi 1991, Owen-Kostelnik et al. 2006). It is also consistent with recent neurological research indicating that the regions of the brain that are associated with emotion regulation, planning, and self-control are still not fully developed in adolescents (for reviews of this literature on the adolescent brain and behavioral effects, see Steinberg 2007). In a brief overview of this research, the National Institute of Mental Health (2001) thus referred to the teenage brain as a "work in progress." As noted earlier, these tendencies are broad, pervasive, and generally accepted. In an amicus curiae brief to the Supreme Court in *Roper v. Simmons* (2005), the American Medical Association et al. (2004) noted that adolescents, compared with adults, focus on opportunities for short-term gain, while simultaneously thinking less about protection from losses and future consequences (this brief was cosigned by the American Psychiatric Association, American Society for Adolescent Psychiatry, American Academy of Child & Adolescent Psychiatry, American Academy of Psychiatry and the Law, National Association of Social Workers, and National Mental Health Association).

Scientific evidence is also strong on the more specific proposition that juveniles are vulnerable to influence in a forensic setting. Developmental psychologists had observed these compliance and suggestibility tendencies in children and adolescents long before the existence of a scientific study of confessions (Whipple 1909, Brown 1926). They continue to observe parallel tendencies in the study of eyewitness memory (e.g., Finnilä et al. 2003; for reviews, see Ceci & Bruck 1995, Bruck & Ceci 2004). Particularly germane to police interrogations, several studies employing a range of methodologies have shown consistently that the risk of false confession increases from childhood and adolescence into adulthood. In a laboratory experiment modeled after Kassin & Kiechel's (1996) described above, Redlich & Goodman (2003) accused participants of destroying a computer by pressing a forbidden key and found that juveniles aged 12 and 13 years old, and 15 and 16 years old, were more likely to confess, despite innocence, than 18- to 26-year-old adults, especially when confronted with false evidence of their culpability. A second experiment tested the effect of positive and negative reinforcement on children aged 5 to 8. The results showed that reinforcement strongly increased the tendency for children to make false statements: Of those in the reinforcement condition, 52% made false admissions of guilty knowledge and 30% made false admissions of having witnessed the crime. In contrast, of children in the control condition, only 36% and 10% made false admissions of guilty knowledge and to being a witness, respectively (Billings et al. 2007). These findings parallel earlier studies on the interview-relevant abilities of child-victims/child-witnesses (e.g., Garven et al. 2000). In a third study, Grisso et al. (2003) examined juveniles' and young adults' responses to hypothetical mock interrogations to see if they would confess to police, remain silent, or deny the offense. Compared with participants 16 and older, those 15 and younger were significantly more likely to report that they would confess. In a fourth set of studies, juveniles were asked to self-report on actual interrogation experiences. In one sample of 114 justice-involved juveniles, Viljoen et al. (2005) found that suspects who were 15 and younger, compared with those who were 16 and 17 years old, were significantly more likely to waive their right to counsel and to confess. A survey of over 10,000 Icelandic students aged 16–24 years similarly revealed that, of those with interrogation experiences, 7% claimed to have falsely confessed, with the rates higher among those with more than one interrogation experience (Gudjonsson et al. 2006). In a massive European study, more than 23,000 juveniles from grades 8, 9, and 10 were surveyed from seven countries—Iceland, Norway, Finland, Latvia, Lithuania, Russia, and Bulgaria. Overall, 11.5% (2726) reported having been interrogated by police. Within this group, 14% reported having given a false confession—rates that are substantially higher than are found among older high school, college, and university students (Gudjonsson et al. 2008).

People with intellectual disabilities are also overrepresented in false confession cases (see Gudjonsson 2003, Gudjonsson & MacKeith 1994). Drizin & Leo (2004) identified at least 28 mentally retarded defendants in their sample of 125 false confessions and 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 terribly surprising. On standardized tests that measure people's comprehension of *Miranda* rights, comprehension scores correlate significantly with IQ. Indeed, 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, O'Connell et al. 2005). Specifically addressing this lack of competency, Appelbaum & Appelbaum (1994) note that people who are mentally retarded might confess to a crime merely to avoid the discomfort of police interrogation—that "[f]riendliness, as well as threats and coercion, can result in waivers and confessions" (p. 493). Other researchers have described the *Miranda* warnings to mentally retarded suspects as "words without meaning" (Cloud et al. 2002).

The disproportionate numbers of mentally retarded individuals in the population of proven false confessors suggest that they are very much at risk in the interrogation room. As noted 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 reveals itself in an acquiescence response bias (Shaw & Budd 1982). Indeed, research shows that people who are mentally retarded exhibit a strong tendency to answer "yes" to a wide 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).

A heightened suggestibility in response to misleading information, which can increase the risk of internalized false confessions, is also problematic. Research shows that witnesses with mental deficiencies are highly influenced by the insertion of leading and misleading information into questions (Perlman et al. 1994). In studies conducted in Great Britain and the United States, respectively, Gudjonsson & Henry (2003) and Everington & Fulero (1999) found that people who are mentally retarded as a group score significantly higher than average on psychological measures of interrogative suggestibility, being more likely to yield to leading questions and to change their answers in response to mild negative feedback (see also O'Connell et al. 2005).

To make matters worse with regard to behavior in the interrogation room, research shows that people who are mentally retarded are limited in their capacity to foresee the consequences of their actions when making legal decisions (for a review, see Fulero & Everington 2004). For example, Clare & Gudjonsson (1995) examined people's perceptions of a videotaped suspect who provides a true and false confession during an interrogation; they found that 38% of perceivers with intellectual disabilities, compared with only 5% of others, believed the suspect would be permitted to return home while awaiting trial. Additionally, only 52% believed that the suspect should obtain legal advice if innocent, compared with 90% of others.

The Innocence-Confession Paradox

On September 20, 2006, Jeffrey Mark Deskovic was released from a maximum-security prison in New York, where he spent 15 years for a murder he said he committed but did not. Why did he confess? "Believing in the criminal justice system and being fearful for myself, I told them what they wanted to hear," Deskovic said. Certain that DNA testing on the semen would establish his innocence, he added, "I thought it was all going to be okay in the end" (Santos 2006, p. A1).

Citing anecdotal and research evidence, Kassin (2005) proposed the hypothesis that innocence itself may put innocents at risk. Specifically, he suggested that people who stand falsely accused believe that truth and justice will prevail and that their innocence will become transparent to investigators, juries, and others. As a result, they cooperate fully with police, often failing to realize that they are suspects not witnesses, waiving their rights to silence and a lawyer, and speaking freely to defend themselves. Thus, although mock criminals vary their disclosures according to whether the interrogator seems informed about the evidence, innocents are uniformly forthcoming—regardless of how informed the interrogator seems to be (Hartwig et al. 2005, 2006).

To test the hypothesis that innocent people in particular are prone to cooperate, Kassin & Norwick (2004), in the study described above, assessed the extent to which people invoke or waive their precious *Miranda* rights (naturalistic studies indicate that roughly 80% of people waive their rights). Most innocent subjects said that they waived their rights precisely because they were innocent: "I did nothing wrong," "I had nothing to hide." The feeling of reassurance that accompanies innocence may stem from a generalized belief that the world is a just place in which human beings get what they deserve and deserve what they get (Lerner 1980). It may also stem from the "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 et al. 1998). Either way, it appears that *Miranda* warnings may not adequately protect the citizens who need it most—those accused of crimes they did not commit.

The naive mental state that accompanies innocence has provocative implications for the impact of various interrogation tactics. As an apparently benign alternative to outright lies about evidence, for example, many interrogators will bluff about the presence of evidence being processed without the additional assertion that this evidence implicates the suspect (e.g., police may state simply that biological evidence was sent to a laboratory for testing). In principle, this bluff should threaten the actual perpetrator with certain detection, forcing him or her to cooperate—yet it should not similarly affect the innocent suspect who has nothing to fear from the evidence. But does this tactic pose a risk to the innocent? Using the computer crash paradigm described above, Torkildson & Kassin (2008) designed a study to replicate the false evidence effect and to test the effects of bluffing on participants pushed to admit responsibility for a negative outcome they did not produce. In that study, all subjects were falsely accused of hitting a forbidden key after the computer allegedly crashed. Replicating the original Kassin & Kiechel (1996) study, the presentation of a false but incriminating eyewitness account significantly increased the confession rate, from 27% to 79%. In a bluff condition, in which subjects were told merely that the keystrokes were recorded but could not be accessed until the laboratory technician returned the following day, the false confession rate also significantly increased—to 87%. To the innocent person, the "threat" of proof implied by the bluff represents a promise of future exoneration that, paradoxically, makes it easier to confess.

Alternative Approaches to Interrogation

In light of the numerous false confession cases that have surfaced in recent years, researchers and policy makers are wondering if the current, highly confrontational approach to interrogation is flawed and whether it is possible to reform current practices without undermining police work. Toward this end, recent history in Great Britain is instructive. Several years ago, after a number of high-profile false confessions, the British transitioned police from a classic interrogation to a process of "investigative interviewing," the primary purpose of which is fact finding, not the elicitation of confession. The Police and Criminal Evidence Act of 1984 (PACE; Home Office 1985) thus sought to reduce the use of psychological coercion. Evaluating the result of this initial change in

practice, Irving & McKenzie (1989) found that the use of psychologically manipulative tactics had significantly declined without an accompanying decline in the rate of self-incrimination. In 1993, the Royal Commission on Criminal Justice further reformed the practice of interrogation by proposing the PEACE model, using this mnemonic to describe the five parts of this approach: prepare and plan (i.e., organize the evidence and plan the interview), engage and explain (i.e., establish a rapport and communicate the purpose of the interview to the suspect), account (conduct a cognitive interview to get the compliant suspect to speak freely and use conversation management to open up the noncompliant suspect), closure (address discrepancies that may appear in the suspect's narrative account), and evaluate (compare the suspect's final statement to evidence to resolve inconsistencies and draw conclusions). For a full description, see Clarke & Milne (2001) and Williamson (2006).

On the question of whether investigative interviewing may prove an effective replacement for confrontational interrogation, some preliminary research evidence is encouraging. In Great Britain, naturalistic observation suggests that investigative interviews enable police to inculpate offenders by obtaining useful information from them (for a review, see Williamson 2006). Recent laboratory research has also suggested that this approach may be promising. In a series of laboratory experiments, interviewers more effectively exposed mock criminals as deceptive when they strategically withheld incriminating evidence than when they confronted the suspects with that evidence at the outset (Hartwig et al. 2005, 2006). More to the point, Rigoni & Meissner (2008) used the Russano et al. (2005) cheating paradigm described earlier and independently varied the use of accusatorial and inquisitorial methods of questioning. They found that the inquisitorial approach produced more diagnostic, surgically precise outcomes than the confrontational approach, lowering the rate of false confessions (to 17% from 40%) without producing a corresponding decrease in the rate of true confessions (which actually increased to 77% from 67%). Although more systematic research is needed, it seems that investigative interviewing offers a potentially effective alternative to the classic interrogation.

CONFESSION EVIDENCE IN COURT

Confession evidence is so potent that "the introduction of a confession makes the other aspects of a trial in court superfluous" (McCormick 1972, p. 316). This impact begins with the police, who often close investigations rather than pursue exculpatory evidence or other possible suspects (Leo & Ofshe 1998, Drizin & Leo 2004), and extends to prosecutors, who often maintain their beliefs in a confessor's guilt even after DNA evidence has established his or her innocence (Findley & Scott 2006, Hirsch 2007).

Part of the problem may be that confessions can taint other evidence. In one study, Dror & Charlton (2006) presented five experienced fingerprint experts with pairs of prints—one from a crime scene, the other from the suspect—from prior cases in which they had judged the prints to be matches or exclusions. The prints were accompanied either by no added information, by information that the suspect had confessed (suggesting a match), or by information that the suspect was in police custody at the time the crime was committed (suggesting an exclusion). The misinformation produced a change in 17% of the original, previously correct decisions. In a second study, Hasel & Kassin (2009) staged a theft and obtained photographic identification decisions from a large number of eyewitnesses who were present. One week later, individual witnesses were informed that the person they had identified denied guilt, or that he confessed, or that a specific other lineup member had confessed. In response to this disclosure, many witnesses went on to change their initial identifications when given the opportunity to do so—selecting the confessor and increasing their confidence in that decision. Among those who had correctly failed to make

an initial identification, half went on to do so when told of a confession.

Not surprisingly, confessions are especially devastating in the courtroom. When a suspect retracts his or her confession, pleads not guilty, and goes to trial, a judge determines whether the confession was voluntary and hence admissible as evidence. A jury, hearing the admissible confession, then determines whether the defendant is guilty beyond a reasonable doubt. But are people accurate judges of confessions? And what effect does this evidence have in the full context of a trial?

To assess whether police can distinguish between true and false confessions to actual crimes, Kassin et al. (2005) recruited male prison inmates to take part in a pair of videotaped interviews. Each inmate was asked to give both a true narrative confession to the crime for which he was incarcerated as well as a newly concocted false confession to a crime he did not commit that was skeletally described by the experimenter. Using this procedure, Kassin et al. compiled a videotape of ten different inmates, each giving a true or false confession to one of five crimes: aggravated assault, armed robbery, burglary, breaking and entering, and automobile theft. College students and police investigators judged these statements, and the results paralleled those described above for judgments of denials. Neither group exhibited a high level of accuracy, and the police were more confident in their performance. A signal detection analysis further revealed that police did not differ from students in their hit rate but committed significantly more false alarms. This response bias was most evident among those with extensive law enforcement experience and those specially trained in interviewing and interrogation. Presented to samples of lay people, these results were recently replicated in a study involving juvenile offenders (Honts & Kassin 2007).

Research on the net impact of confessions at trial is not more encouraging. Mock jury studies have shown that confessions have more impact than other potent forms of evidence and that people do not fully discount confessions even when they perceive the confessions to have been coerced (Kassin & Neumann 1997). In one study, for example, mock jurors were heavily influenced by a defendant's confession—even if it was indisputably induced by an explicit and unlawful promise of leniency (Kassin & Wrightsman 1980). In a second study, mock jurors were influenced by an indirect or "secondary confession" reported by an accomplice or jailhouse informant—even when told that this cooperating witness had an incentive to claim that the defendant had confessed (Neuschatz et al. 2008).

In a mock jury experiment that well illustrates the power of confessions, Kassin & Sukel (1997) presented subjects with one of three versions of a murder trial transcript. In a low-pressure version, the defendant was said to have confessed to police immediately upon questioning. In a high-pressure version, participants read that the suspect was in pain and interrogated aggressively by a detective who waved his gun in a menacing manner. A control version contained no confession in evidence. Presented with the high-pressure confession, participants appeared to respond in the legally prescribed manner. 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. This increase occurred even when subjects were specifically admonished to disregard confessions they found to be coerced. This point concerning the power of confession evidence is bolstered by archival analyses of actual cases, which show that when proven 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 & Leo (2004) to describe confessions 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).

Increasing numbers of police departments in the U.S. are now videotaping entire

interrogations, a practice that is presumed to deter interrogators from using highly coercive tactics, disable frivolous defense claims of police coercion, and increase the fact finding accuracy of trial judges and juries by providing a full and accurate record of the transaction (see Geller 1993, Drizin & Reich 2004, Sullivan 2004, The Justice Project 2007). In light of this development, researchers have also sought to examine how juries are affected by these tapes. In particular, researchers have examined the effects of camera angles. In a series of studies initiated by Lassiter & Irvine (1986), people have been shown mock interrogations from three different camera angles so that the suspect only, the interrogator only, or both were salient. Consistently, lay observers who were focused on the suspect judged the situation as less coercive than those focused on the interrogator or on both parties. By directing visual attention toward the accused, the camera can thus lead jurors to underestimate the pressures brought to bear by the "hidden" detective (Lassiter et al. 1992). Additional studies have confirmed that people are more attuned to the situational factors that prompt confessions whenever the interrogator is on camera than when the focus is solely on the suspect (Lassiter & Geers 2004, Lassiter et al. 2001). Under these more 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 et al. 2002). Interestingly, experienced trial judges are similarly influenced by this variation in camera perspective (Lassiter et al. 2007).

FUTURE DIRECTIONS

In the wake of mounting numbers of DNA exonerations, roughly one-quarter of which involved false confessions, law and social science researchers have actively sought to understand (*a*) the processes by which police interview crime suspects in an effort to distinguish the truth tellers from the liars; (*b*) the interrogation tactics that increase the tendency to confess among offenders and innocents alike; and (*c*) the accuracy with which judges, juries, and other decision makers within the legal system evaluate confession evidence in court. In addition, research has focused on the variability in language and practical utility of *Miranda* rights; on how juvenile suspects may be uniquely vulnerable and unprotected inside the interrogation room; on the phenomenology of innocence and how it may put innocents at risk to waive their rights and confess, even in the face of apparently benign interrogation practices; and on the effects of videotaping full interrogations, as opposed to mere confessions, for presentation in court.

Having identified a number of problems, the research community is poised in the coming years to test and propose possible improvements. In a truly collaborative effort that would bring together law enforcement professionals, prosecutors, defense lawyers, judges, social scientists, and policy makers, new methods of interviewing and interrogating suspects and presenting their statements in court should be assessed. In principle, all parties would agree that the surgical objective throughout this investigatory chain of events is to secure outcomes that are diagnostic—namely, confessions from and the conviction of offenders but not the innocent. Hence, empirical data are needed, particularly from laboratory interrogation paradigms that independently vary both guilt and innocence and establish causal connections to the diagnosticity of outcomes. In addition, field research is needed to assess how the videotaping of entire interrogations affects police, suspects, the process of interrogation, and ultimately the accuracy with which judges and juries evaluate confession evidence.

Finally, social scientists are often called as consultants in cases involving disputed confessions, at times testifying as experts at suppression hearings and trials. In Great Britain, experts have had substantial recent impact within the courts. In the United States, however, judges serve as active gatekeepers of expert testimony by ascertaining whether an individual expert, if qualified, offers scientific, technical, or other specialized knowledge that is reliable (*Daubert v. Merrell Dow Pharmaceuticals*

1993) or generally accepted within the discipline (*Frye v. United States* 1923)—and, in either case, that will assist the trier of fact (*Fed. Rules Evidence* 2006, Rule 702). To address this latter question of whether juries would benefit from an expert's testimony on confessions, researchers must delve into the realm of commonsense psychology to assess what jurors know about the processes of interviewing and interrogation and, more importantly, their psychological and behavioral effects on people accused of crimes.

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