Police-Induced Confessions: Risk Factors and Recommendations

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Abstract

Recent DNA exonerations have helped shed light on the problem of false confessions and the empirical fact that innocent people sometimes confess to crimes they did not commit. Drawing on past and current police practices, laws concerning the admissibility of confession evidence in court, relevant core principles of psychology, and forensic studies involving an array of empirical methodologies, this White Paper summarizes much of what we know about police-induced confessions. AS part of this review, we identify dispositional suspect characteristics (e.g., adolescence; intellectual disability; mental illness, and certain personality traits), interrogation tactics (e.g., excessive interrogation time; presentations of false evidence; minimization), and the phenomenology of innocence (e.g., the tendency to waive *Miranda* rights) that can influence the reliability of confessions, as well as their effects on judges, juries, and other decision makers. This article concludes with a strong recommendation for the mandatory videotaping of interrogations and considers other possibilities for the reform of interrogation practices and the protection of vulnerable suspect populations.

Police-Induced Confessions: Risk Factors and Recommendations

In recent years, a disturbing number of high-profile cases, such as the Central Park jogger case, have surfaced involving innocent people who had confessed and were convicted at trial, only later to be exonerated (Drizin & Leo, 2004; Gudjonsson, 1992, 2003; Kassin, 1997; Kassin & Gudjonsson, 2004; Lassiter, 2004; Leo & Ofshe, 1998). Although the precise incidence rate is not known, research suggests that false confessions and admissions are present in 15 to 20 percent of all DNA exonerations (Garrett, 2008; Scheck, Neufeld, & Dwyer, 2000; http://www.innocenceproject.org/). Moreover, because this sample does not include those false confessions that are disproved before trial, those that result in guilty pleas, those in which DNA evidence is not available, those given to minor crimes that receive no post-conviction scrutiny, and those in juvenile proceedings that contain confidentiality provisions, the cases that are discovered most surely represent the tip of an iceberg.

In this new era of DNA exonerations, researchers and policy makers have come to realize the enormous role that psychological science can play in the study and prevention of wrongful convictions. In cases involving wrongfully convicted defendants, the most common reason (found in three-quarters of the cases) has been eyewitness misidentification. Eyewitness researchers have thus succeeded at identifying the problems and proposing concrete reforms. Indeed, following upon an AP-LS White Paper on the subject (Wells, Small, Penrod, Malpass, Fulero, & Brimacombe, 1998), the U.S. Department of Justice assembled a working group of research psychologists, prosecutors, police officers, and lawyers, ultimately publishing guidelines for law enforcement on

how to minimize eyewitness identification error (Technical Working Group for Eyewitness Evidence, 1999; see Doyle, 2005; Wells et al., 2000). While other problems have been revealed—for example, involving flaws in various forensic sciences (see Faigman, Kaye, Saks, & Sanders, 2002), the number of cases involving confessions—long considered the "gold standard" in evidence—has proved surprising (http://www.innocenceproject.org/).

Wrongful convictions based on false confessions raise serious questions concerning a chain of events by which innocent citizens are judged deceptive in interviews and misidentified for interrogation; waive their rights to silence and to counsel; and are induced into making false narrative confessions that form a sufficient basis for subsequent conviction. This White Paper summarizes much of what we know about this phenomenon. It draws on core psychological principles of influence as well as relevant forensic psychology studies involving an array of methodologies. It identifies various risk factors for false confessions, especially in police interviewing, interrogation, and the elicitation of confessions. It also offers recommendations for reform.

The objectives of this White Paper are threefold. The first is to review the state of the science on interviewing and interrogation by bringing together a multidisciplinary group of scholars from three perspectives: (1) clinical psychology, focused on individual differences in personality and psychopathology; (2) experimental psychology (focused on the influence of social, cognitive, and developmental processes); and (3) criminology (focused on the empirical study of criminal justice as well as criminal law, procedure, and legal practice). Our second objective is to identify the dispositional characteristics (e.g., traits associated with *Miranda* waivers, compliance, and suggestibility; adolescence;

mental retardation; psychopathology) and situational-interrogation factors (e.g., prolonged detention and isolation; confrontation; presentations of false evidence; minimization) that influence the voluntariness and reliability of confessions. Our third objective is to make policy recommendations designed to reduce both the likelihood of police-induced false confessions and the likelihood of wrongful convictions based on these confessions.

Background

The pages of American legal history are rich in stories about false confessions. These stories date back to the Salem witch trials of 1692, during which about 50 women confessed to witchcraft, 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). Psychologists' interest as well can be traced to its early days as a science. One hundred years ago, in *On the Witness Stand*, Hugo Munsterberg (1908) devoted an entire chapter to the topic of "Untrue Confessions." In this chapter, he discussed the Salem witch trials, reported on a contemporary Chicago confession that he believed to be false, and sought to explain the causes of this phenomenon (e.g., he used such words as "hope," "fear," "promises," "threats," "suggestion," "calculations," "passive yielding," "shock," "fatigue," "emotional excitement," "melancholia," "auto-hypnosis," "dissociation," and "self-destructive despair").

DNA Exonerations and Discovery in the U.S.

In 1989, Gary Dotson was the first wrongfully convicted individual to be proven innocent through the then-new science of DNA testing. Almost two decades later more than 200 individuals have been exonerated by post-conviction DNA testing and released

from prison, some from death row. In 15 to 20 percent of these cases, police-induced false confessions were involved (Garrett, 2008; www.innocenceproject.org). A disturbing number of these have occurred in high profile cases, such as New York City's Central Park Jogger case, where five false confessions were taken within a single investigation. In that case, five teenagers confessed during lengthy interrogations to the 1989 brutal assault and rape of a young woman in Central Park. Each boy retracted his statement immediately upon arrest, saying he had confessed because 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, accurately detailed, that was confirmed by DNA evidence (People of the State of New York v. Kharey Wise et al., 2002).

Post-conviction DNA tests and exonerations have offered a window onto the causes of wrongful conviction. Researchers and legal scholars have long documented the problem and its sources of error (Borchard, 1932; Frank & Frank, 1957; see Leo, 2005 for a review). Yet criminal justice officials, commentators and the public have tended until recently to be highly skeptical of its occurrence, especially in death penalty cases (Bedau & Radelet, 1987). The steady stream of post-conviction DNA exonerations in the last two decades has begun to transform this perception. Indeed, these cases have established the leading causes of error in the criminal justice system to be eyewitness misidentification, faulty forensic science, false informant testimony, and police-elicited false confessions (Garrett, 2008).

The Problem of False Confessions

A false confession is an admission to a criminal act – usually accompanied by a narrative of how and why the crime occurred – that the confessor did not commit. False

confessions are difficult to discover because neither the state nor any organization keeps records of them, and they are not usually publicized. Even if they are discovered, false confessions are hard to establish because of the difficulty of proving the confessor's innocence. The literature on wrongful convictions, however, shows that there are several ways to determine whether a confession is false. Confessions may be deemed false when: (1) 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); (2) additional evidence shows 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); (3) the real perpetrator, having no connection to the defendant, is apprehended and linked to the crime (e.g., by intimate knowledge of non-public crime details, ballistics or physical evidence); and (4) 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).

Drizin and Leo (2004) recently analyzed 125 cases of proven false confession 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 the real perpetrator was identified (74%) or that new scientific evidence was discovered (46%). With respect to personal vulnerabilities, the sample was younger than the total population of murderers and rapists (63% of false confessors were under the age of 25; 32% were under 18). In addition, 22% were mentally retarded, and 10% had a diagnosed mental illness. Surprisingly, multiple false confessions to the same crime were

obtained in 30% of the cases, wherein one false confession was used to prompt others. In total, 81% of false confessors in this sample whose cases went to trial were wrongfully convicted.

Although other researchers have also documented false confessions in recent years, there is no known incidence rate, and to our knowledge empirically based estimates have ever been published. There are several reasons why an incidence rate cannot be determined. First, researchers cannot identify the universe of false confessions because no governmental or private organization keeps track of this information. As noted earlier, the sample of discovered cases is thus incomplete. Second, even if one could identify a non-random set of hotly contested and possibly false confessions, it is often difficult if not impossible as a practical matter to obtain the primary case materials (e.g., police reports, pretrial and trial transcripts; electronic recordings of the interrogations) needed to determine "ground truth" with sufficient certainty to prove that the confessor is innocent. Also, it is important to note that although most case studies are based in the United States and England, proven false confessions have been documented in countries all over the world—including Canada (CBC News, August 10, 2005), Norway (Gudjonsson, 2003), Holland (Santtila, Alkiora, Ekholm, & Niemi, 1999), Germany (Otto, 2006), (Sigurdsson & Gudjonsson, 2004), Ireland (Inglis, 2004), Australia (Egan, 2006), New Zealand (Sherrer, 2005), China (Kahn, 2005), and Japan (Onishi, 2007).

For estimating the extent of the problem, self-report methods have also been used. Sigurdsson and Gudjonsson (2001) conducted two 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, a pattern that the authors saw a part of the criminal lifestyle. In a more recent study of Icelandic inmates, the rate of self-reported false confessions had increased (Gudjonsson, Sigurdsson, Einarsson, Bragason, & Newton, in press). 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. 2004b; Gudjonsson et al., 2006; Steingrimsdottir et al., 2007) and 1 to 2% for older University students (Gudjonsson et al. 2004a). 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, Leo, Meissner, Richman, Colwell, Leach, & La Fon, 2007). Retrospective self-reports and observer estimates are subject to various cognitive and motivational biases and should be treated with caution as measures of a false confession rate. In general, however, they reinforce the wrongful conviction data indicating that a small but significant minority of innocent people confess under interrogation.

Police Interrogations in Context

The practices of interrogation and the elicitation of confessions are subject to historical, cultural, political, legal, and other contextual influences. Indeed, although this article is focused on confessions to police within in a criminal justice framework, it is important to note that similar processes occur, involving varying degrees of pressure, within the disparate frameworks of military intelligence gathering and corporate loss-prevention investigations. Focused on criminal justice, we examine American interrogation practices of the past and present; the role played by *Miranda* rights; the

admissibility and use of confession evidence in the courts; and current practices not only in the U.S. but in other countries as well.

"Third Degree" Practices of the Past

From the late nineteenth century through the 1930s, American police routinely employed "third degree" methods of interrogation – inflicting physical or mental pain and suffering to extract confessions and other types of information from crime suspects. These techniques ranged from the direct and explicit use of physical assaults to tactics that were both physically and psychologically coercive to lesser forms of duress. Among the most commonly used "third degree" techniques were physical violence (e.g., beating, kicking or mauling suspects); torture (e.g., simulating suffocation by holding a suspect's head in water, putting lighted cigars or pokers against a suspect's body); hitting suspects with a rubber hose (which seldom left marks); prolonged incommunicado confinement; deprivations of sleep, food and other needs; extreme sensory discomfort (e.g., forcing a suspect to stand for hours on end, shining a bright, blinding light on the suspect); and explicit threats of physical harm (for a review, see Leo, 2004). Third degree methods were varied and commonplace (Hopkins, 1931), resulting in large numbers of coerced false confessions (Wickersham Commission Report, 1931).

The use of third degree methods declined precipitously from the 1930s through the 1960s. They have long since become the exception rather than the rule in American police work, having been replaced by interrogation techniques that are more professional and psychologically oriented. The twin pillars of modern interrogation are behavioral lie-detection methods and psychological interrogation techniques, both of which police have developed and memorialized in interrogation training manuals. By the middle of the

1960s, police interrogation practices had become entirely psychological in nature (Wald, et al., 1967). The President's Commission on Criminal Justice and the Administration of Justice declared in 1967: "Today the third degree is virtually non-existent" (Zimring & Frase, 1979, p. 132). Still, as the United States Supreme Court recognized in *Miranda v. Arizona* (1966), psychological interrogation is inherently compelling, if not coercive, because it relies on sustained pressure, manipulation, trickery and deceit.

Current Law Enforcement Objectives and Practices in the U.S.

American police typically receive brief instruction on interrogation in the academy and then more sustained and specialized training when promoted from patrol to detective. Interrogation is an evidence-gathering activity that is supposed to occur after detectives have conducted an initial investigation and determined, to a reasonable degree of certainty, that the suspect to be questioned committed the crime. The purpose of interrogation is therefore not to discern the truth, determine if the suspect committed the crime, or evaluate his or her denials. Rather, police are trained to interrogate only those suspects whose guilt they presume on the basis of their initial investigation (Gordon and Fleisher, 2006; Inbau, Reid, Buckley, & Jayne, 2001). Hence, the single-minded purpose of interrogation is to elicit incriminating statements, admissions, and perhaps a full confession, in order to assist the prosecutor in securing a conviction (Leo, 2008).

Designed to overcome the anticipated resistance of individual suspects who are presumed guilty, police interrogation is stress-inducing by design—structured to promote a sense of isolation and increase the anxiety and despair associated with denial relative to confession. To achieve these goals, police employ a number of tactics. As described in Inbau et al.'s (2001) *Criminal Interrogation and Confessions*, the most influential approach

is the so-called Reid technique (named after John E. Reid who, along with Fred Inbau, developed this approach in the 1940's). First, 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, the interrogator confronts the suspect with accusations of guilt, assertions that may be bolstered by evidence, real or manufactured, and refuses to accept alibis and denials. On the other hand, the interrogator offers sympathy and morally justification, introducing "themes" that minimize the crime and lead suspects to see confession as an expedient means of escape. The use of this technique has been documented in naturalistic observational studies (Wald et al., 1967; Simon, 1991; Leo, 1996b; Feld, 2006b) and in recent surveys of North American police investigators (Kassin et al., 2007; Meyer & Reppucci, 2007).

Miranda Warnings, Rights, and Waivers

One of the U.S. legal system's greatest efforts to protect suspects from conditions that might produce involuntary and unreliable confessions was the U.S. Supreme Court opinion in *Miranda v. Arizona* (1966). The Court was chiefly concerned with cases in which the powers of the state, represented by law enforcement, threatened to overbear the will of citizen suspects, thus threatening their Constitutional right to avoid self-incrimination.

In *Miranda,* the Court offered a remedy, requiring that police officers had to inform suspects of their rights to remain silent and to the availability of legal counsel prior to confessions. This requirement aimed to strike a balance against the inherently threatening power of the police in relation to the disadvantaged position of the suspect, thus reducing

coercion of confessions. In cases involving challenges to the validity of the waiver of rights, courts were to apply a test regarding the admissibility of the confession at trial. Statements made by defendants would be inadmissible if a waiver of the rights to silence and counsel was not made "voluntarily, knowingly and intelligently." One year after the *Miranda* decision, *In re Gault* (1967) extended these rights and procedures to youth when they faced delinquency allegations in juvenile court.

Forty years later, there is no research evidence that *Miranda* and *Gault* achieved their ultimate objective. Police officers routinely offer the familiar warnings to suspects prior to taking their statements. But research has not unequivocally determined whether confessions became more or less likely, are any more or less reliable, or are occurring under any more or less "voluntary, knowing and intelligent" conditions than in the years prior to *Miranda*. Several years ago, Paul Cassell, an outspoken critic of *Miranda*, had maintained (based on pre-post studies as well as international comparisons) that the confession and conviction rates have dropped significantly as a direct result of the warning and waiver requirements, thus triggering the release of dangerous criminals (Cassell, 1996a, 1996b; Cassell & Hayman, 1996). Yet others countered that his analysis was based on selective data gathering methods and unwarranted inferences (Donahue, 1998; Feeney, 2000; Thomas and Leo, 2002); that these declines, if real, were insubstantial (Schulhofer, 1996); that four out of five suspects waive their rights and submit to questioning (Leo, 1996a, 1996b); and that the costs to law enforcement were 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, 1996c; Thomas, 1996).

In recent years, the U.S. Supreme Court has upheld the basic warning-and-waiver requirement (*Dickerson v. United States*, 2000)—for example, refusing to accept confessions given after a warning that was tactically delayed to produce an earlier inadmissible statement (*Missouri v. Seibert*, 2004). Practically speaking, however, research has suggested that the Court's presumption concerning the protections afforded by *Miranda* warnings is questionable. At minimum, a valid waiver of rights requires that police officers provide suspects an understandable description of their rights and that suspects must understand these warnings in order to waive them validly. What empirical evidence do we have that *Miranda's* procedural safeguards produce these conditions?

First, the *rights* of which suspects must be informed were clearly defined in Miranda, but the *warnings* were not. The *Miranda* decision included an appendix wherein the Court offered an example of the warnings that were suggested, but police departments were free to devise their own warnings. A recent study examined 560 *Miranda* warning forms used by police throughout the U.S. (Rogers et al., 2007b). A host of variations in content and format were identified, and metric analysis of their wording revealed reading-level requirements ranging from third-grade level to the verbal complexity of postgraduate textbooks (see Kahn, Zapf & Cooper, 2006, for similar results; also see Rogers et al., 2008). Moreover, *Miranda* warning forms varied considerably in what they conveyed. For example, only 32% of the forms told suspects that legal counsel could be obtained without charge. Thus many warning forms raise serious doubts about the knowing and intelligent waiver of rights by almost any suspect who is "informed" by them.

Second, studies have repeatedly shown that a substantial proportion of adults with mental disabilities, and "average" adolescents below age 16 have impaired understanding of

Miranda warnings when they are exposed to them. Even adults and youth who understand them sometimes do not grasp their basic implications. Many of these studies have examined actual adult or juvenile defendants, using reliable procedures that allow the quality of an individual's understanding to be scored according to specified criteria. For example, do people after warnings factually understand that "I don't have to talk" and that "I can get an attorney to be here now and during any questioning by police?" To answer this question, respondents have been examined in the relatively benign circumstance of a testing session with a researcher rather than in the context of an accusatory, highly stressful police interrogation using standardized *Miranda* warnings that have about an average sixth to seventh grade reading level. Thus the results obtained in these studies represent people's grasp of the *Miranda* warnings under relatively favorable circumstances. Under these conditions, average adults exhibit a reasonably good understanding of their rights (Grisso, 1980, 1981). But studies of adults with serious mental disorders (Rogers et al., 2007a) or with mental retardation (Clare & Gudjonsson, 1991; Everington & Fulero, 1999; Fulero & Everington, 1995; O'Connell, Garmoe & Goldstein, 2005) have found substantial impairments in understanding of *Miranda* warnings compared to non-impaired adult defendants.

Many studies have examined adolescents' understanding of *Miranda* warnings, and the results have been very consistent (Abramovitch, Higgins-Biss & Biss, 1993; Abramovitch, Peterson-Badali & Rohan, 1995: Colwell, Cruise, Guy et al., 1995; Goldstein, Condie, Kalbeitzer et al., 2003; Grisso, 1980, 1981; Redlich, Silverman & Steiner, 2003; Viljoen, Klaver & Roesch, 2005; Viljoen & Roesch, 2005; Wall & Furlong, 1985). In one comprehensive study, 55% of 430 youth of ages 10 to 16 misunderstood one or more of the

Miranda warnings (for example, "That means I can't talk until they tell me to"). Across these studies, the understanding of adolescents ages 15-17 with near-average levels of verbal intelligence tends not to have been inferior to that of adults. But youth of that age with intelligence scores below 85, and average youth below age 14, performed much poorer, often misunderstanding two or more of the warnings.

Some studies have shown that many defendants, especially adolescents, who seem to have an adequate factual understanding of *Miranda* warnings do not grasp their relevance to the situation they are in (e.g., Grisso, 1980, 1981; Viljoen, Zapf & Roesch, 2007). For example, one may factually understand that "I can have an attorney before and during questioning" yet not know what an attorney is or what role an attorney would play. Others may understand the attorney's role but disbelieve that it would apply in their own situation—as when youth cannot imagine that an adult would take their side against other adults, or when a person with paranoid tendencies believes that any attorney, even his own, would oppose him.

The ability to grasp the relevance of the warnings beyond having a mere factual understanding of what they say is sometimes referred to as having a "rational understanding" or "appreciation" of the warnings. Many states, however, require only a factual understanding of *Miranda* rights for a "knowing and intelligent" waiver (e.g., *People v. Daoud*, 2000). In those states that apply a strict factual understanding standard, youth who technically understand the warnings (e.g., "I can have an attorney to talk to" or "I can stay silent") but harbor faulty beliefs that may distort the significance of these warnings ("An attorney will tell the court whatever I say" or "You have to tell the truth in court, so eventually I'll have to talk if they want me to") are considered capable of having made a

valid waiver, even if they have no recognition of the meanings of the words or a distorted view of their implications.

Even among those with adequate understanding, suspects will vary in their capacities to "think" and "decide" about waiving their rights. Whether decision-making capacities are deemed relevant for a "voluntary, knowing and intelligent" waiver will depend on courts' interpretations of "intelligent" or "voluntary." Several studies have thus examined the decision-making process of persons faced with hypothetical *Miranda* waiver decisions.

Studies of adolescents indicate that youth under age 15 on average perform differently from older adolescents and adults. They are more likely to believe that they should waive their rights and tell what they have done, partly because they are still young enough to believe that they should never disobey authority. Studies have also shown that they are more likely to decide about waiver on the basis of the potential for immediate negative consequences—for example, whether they will be permitted to go home if they waive their rights—rather than considering the longer-range consequences associated with penalties for a delinquency adjudication (Grisso, 1981; Grisso, Steinberg, Woolard et al., 2003). Young adolescents presented with hypothetical waiver decisions are less likely than older adolescents to engage in reasoning that involves adjustment of their decisions based on the amount of evidence against them or the seriousness of the allegations (Abramovitch, Peterson-Badali & Rohan, 1995). These results regarding the likelihood of immature decision making processes are consistent with research on the development of psychosocial abilities of young adolescents in everyday circumstances (Steinberg & Caufmann, 1995) and

other legal contexts (Grisso & Schwartz, 2000; Owen-Kostelnik, Reppucci, & Meyer, 2006).

Other *Miranda* decision-making studies have examined the suggestibility of persons with disabilities (Clare & Gudjonsson, 1995: Everington & Fulero, 1999; O'Connell, Garmoe & Goldstein, 2005) and adolescents (Goldstein, Condie, Kalbeitzer et al., 2005; Redlich, Silverman & Steiner, 2003; Singh & Gudjonsson, 1991). Suggestibility refers to a predisposition to accept information communicated by others and to incorporate that information into one's beliefs and memories. In general, these studies indicate that persons with mental retardation and adolescents in general are more susceptible to suggestion in the context of making hypothetical waiver decisions, and that greater suggestibility is related to poorer comprehension of the warnings. These results take on special significance in light of observational studies of police behavior when obtaining *Miranda* waiver decisions from adolescents (Feld, 2006a, 2006b) and adults (Leo, 1996b). As described elsewhere in this paper, police officers often approach suspects with "friendly" suggestions regarding both the significance of the *Miranda* waiver procedure and their decision. In either case, results indicate that adults with disabilities and adolescents in general are prone to adjust their behaviors and decisions accordingly.

In a formal sense, whether one waives his or her rights voluntarily, knowingly and intelligently does not have a direct bearing on the likelihood of false confessions (Leo, 1998; White, 2001). The decision to waive one's rights in a police interrogation need not lead to a confession, much less a false confession. Nevertheless, research cited earlier regarding the lack of attentiveness of persons with disabilities and adolescents to attend to long-range consequences suggests an increased risk that they would also comply with requests for a

confession—whether true of false—in order to obtain the presumed short-term reward (e.g., release to go home). In addition, some studies have found that poor comprehension of *Miranda* warnings is itself predictive of a propensity to give false confessions (Clare & Gudjonsson, 1995; Goldstein, Condie, Kalbeitzer et al., 2003). Sometimes this stems from a desire to comply; at other times it appears to be related to a naïve belief that one's actual innocence will eventually prevail—a belief that is not confined to adolescents or persons with disabilities (Kassin & Norwick, 2004).

Finally, many states require the presence of a parent or other interested adult when youth make decisions about their *Miranda* rights (Oberlander, Goldstein & Goldstein, 2003). These rules are intended to offer youth assistance in thinking through the decision, while recognizing that caretakers cannot themselves waive their children's rights in delinquency or criminal investigations. Studies have shown, however, that the presence of parents at *Miranda* waiver events typically does not result in any advice at all or, when it does, provides added pressure for the youth to waive rights and make a statement (Grisso & Ring, 1979). The presence of parents may be advisable, but it does not offer a remedy for the difficulties youth face in comprehending or responding to requests for a waiver of their rights.

In summary, research suggests that adults with mental disabilities, as well as adolescents, are particularly at risk when it comes to understanding the meaning of *Miranda* warnings. In addition, they often lack the capacity to weigh the consequences of rights waiver, and are more greatly susceptible to waiving their rights as a matter of mere compliance with authority.

Overview of Confession Evidence in the Courts

American courts have long treated confession evidence with both respect and skepticism. Judicial respect for confessions emanates from the power of confession evidence and the critical role that confessions play in solving crimes. The U.S. Supreme Court has recognized that confession evidence is perhaps the most powerful evidence of guilt admissible in court (*Miranda v. Arizona,* 1966)—so powerful, in fact, that "the introduction of a confession makes the other aspects of a trial in court superfluous, and the real trial, for all practical purposes, occurs when the confession is obtained" (*Colorado v. Connelly*, 1986, p. 182 citing McCormick, 1972, p. 316).

Judicial skepticism of confession evidence stems from the historical fact that many law enforcement officers, aware that confession evidence can assure conviction, have abused their power in the interrogation room. As the U.S. Supreme Court stated in *Escobedo v. Illinois* (1964): "We have learned the lesson of history, ancient and modern, that a system of criminal law enforcement which comes to depend on the 'confession' will, in the long run, be less reliable and more subject to abuses than a system which depends on extrinsic evidence independently secured through skillful investigation" (pp. 488-489).

Judicial concern with juror over-reliance on confession evidence gave rise to a series of evolving rules designed to curb police abuses in the interrogation room, exclude unreliable confessions from trial, and prevent wrongful convictions. These doctrines, which developed both in the common law of evidence and under the Constitution as interpreted by the U.S. Supreme Court, fell into two distinct sets of legal rules: corroboration rules and the voluntariness rules (Ayling, 1984; Leo et al., 2006).

Corroboration rules. The corroboration rule, which requires that confessions be corroborated by independent evidence, was the American take on the English rule known as the *corpus delicti* rule. *Corpus delicti* literally means "body of the crime"—that is, the material substance upon which a crime has been committed" (Black's Law Dictionary, 1979; p. 310). The rule was founded at common law in England in the wake of *Perry's Case,* a seventeenth century case in which a mother and two brothers were convicted and executed based upon a confession to a murder that was later discovered to be false when the supposed murder victim turned up alive (Leo et al., 2006). America's version of *Perry's Case* is the infamous 1819 case of Stephen and Jesse Boorn, two brothers who were convicted and sentenced to death in Manchester, Vermont for the murder of their brother-in-law Russell Colvin. Fortunately for the two men, both of whom had confessed to the killing under intense pressure from authorities, their lawyers located Colvin alive before their hangings took place (Warden, 2005).

In American homicide cases, in response to *Boorn*, the rule came to mean that no individual can be convicted of a murder without proof that a death occurred, namely the existence of a "dead body." As the rule evolved in the courts over time, it was applied to all crimes and required that before a confession could be admitted to a jury, prosecutors had to prove: (1) that a death, injury, or loss had occurred, and (2) that criminal agency was responsible for that death, injury, or loss (Leo et al., 2006). The rule was designed to serve three purposes: to prevent false confessions, to provide incentives to police to continue to investigate after obtaining a confession, and to safeguard against the tendency of juries to view confessions as dispositive of guilt regardless of the circumstances under which they were obtained (Ayling, 1984).

The *corpus delicti* rule does not require corroboration that the defendant committed the crime, nor does it demand any proof of the requisite mental state or any other elements of the crime. Moreover, the rule only requires corroboration of the fact that a crime occurred; it does not require that the facts contained in the confession be corroborated. Given the relative ease of establishing the *corpus delicti* in most criminal cases (e.g. producing a dead body in a homicide case and showing that death was not self-inflicted or the result of an accident), and the weight that most jurors attach to confession evidence, prosecutors can still obtain many convictions from unreliable confessions. The rule thus makes it easier in some cases for prosecutors to convict both the guilty and the innocent (Leo et al., 2006).

At the same time, in a certain class of cases, the *corpus delicti* rule may bar the admission of reliable confessions. Because the rule requires that prosecutors prove that there be death or injury resulting from a criminal act, prosecutors may have a hard time getting confessions admitted when the evidence is unclear as to whether any injury had occurred (e.g. child molestation without physical evidence) or whether it resulted from an accident or natural causes as opposed to a criminal act (e.g. child death by smothering or Sudden Infant Death Syndrome; see Taylor, 2005).

For these reasons and others, the rule has been severely criticized. In *Smith v. United States* (1954), the U.S. Supreme Court criticized the *corpus delicti* rule for "serv[ing] an extremely limited function" (p. 153). The Court noted that the rule was originally designed to protect individuals who had confessed to crimes that never occurred but that it does little to protect against the far more frequent problem wherein a suspect confesses to a crime committed by someone else. In short, the rule did "nothing

to ensure that a particular defendant was the perpetrator of a crime" (*State v. Mauchley*, 2003, p. 483).

In place of the *corpus delicti* rule, the Supreme Court, in two decisions released on the same day—*Smith* and *Opper v. United States* (1954)—announced a new rule, dubbed the trustworthiness rule, which requires corroboration of the confession itself rather than the fact that a crime occurred. Under the trustworthiness rule, which was adopted by several states, the government may not introduce a confession unless it provides "substantial independent evidence which would tend to establish the trustworthiness of the confession" (*State v. Mauchley*, 2003, p. 48; citing Opper).

In theory, the trustworthiness standard is a marked improvement on the corpus delicti rule in its ability to prevent false confessions from entering the stream of evidence at trial. In practice, however, the rule has not worked to screen out false confessions. Because investigators sometimes suggest and incorporate crime details into a suspect's confession, whether deliberately or inadvertently, many false confessions appear highly credible to the secondhand observer. Without an electronic recording of the entire interrogation process, courts are thus left to decide a swearing contest between the suspect and the detective over the source of the details contained within the confession. Moreover, the quantum of corroboration in most jurisdictions that apply the trustworthiness doctrine is very low, allowing many unreliable confessions to go before the jury (Leo et al., 2006).

Rules prohibiting involuntary confession. Until the late eighteenth century, out-of-court confessions were admissible as evidence even if they were the involuntary product of police coercion. In 1783, however, in *The King v. Warrickshall,* an English

Court recognized the inherent lack of reliability of involuntary confessions and established the first exclusionary rule:

> Confessions are received in evidence, or rejected as inadmissible, under a consideration whether they are or are not intitled [sic] to credit. A free and voluntary confession is deserving of the highest credit, because it is presumed to flow from the strongest sense of guilt …but a confession forced from the mind by the flattery of hope, or by the torture of fear, comes in so questionable a shape…that no credit ought to be given it; and therefore it should be rejected (*King v. Warrickshall*, 1783; p. 234-35).

The basis for excluding involuntary confessions in *Warrickshall* was a concern that confessions procured by torture or other forms of coercion must be prohibited because of the risk that such tactics could cause an innocent person to confess. In other words, involuntary confessions were to be prohibited because they were unreliable. Following *Warrickshall*, in the late 1800's, the U.S. Supreme Court adopted this reliability rationale for excluding involuntary confessions in a series of decisions *(Hopt v. Utah*, 1884; *Sparf v. United States*, 1895; *Pierce v. United States*, 1896; *Wilson v. United States*, 1896).

The Supreme Court adopted a second rationale for excluding involuntary confessions in 1897, in *Bram v. United States.* In *Bram*, the Court for the first time linked the voluntariness doctrine to the Fifth Amendment's provision that "no person shall be compelled in any criminal case to be a witness against himself." This privilege against self-incrimination was not rooted in a concern about the reliability of confessions. Rather, its origins were grounded in the rule of *nemo tenetursepsum prodere* ("no one is

bound to inform on himself"), a rule dating back to the English ecclesiastical courts which sought to protect individual free will from state intrusion (Leo et al., 2006). The rule of *nemo tenetur,* which was adopted in the colonies and incorporated into the Fifth Amendment, applied only to self-incriminating statements in court, and had never been applied to extrajudicial confessions. By mixing two unrelated voluntariness doctrines, *Bram* rewrote history and provoked considerable confusion by courts and academics alike (Wigmore, 1970). Still, it gave birth to a new basis for excluding involuntary confession evidence–the protection of individual free will.

A third basis for excluding involuntary confessions began to emerge in 1936, in the case of *Brown v. Mississippi,* to deter unfair and oppressive police practices. In *Brown,* three black tenant farmers who had been accused of murdering a white farmer were whipped, pummeled, and tortured until they provided detailed confessions. The Court unanimously reversed the convictions of all three defendants, holding that confessions procured by physical abuse and torture were involuntary. The Court established the Fourteenth Amendment's due process clause as the constitutional test for assessing the admissibility of confessions in state cases. In addition to common law standards, trial judges would now have to apply a federal due process standard when evaluating the admissibility of confession evidence, looking to the "totality of the circumstances" to determine if the confession was 'made freely, voluntarily and without compulsion or inducement of any sort'"(*Haynes v. Washington*, 1963, quoting *Wilson v. United States*, 1896). As such, the Court proposed to consider personal characteristics of the individual suspect (e.g., age, intelligence, mental stability, prior contact with law

enforcement) as well as the conditions of detention and interrogation tactics that were used (e.g., threats, promises, lies).

This deterrence rationale, implied in *Brown,* was made even more explicit in *Haley v. Ohio,* a case involving a fifteen year old black boy who was questioned throughout the night by teams of detectives, isolated for three days, and repeatedly denied access to his lawyer (*Haley v. Ohio,* 1948). While the majority held that the confession was obtained "by means which the law should not sanction" (pp. 600-601), Justice Frankfurter, in his concurrence, went a step further, stating that the confession must be held inadmissible "[t]o remove the inducement to resort to such methods this Court has repeatedly denied use of the fruits of illicit methods" (p. 607).

As these cases suggest, the Supreme Court relied on different and sometimes conflicting rationales for excluding involuntary confessions throughout the twentieth century (Kamisar, 1963; White, 1998). It was not always clear which of the three justifications the Court would rely on when evaluating the voluntariness of a confession. Nevertheless, the Court did appear to designate certain police interrogation methods—including physical force, threats of harm or punishment, lengthy or incommunicado questioning, solitary confinement, denial of food or sleep, and promises of leniency—as presumptively coercive and therefore unconstitutional (White, 2001). The Court also considered the individual suspect's personal characteristics, such as age, intelligence, education, mental stability, and prior contact with law enforcement, in determining whether a confession was voluntary. The template of the due process voluntariness test thus involved a balancing of whether police interrogation pressures, interacting with a

suspect's personal dispositions, were sufficient to render a confession involuntary (Schulhofer, 1981).

The "totality of the circumstances" test, while affording judges flexibility in practice, has offered little protection to suspects. Without bright lines for courts to follow, and without a complete and accurate record of what transpired during the interrogation process, the end result has been largely unfettered and unreviewable discretion by judges. In practice, as Feld's (1984) research has shown, when judges apply the test, "they exclude only the most egregiously obtained confessions and then only haphazardly" (Feld, 1999, p.118). The absence of a litmus test has also encouraged law enforcement officers to push the envelope with respect to the use of arguably coercive psychological interrogation techniques (Penney, 1998). Unlike its sweeping condemnation of *physical* abuse in *Brown v. Mississippi*, the Court's overall attitude towards *psychological* interrogation techniques has been far less condemnatory. In particular, the Court's attitudes toward the use of maximization and minimization (Kassin and McNall, 1991) and the false evidence ploy and other forms of deception (Kassin & Kiechel, 1996)—techniques that have frequently been linked to false confessions (Kassin & Gudjonsson, 2004)—has been largely permissive. A discussion of some of these cases follows.

Cases addressing interrogation tactics: Maximization and minimization. Today's interrogators seek to manipulate a suspect into thinking that it is in his or her best interest to confess. In order to achieve this change in perceptions of subjective utilities, they use a variety of techniques, referred to broadly as "maximization" and "minimization" (Kassin & McNall, 1991). Maximization involves a cluster of tactics

designed to convey the interrogator's rock-solid belief that the suspect is guilty and that all denials will fail. Such tactics include making an accusation, overriding objections, and citing evidence, real or manufactured, to shift the suspect's mental state from confident to hopeless. Toward this end, it is particularly common for interrogators to communicate as a means of inducement, implicitly or explicitly, a threat of harsher consequences in response to the suspect's denials (Leo, 2001).

In contrast, minimization tactics are designed to provide the suspect with moral justification and face-saving excuses for having committed the crime in question. Using this approach, the interrogator offers sympathy and understanding; normalizes and minimizes the crime, often suggesting that he or she would have behaved similarly; and offers the suspect a choice of alternative explanations—for example, suggesting to the suspect that the murder was spontaneous, provoked, peer-pressured, or accidental rather than the work of a cold-blooded premeditated killer. As we will see later, research has shown that this tactic communicates by implication that leniency in punishment is forthcoming upon confession.

As the 1897 case of *Bram v. United States* demonstrates, minimization has been part of the arsenal of police interrogation tactics for over a century. In *Bram*, the authorities induced the defendant to confess based on the kind of unspoken promise that anchors the modern psychological interrogation: "Bram, I am satisfied that you killed the captain. But some of us here think you could not have done the crime alone. If you had an accomplice, you should say so, and not have the blame of this horrible crime on your own shoulders" (*Bram v. United States*, 1897, p. 539). This statement contained no direct threats or promises; rather, it combined elements of maximization (the interrogator's

stated certainty in the suspect's guilt) and minimization (the suggestion that he will be punished less severely if he confesses and names an accomplice). Using language that condemns the latter, the Supreme Court reversed Bram's conviction, holding that a confession "must not be extracted by any sort of threats or violence, nor obtained by any direct or implied promises, however slight" (pp. 542-543).

Although a strict interpretation of *Bram* seemed to suggest a ban on minimization, courts throughout the twentieth century followed a practice of evading, contradicting, disregarding, and ultimately discarding *Bram* (Hirsch, 2005). Briefly in the 1960's, it appeared that the Supreme Court was ready to revitalize *Bram* and to apply it broadly to the psychological interrogation techniques taught by such legendary police reformers as Chicago's Fred Inbau and John Reid. Indeed, the landmark case of *Miranda v. Arizona* (1966), described earlier, cited *Bram* and condemned the Reid technique and other tactics that "are designed to put the subject in a psychological state where his story is but an elaboration of what the police purport to know already—that he is guilty" (p. 450). This newfound concern with the impact of psychological interrogation tactics, however, was short-lived. In the immediate aftermath of *Miranda,* the Supreme Court adopted a more deferential attitude toward law enforcement in its confession jurisprudence. In particular, *Arizona v. Fulminante* (1991) in dicta may have sounded the death knell for *Bram.* Responding to a party's invocation of *Bram*, the Court casually remarked that "under current precedent [Bram] does not state the standard for determining the voluntariness of a confession" (p. 286).). However, White (1997) noted that "as Fulminante's holding indicates, some promises may be sufficient in and of themselves to render a confession

involuntary; other promises may or may not be permissible depending upon the circumstances" (p. 150).

Cases addressing interrogation tactics: Trickery and deception. The false evidence ploy is a controversial tactic occasionally used by police. Not all interrogation trainers approve of this technique (Gohara, 2006), the use of which has been implicated in the vast majority of documented police-induced false confessions (Kassin, 2005). In several pre-*Miranda* voluntariness cases, the U.S. Supreme Court recognized that deception can induce involuntary confessions, although the Court never held that such tactics would automatically invalidate a confession. In *Leyra v. Denno* (1954), for example, Leyra asked to see a physician because he was suffering from sinus problems and police brought in a psychiatrist who posed as a general physician. The Supreme Court held that the "subtle and suggestive" questioning by the psychiatrist amounted to a continued interrogation of the suspect without his knowledge. This deception and other circumstances of the interrogation rendered Leyra's confession involuntary. Similarly, in *Spano v. New York* (1959), the suspect considered one of the interrogating officers to be a friend. The Court held that the officer's false statements, in which he suggested that the suspect's actions might cost the officer his job, were a key factor in rendering the resulting confession involuntary. In *Miranda v. Arizona* (1966), the Supreme Court discussed the use of trickery and deception and noted that the deceptive tactics recommended in standard interrogation manuals fostered a coercive environment. Again, the Court did not specifically prohibit such tactics, choosing instead to offer suspects some relief from the coercive effect by empowering them with rights which could be used to bring interrogation to a halt. The criticism of deception may have fanned hopes

that the Court would deal a more direct blow to this controversial tactic in future cases. But such hopes were quickly quashed.

Three years later, in *Frazier v. Cupp* (1969), the Supreme Court addressed interrogation trickery and issued a decision that to this day has been interpreted by police and the courts as a green light to deception. In *Frazier*, police used a standard false evidence ploy—telling Frazier that another man whom he and the victim had been seen with on the night of the crime had confessed to their involvement. The investigating detective also used minimization, suggesting to Frazier that he had started a fight with the victim because the victim made homosexual advances toward him. Despite the use of these deceptive tactics, the Court held that Frazier's confession was voluntary. This ruling established that police deception by itself is not sufficient to render a confession involuntary. Rather, according to *Frazier*, police deception is but one factor among many that a court should consider. Some state courts have distinguished between mere false assertions, which are permissible, and the fabrication of reports, tapes, and other evidence—which is not. In the Florida case of *State v. Cayward* (1989), the defendant's confession was suppressed because police had typed up a phony crime laboratory report that placed Cayward's DNA on the victim. However, the court's concern was not that the manufactured evidence might prompt an innocent person to confess but that it might find its way into court as evidence. Similarly, New Jersey confessions were suppressed when produced by a fake, staged audiotape of an alleged eyewitness account (*State v. Patton*, 1993) and a fake crime lab report identifying the suspect's DNA at the crime scene (*State v. Chirokovskcic*, 2004). This is where the law remains today, despite numerous cautionary notes from academics and researchers on the use of deception (Gohara, 2006;

Gudjonsson, 2003; Kassin, 2005; Kassin & Gudjonsson, 2004; Skolnick & Leo, 1992; but see Slobogin, 2008).

Practices in England

Interrogations and confession evidence are regulated in England and Wales by the Police and Criminal Evidence Act of 1984 (PACE; Home Office, 1985), which became effective in January 1986. The Act is supplemented by five Codes of Practice, referred to as Codes A (on stop and search), B (entry and searches of premises), C (detention and questioning of suspects), D (on identification parades), and E (tape recording of interviews). The Codes provide guidance to police officers concerning procedures and the appropriate treatment of suspects. Code C is particularly relevant to issues surrounding "fitness to be interviewed," as it provides guidance "on practice for the detention, treatment and questioning of persons by police officers" (Home Office, 2003, p. 47).

The most important interview procedures set out in PACE and its Codes of Practice are that: Suspects who are detained at a police station must be informed of their legal rights; in any 24-hour period the detainee must be allowed a continuous period of rest of least eight hours; detainees who are vulnerable in terms of their age or mental functioning should have access to a responsible adult (known as an 'appropriate adult'), whose function is to give advice, further communication, and ensure that the interview is conducted properly and fairly; and all interviews shall be electronically recorded.

Compared to the approach taken in the United States (e.g., using the Reid technique), police interview practices in England are less confrontational. Williamson (2007) discussed in detail how psychological science has influenced the training of police officers and their interviewing practice, making it fairer and more transparent. Prior to

1992, police officers in Britain received no formal training and the chief purpose of interviewing suspects was to obtain confessions. Following some high profile miscarriages of justice, such as the "Guildford Four" and "Birmingham Six," the Association of Chief Police Officers for England and Wales (ACPO) published the first national training program for police officers interviewing both suspects and witnesses. This new approach was developed through a collaboration of police officers, psychologists and lawyers. The mnemonic PEACE was used to describe the five distinct parts of the new interview approach ("Preparation and Planning," "Engage and Explain," "Account," "Closure," and "Evaluate"). The theory underlying this approach, particularly in cases of witnesses, victims and cooperative suspects, can be traced to Fisher and Geiselman's (1992) work on the "Cognitive Interview" (Milne & Bull, 1999; for research evidence, see Clarke and Milne, 2001; Williamson, 2006).

Police-Induced False Confessions

As described earlier, the process of interrogation is designed to overcome the anticipated resistance of individual suspects who are presumed guilty and to obtain legally admissible confessions. The single-minded objective, therefore, is to increase the anxiety and despair associated with denial and reduce the anxiety associated with confession. To achieve these goals, police employ a number of tactics that involve isolating the suspect and then employing both negative and positive incentives. On the negative side, interrogators confront the suspect with accusations of guilt, assertions that are made with certainty and often bolstered by evidence, real or manufactured, and a refusal to accept alibis and denials. On the positive side, interrogators offer sympathy and moral justification, introducing "themes" that normalize and minimize the crime and

lead suspects to see confession as an expedient means of escape. In this section, we describe some core principles of psychology relevant to understanding the suspect's decision making in this situation; then we describe the problem of false confessions and the situational and dispositional factors that put innocent people at risk.

Types of False Confessions

Although it is not possible to calculate a precise incidence rate, it is clear that false confessions occur in different ways and for different reasons. Drawing on the pages of legal history, and borrowing from social-psychological theories of influence, Kassin and Wrightsman (1985) proposed a taxonomy that distinguished among three types of false confession: voluntary, coerced-compliant, and coerced-internalized (see also Kassin, 1997; Wrightsman & Kassin, 1993). This classification scheme has provided a useful framework for the study of false confessions and has since been used, critiqued, extended, and refined by others (Gudjonsson, 2003; Inbau et al., 2001; McCann, 1998; Ofshe & Leo, 1997a, 1997b).

Voluntary false confessions. Sometimes innocent people have claimed responsibility for crimes they did not commit without prompting or pressure from police. This has occurred in several high-profile cases. After Charles Lindbergh's infant son was kidnapped in 1932, 200 people volunteered confessions. When "Black Dahlia" actress Elizabeth Short was murdered and her body mutilated in 1947, more than 50 men and women confessed. In the 1980s, Henry Lee Lucas in Texas falsely confessed to hundreds of unsolved murders, making him the most prolific serial confessor in history. In 2006, John Mark Karr volunteered a confession, replete with details, to the unsolved murder of young JonBenet Ramsey. There are a host of reasons why people have volunteered false

confessions—such as 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 protect the actual perpetrator—the most prevalent reason for false admissions (Gudjonsson, Sigurdsson, & Einarsson, 2004; Sigurdsson & Gudjonsson, 1996, 1997; 2001). Radelet et al. (1992) described one case in which an innocent man confessed to a murder in order to impress his girlfriend. Gudjonsson (2003) described another case in which a man confessed to murder because he was angry at police for a prior arrest and wanted to mislead them 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 in order to escape a stressful situation, avoid punishment, or gain a promised or implied reward. Demonstrating the form of influence observed in classic studies of social influence (e.g., Asch, 1956; Milgram, 1974), this type of confession is an act of mere public compliance by a suspect who knows that he or she is innocent but comes to believe that the short-term benefits of confession relative to denial outweigh the long-term costs. Based on a review of a number of cases, Gudjonsson (2003) 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. The pages of legal history are filled with stories of compliant false confessions. In the 1989 Central Park jogger case described earlier, five teenagers confessed after lengthy interrogations. All immediately retracted their confessions but were convicted at trial and sent to prison—only to be exonerated thirteen years later (People of the State of New York v. Kharey Wise et al., 2002).

Internalized false confessions. In the third type of false confession, innocent but malleable suspects, told that there is incontrovertible evidence of their involvement, come not only to capitulate in their behavior, but also to believe that they may have committed the crime in question, sometimes confabulating false memories in the process. Gudjonsson and MacKeith (1982) argued that this kind of false confession occurs when people develop such a profound distrust of their own memory that they become vulnerable to influence from external sources. Noting that the innocent confessor's belief is seldom fully internalized, Ofshe and Leo (1997a) have suggested that the term "persuaded false confession" is a more accurate description of the phenomenon. The case of 14-year-old Michael Crowe, whose sister Stephanie was stabbed to death in her bedroom, illustrates this type of persuasion. After a series of interrogation sessions, during which time police presented Crowe with compelling false physical evidence of his guilt, he concluded that he was a killer, saying: "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 a jealous rage while "good Michael" blocked the incident from memory. The charges against Crowe were later dropped when a drifter in the neighborhood that night was found with Stephanie's blood on his clothing (Drizin & Colgan, 2004).

Relevant Core Principles of Psychology

Earlier we reviewed the tactics of a modern American interrogation and the ways in which the U.S. Supreme Court has treated these tactics with respect to the voluntariness and admissibility of the confessions they elicit. As noted, the goal of interrogation is to alter a suspect's decision making by increasing the anxiety associated with denial and reducing the anxiety associated with confession (for an excellent description of a suspect's decision-making process in this situation, see Ofshe & Leo, 1997).

Long before the first empirical studies of confessions were conducted, the core processes of relevance to this situation were familiar to generations of behavioral scientists. Dating back to Thorndike's (1911) law of effect, psychologists have known that people are highly responsive to reinforcement and subject to the laws of conditioning, and that behavior is influenced more by perceptions of short-term than long-term consequences. Of distal relevance to a psychological analysis of interrogation are the thousands of operant animal studies of reinforcement schedules, punishment, and appetitive, avoidance, and escape learning, as well as behavioral modification applications in clinics, schools, and workplaces. Looking through this behaviorist lens, it seems that interrogators have sometimes shaped suspects to confess to particular narrative accounts of crimes like they were rats in a Skinner box (see Skinner, 1938; Herrnstein, 1970).

More proximally relevant to an analysis of choice behavior in the interrogation room are studies of human decision-making in a behavioral economics paradigm. A voluminous body of research has shown that people make choices that they think will

maximize their well-being given the constraints they face, making the best of the situation they are in—what Herrnstein has called the "matching law" (Herrnstein, Rachlin & Laibson, 1997). With respect to a suspect's response to interrogation, studies on the discounting of rewards and costs show that people tend to be impulsive in their orientation, preferring outcomes that are immediate rather than delayed, with delayed outcomes depreciating over time in their subjective value (Rachlin, 2000). In particular, animals and humans clearly prefer delayed punishment to immediate aversive stimulation (Deluty, 1978; Navarick, 1982). These impulsive tendencies are especially evident in juvenile populations and among cigarette smokers, alcoholics, and other substance users (e.g., Baker et al., 2003; Bickel et al., 1999; Bickel & Marsch, 2001; Kollins, 2003; Reynolds et al., 2004).

Rooted in the observation that people are inherently social beings, a second set of core principles is that individuals are highly vulnerable to influence from change agents who seek their compliance. Of direct relevance to an analysis of interrogation are the extensive literatures on attitudes and persuasion (Petty & Cacioppo, 1986), informational and normative influences (e.g., Asch, 1956; Sherif, 1936), the use of sequential request strategies, as in the foot-in-the-door effect (Cialdini, 2001), and the gradual escalation of commands, issued by figures of authority, to effectively obtain self- and other-defeating acts of obedience (Milgram, 1974). Conceptually, Latane's (1981) social impact theory provides a coherent predictive model that can account for the influence of police interrogators—who bring *power, proximity*, and *number* to bear on their exchange with suspects (for a range of social psychological perspectives on interrogation, see Bem, 1966; Zimbardo, 1967; Davis & O'Donahue, 2004).

A third set of core principles consists of the "seven sins of memory" that Schacter (2001) identified from cognitive and neuroscience research—a list that includes memory transience, misattribution effects, suggestibility, and bias. When Kassin and Wrightsman (1985) first identified coerced-internalized or –persuaded false confessions, they were puzzled. At the time, existing models of memory could not account for the phenomenon whereby innocent suspects would come to internalize responsibility for crimes they did not commit and confabulate memories about these non-events. These cases occur when a suspect is dispositionally or situationally rendered vulnerable to manipulation and the interrogator then misrepresents the evidence, a common ploy. In light of a now extensive research literature on misinformation effects and the creation of illusory beliefs and memories (e.g., Loftus, 1997, 2005), experts can now better grasp the process by which people come to accept guilt for a crime they did not commit as well as the conditions under which this may occur (see Kassin, 2007).

Situational Risk Factors

Among the situational risk factors associated with false confessions, three will be singled out: interrogation time, the presentation of false evidence, and minimization. These factors are highlighted because of the consistency in which they appear in cases involving proven false confessions.

Physical custody and isolation. To ensure privacy and control, and to increase the stress associated with denial in an incommunicado setting, interrogators are trained to remove suspects from their familiar surroundings and question them in the police station—often in a special interrogation room. Consistent with guidelines articulated by Inbau et al. (2001), most interrogations are brief. Observational studies in the United

States and Britain have consistently shown that the vast majority of interrogations last approximately from 30 minutes up to two hours (Wald et al., 1967; Irving, 1980; Baldwin, 1993; Leo, 1996b). In a recent self-report survey, 631 North American police investigators estimated from their experience that the mean length of a typical interrogation is 1.60 hours. Consistent with cautionary advice from Inbau et al. (2001) against exceeding four hours in a single session, these same respondents estimated on average that their longest interrogations lasted 4.21 hours (Kassin et al., 2007). Suggesting that time is a concern among practitioners, one former Reid technique investigator has defined interrogations that exceed six hours as "coercive" (Blair, 2005). In their study of 125 proven false confessions, Drizin and Leo (2004) thus 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.

It is not particularly surprising that false confessions tend to occur after long periods of time—which indicates a dogged persistence in the face of denial. The human needs for belonging, affiliation, and social support, especially in times of stress, are a fundamental human motive (Baumeister & Leary, 1996). People under stress seek desperately to affiliate with others for the psychological, physiological, and health benefits that social support provides (Schachter, 1959; Rofe, 1984; Uchino, Cacioppo, & Kiecolt-Glaser, 1996). Hence, prolonged isolation from significant others in this situation constitutes a form of deprivation that can heighten a suspect's distress and incentive to remove himself or herself from the situation. Depending on the number of hours and conditions of interrogation, sleep deprivation may also become a source of concern. Controlled laboratory experiments have shown that sleep deprivation, which may

accompany prolonged periods of isolation, can heighten susceptibility to influence and impair decision-making abilities in complex tasks. The range of effects is varied, with studies showing that sleep deprivation markedly impairs the ability to sustain attention, flexibility of thinking, and suggestibility in response to leading questions (Blagrove, 1996; for a review, see Harrison & Horne, 2000). This research literature is not all based in the laboratory. For example, performance decrements have been observed in medical interns (e.g., Weinger & Ancoli-Israel, 2002; Veasey et al., 2002)—as when sleep deprivation increased the number of errors that resident surgeons made in a virtual reality surgery simulation (Taffinder et al., 1998). Also demonstrably affected are motorists (Lyznicki & Williams, 1998) and F-117 fighter pilots (Caldwell et al., 2004). Combining the results in a meta-analysis, Pilcher & Huffcut (1996) thus concluded that: "overall sleep deprivation strongly impairs human functioning." The use of sleep deprivation in the interrogation is hardly a novel idea. In *Psychology and Torture,* Suedfeld (1990) noted that sleep deprivation is historically one of the most potent methods used to soften up prisoners of war and extract confessions from them. Indeed, Amnesty International reports that most torture victims interviewed report having been deprived of sleep for 24 hours or more.

Presentations of false evidence. Once suspects are isolated, interrogators, armed with a strong presumption of guilt, seek 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. Basic 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, this process also involves interrupting the suspect's denials, overcoming objections, and refuting alibis. At times, American police will overcome a suspect's denials by presenting supposedly incontrovertible evidence of his or her guilt (e.g., a fingerprint, blood or hair sample, eyewitness identification, or failed polygraph)—even if that evidence does not exist. In the United States, it is permissible for police to outright lie to suspects about the evidence (*Frazier v. Cupp*, 1969), recommended in training (Inbau et al., 2001), and occasionally used (Leo, 1996b; Kassin et al., 2007).

Yet basic psychological research warns of the risk of this manipulation. Over the years, and across of range of sub-disciplines, basic research has revealed that misinformation renders people vulnerable to manipulation. To cite but a few highly recognized classics in the field, experiments have shown that presentations of false information—via confederates, witnesses, counterfeit test results, bogus norms, false physiological feedback, and the like—can substantially alter subjects' visual judgments (Asch, 1956; Sherif, 1935), beliefs (Anderson, Lepper, & Ross, 1980), perceptions of other people (Tajfel, Billig, Bundy, & Flament, 1971), behaviors toward other people (Rosenthal & Jacobson, 1968), emotional states (Schachter & Singer, 1962), physical attraction (Valins, 1966), self-assessments (Crocker, Voelkl, Testa, & Major, 1991), memories for observed and experienced events (Loftus, 2005), and even certain medical outcomes, as seen in studies of the placebo effect (Brown, 1998). Scientific evidence for human malleability in the face of misinformation is broad and pervasive.

The forensic literature on confessions reinforces and extends this classic point, indicating that presentations of false evidence can lead people to confess to crimes they

did not commit. This literature is derived from two sources of information. First, studies of actual cases reveal that the false evidence ploy, which is not permitted in Great Britain and most other European nations, is found in numerous wrongful convictions in the U.S., including DNA exonerations, in which there were confessions in evidence (Drizin & Leo, 2004; Leo & Ofshe, 1998). That this tactic appears in proven false confession cases makes sense. In self-report studies, actual suspects state that the reason they confessed is that they perceived themselves to be trapped by the weight of evidence (Moston, Stephenson, & Williamson, 1992; Gudjonsson & Sigurdsson, 1999).

Concerns about the polygraph are illustrative in this regard. Although it is best known for its use as a lie-detector test, and has value as an investigative tool, posttest "failure" feedback is often used to pressure suspects and can prompt false confessions. This problem is so common that Lykken (1998) coined the term “fourth degree” to describe the tactic (p. 235), and the National Research Council Committee to Review the Scientific Evidence on the Polygraph (2003) warned of the risk of polygraph-induced false confessions. 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.

The second source of evidence is found in laboratory experiments that have tested the causal hypothesis that false evidence leads innocent people to confess to prohibited acts they did not commit. In one study, Kassin and Kiechel (1996) accused college students typing on a keyboard of causing the computer to crash by pressing a key they were instructed 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 percent to 94 percent. Follow-up studies have replicated this effect, even when the confession was said to bear a financial or other consequence (Horselenberg, Merckelbach, & Josephs, 2003; Horselenberg et al., 2006). The effect has been particularly evident among children and juveniles who tend to be both more compliant and suggestible than adults (Redlich & Goodman, 2003; Candel, Merckelbach, Loyen, & Reyskens, 2005).

Minimization: Promises implied but not spoken. In addition to thrusting the suspect into a state of despair by the processes of confrontation, interrogators are trained 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., 16 year-old Kharey Wise said he felt pressured by peers)—and each said afterward that he thought he would go home after confessing based on statements made by police.

Minimization tactics that imply leniency may well lead innocent people who feel trapped to confess. Two core areas of psychology compel this conclusion. The first concerns the principle of reinforcement. As noted earlier, generations of basic behavioral scientists, dating back to Thorndike (1911), and formalized by Skinner (1938), have found that people are highly responsive to reinforcement and the perceived consequences of their behavior. More recent studies of human decision-making have added that people

are particularly influenced by outcomes that are immediate rather than delayed, the latter depreciating over time in their subjective value (Rachlin, 2000). The second core principle concerns the cognitive psychology of pragmatic implication. Over the years, researchers have found that when people read text or hear speech, they tend to process information "between the lines" and recall not what was stated per se, but what was *pragmatically implied.* Hence, people who read that "The burglar goes to the house" often mistakenly recall later that the burglar actually broke into the house; those who hear that "The flimsy shelf weakened under the weight of the books" often mistakenly recall that the shelf actually broke (Chan & McDermott, 2006; Harris & Monaco, 1978; Hilton, 1995). These findings indicate that pragmatic inferences can change the meaning of a communication, leading listeners to infer something that is "neither explicitly stated nor necessarily implied" (Brewer, 1977).

Taken together, basic research showing that people are highly influenced by perceived reinforcements and that people process the pragmatic implications of a communication suggests the possibility that suspects infer leniency in treatment from minimizing remarks that depict the crime as spontaneous, accidental, pressured by others, or otherwise excusable—even in the absence of an explicit promise. To test this hypothesis, 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 transcripts were edited to produce three versions in which the detective made a contingent explicit promise of leniency, used the technique of minimization by blaming the victim, or did not use either 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 compared to conditions in which no technique was used.

More recently, researchers have found that minimization can also lead innocent people to confess. Using the computer crash paradigm described earlier, Klaver, Lee, and Rose (2008) found that minimization remarks significantly increased the false confession rate when the accusation concerning the forbidden key press was plausible. Russano, Meissner, Kassin, and Narchet (2005) devised a newer laboratory paradigm to not only assess the behavioral effects of minimization but 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). In their study, subjects were paired with a confederate for a problem-solving study and instructed to work alone on some problems 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 (a deal in which research credit would be given 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, diagnosticity was highest at 7.67 when no tactics were used (46% of guilty suspects confessed vs. only 6% of

innocents) and minimization—just like an explicit offer of leniency—reduced diagnosticity to 4.50 by increasing not only the rate of true confessions (81%) but even more so 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.

It is important to note that minimization and the risk it engenders is not a mere laboratory phenomenon. Analyzing more than 125 electronically recorded interrogations and transcripts, Ofshe and Leo (1997a, 1997b) found that police often use techniques that serve to communicate promises and threats through pragmatic implication. These investigators focused specifically on what they called *high-end inducements*—appeals that communicate to a suspect that he or she will receive less punishment, a lower prison sentence, or some form of prosecutorial or judicial leniency upon confession and/or a higher charge or longer prison sentence in the absence of confession. In some homicide cases, for example, interrogators suggested that if the suspect admits to the killing it would be framed as unintentional, as an accident, or as an act of justifiable self-defense—not as premeditated cold-blooded murder, the portrayal that would follow from continued denial. This is a variant of the "maximization" / "minimization" technique described by Kassin and McNall (1991), which communicates through pragmatic implication that the suspect will receive more lenient treatment if he or she confesses but harsher punishment if he or she does not.

Dispositional Risk Factors

In any discussion of dispositional risk factors for false confession, the two most commonly cited concerns are a suspect's age (i.e., juvenile status) and mental impairment

(i.e., mental illness, mental retardation). These common citations are because of the staggering overrepresentation of these groups in the population of proven false confessions. For example, of the first 200 DNA exonerations in the U.S., 35% of the false confessors were 18 years or younger and/or had a developmental disability. In their sample of wrongful convictions, Gross and colleagues (2005) found that 44% of the exonerated juveniles and 69% of exonerated persons with mental disabilities were wrongly convicted because of false confessions.

Adolescence and immaturity. There is overwhelming evidence that juveniles are at risk for involuntary and false confessions in the interrogation room (for reviews see Drizin & Colgan, 2004; Owens-Kostelnik, Reppucci, & Meyer, 2006; Redlich, 2007; Redlich & Drizin, 2007; Redlich, Silverman, Chen, & Steiner, 2004). Juveniles are overrepresented in the pool of identified false confession cases: 35% of the proven false confessors in the Drizin and Leo (2004) sample were younger than age 18, and within this sample of juveniles, 55% were aged 15 or younger. Comparatively, of all persons arrested for murder and rape, only 8% and 16%, respectively, are juveniles (Snyder, 2006). Numerous high-profile cases, such as the Central Park Jogger case (Kassin, 2002), have demonstrated the risks of combining young age, and the attributes that are associated with it (e.g., suggestibility, heightened obedience to authority, immature decision-making abilities), and the psychologically oriented interrogation tactics described earlier. Hence, Inbau et al. (2001) concede that minors are at special risk for false confession and advise caution when interrogating a juvenile. Referring to the presentation of fictitious evidence, for example, they note: “This technique should be avoided when interrogating a youthful suspect with low social maturity” (p. 429).

The field of developmental psychology was born over a century ago in the influential writings of James Baldwin, Charles Darwin, G. Stanley Hall, and William Stern (see Parke, Ornstein, Rieser, Zahn-Waxler, 1994). Since that time, basic research has shown that children and adolescents are cognitively and psychosocially less mature than adults—and that this immaturity manifests in impulsive decision-making, decreased ability to consider long-term consequences, engagement in risky behaviors, and increased susceptibility to negative influences. Specifically, this body of research indicates that early adolescence marks the onset of puberty, heightening emotional arousability, sensation-seeking, and reward orientation; that mid-adolescence is a period of increased vulnerability to risk-taking and problems in affect and behavior; and that late adolescence is a period in which the frontal lobes continue to mature, facilitating regulatory competence and executive functioning (for reviews, see Steinberg, 2005; Steinberg & Morris, 2001). Recent neurological research on brain development dovetails with findings from behavioral studies. Specifically, these studies have shown continued maturation during adolescence in the limbic system (emotion regulation) and in the prefrontal cortex (planning and self-control), with gray matter thinning and white matter increasing (Steinberg, 2007).

The developmental capabilities and limitations of adolescents are highly relevant to behavior in the interrogation room. In *Roper v. Simmons* (2005), Justice Kennedy cited three general differences between juveniles and adults in support of the Court's reasoning for abolishing the death penalty for juveniles. First he addressed the lessened maturity and responsibility of juveniles compared to adults with specific mention to the 18-year bright-line requirements for marriage without parental consent, jury duty, and

voting. Second, Justice Kennedy noted that "juveniles are more vulnerable or susceptible to negative influences and outside pressures, including peer pressure" (p. 15). Consistent with this portrait, Drizin and Leo (2004) found in the population of false confessions that several involved two or more juveniles (out of 38 multiple false confession cases, half involved juveniles). In recommending that police "play one [suspect] against the other," Inbau et al. (2001) note that this tactic may be especially effective on young, first-time offenders (pp. 292-293). Third, Justice Kennedy recognized that juveniles' personality or "character" is not as well-developed as adults. In light of the volatility of adolescence, it is interesting that they also suggest "themes" for confession that exploit a juvenile's restless energy, boredom, low resistance to temptation, and lack of supervision.

Drawing on basic principles of developmental psychology, there is now a wealth of forensically oriented research indicating that juveniles—suspects, defendants, and victim/witnesses—have age-related limitations of relevance to the legal system in comparison to adults. For example, individuals younger than 15 years generally have impairments in adjudicative competence (e.g., the ability to help in one's own defense) and comprehension of legal terms (Grisso et al., 2003; Saywitz, Nathanson, & Snyder, 1993). In a subset of studies 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. Of particular note, as described earlier, juveniles are more likely than adults to exhibit deficits in their understanding and appreciation of the *Miranda* rights that were explicitly put into place to protect people subject to "inherently coercive" interrogations (see Grisso, 1981; Redlich et al., 2003).

In the first set of studies, laboratory-based experiments have examined juveniles' responses in a mock crimes and interrogations. Using the Kassin and Kiechel (1996) computer crash paradigm, Redlich and Goodman (2003) found that juveniles aged 12- and 13-years-old, and 15-and 16-years-old, were more likely to confess than young adults (aged 18 to 26 years), especially when confronted with false evidence of their culpability. In fact, a majority of the younger participants, in contrast to adults, complied with the request to sign a false confession without uttering a word. In another laboratory experiment, researchers examined the effect of positive and negative reinforcement on children aged 5 through 8 years (Billings, Taylor, Burns, Corey, Garven, & Wood, 2007). Reinforcement strongly affected children's likelihood of making 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 (within a span of 3.5 minutes!). In contrast, of children in the control condition, only 36% and 10% made false guilty-knowledge and admissions, respectively. These findings mirror the vast majority of studies on the interview-relevant abilities of child-victim/witnesses (e.g., Garven, Wood, & Malpass, 2000).

In a second set of studies, youths have made decisions in response to hypothetical scenarios. Goldstein Condie, Kalbeitzer, Osman, and Geier (2003) investigated male juvenile offenders' self-reported likelihood of providing false confessions across different interrogation situations and found that younger age significantly predicted false confessions (25% surmised that they would definitely confess despite innocence to at least one of the situations). Similarly, Grisso et al. (2003) examined juveniles' and young adults' responses to a hypothetical mock-interrogation situation—specifically, whether

they would confess to police, remain silent, or deny the offense. Compared to individuals aged 16 and older, those between 11 and 15 were significantly more likely to report that they would confess.

In a third set of studies, juveniles have been asked to self-report on actual interrogation experiences. In a sample of 114 justice-involved juveniles, Viljoen, Klaver, and Roesch (2005) found that suspects who were 15 years-old and younger, compared to those who were 16- and 17-years-old, were significantly more likely to waive their right to counsel and to confess. Overall, only 11 (less than 10%) said they had asked for an attorney during police questioning (see also Redlich et al., 2004) and 9 (6%) said they had at some point falsely confessed. 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 being higher among those with more than one interrogation experience (Gudjonsson, Sigurdsson, Asgeirsdottir, & Sigfusdottir, 2006). In a massive and more recent effort, more than 23,000 juveniles from grades 8, 9, and 10 (average age of 15.5 years) were surveyed from seven countries—Iceland, Norway, Finland, Latvia, Lithuania, Russia, and Bulgaria. Overall, 11.5% (2,726) reported having been interrogated by police. Within this group, 14% reported having given a false confession (Gudjonsson, Sigurdsson, Asgeirsdottir, & Sigfusdottir, unpublished).

Cognitive and intellectual ability. Much of what is true of juveniles is similarly true for persons with intellectual disabilities—another group that is overrepresented in false confession cases (see Gudjonsson, 2003; Gudjonsson & MacKeith, 1994). Hence, in *Atkins v. Virginia* (2002), the U.S. Supreme Court explicitly cited the possibility of false confession as a rationale underlying their decision to exclude this group

categorically from capital punishment. The case of Earl Washington is illustrative of the problem. Reported to have an IQ ranging from 57 to 69 and interrogated over the course of two days, Washington "confessed" to five crimes, one being the rape and murder of a woman (charges resulting from the other four confessions were dismissed because of inconsistencies). Although he could not provide even basic details (e.g., that the victim was raped or her race) and although much of his statement was inconsistent with the evidence, Washington—who was easily led by suggestive questions and deferred to authority figures—was convicted, sentenced to death, and incarcerated for 18 years before being exonerated (Hourihan, 1995).

Mental retardation represents a constellation of symptoms, disorders, and adaptive functioning. The condition is defined by an IQ score of 70 or below and a range of impairments, such as adapting to societal norms, communication, social and interpersonal skills, and self-direction (American Psychiatric Association, 1994). In training police recruits, Perske (2004) identifies from research a number of tendencies exhibited by people who are mentally retarded. Collectively suggesting a heightened susceptibility to influence, the list includes the tendencies to rely on authority figures for solutions to everyday problems; please persons in authority; seek out friends; feign competence; exhibit a short attention span; experience memory gaps; lack impulse control; and accept blame for negative outcomes.

Some researchers have provided evidence for the diminished capacity of persons with cognitive disabilities in studies pertaining to interrogation (Fulero & Everington, 2004). Across four studies of Miranda comprehension, findings are quite consistent in showing that persons with mental retardation have significant deficits in their

understanding and appreciation of Miranda warnings (Cloud, Shepard, Barkoff, & Shur, 2002; Everington & Fulero, 1999; Fulero & Everington, 1995; O'Connell, Garmoe, & Goldstein, 2005). For example, O'Connell et al. (2005) found that 50% of people with mild mental retardation in their sample could not correctly paraphrase *any* of the five *Miranda* components (see also Everington & Fulero, 1999). In comparison, less than 1% of adults in the general population score similarly low (Grisso, 1998). Moreover, research on the capacity of persons with mental retardation to learn and retain the knowledge and skills necessary to be competent suspects and defendants demonstrates that a significant number cannot meet this threshold, even with education (Anderson & Hewitt, 2002).

Everington and Fulero (1999) also examined the suggestibility of persons with mental retardation. Using the Gudjonsson Suggestibility Scale (GSS; a measure of interrogative suggestibility), they found that people with mental retardation were more likely to yield to leading questions and change their answers in response to mild negative feedback (see also O'Connell et al., 2005). Gudjonsson (1991) examined GSS scores among three groups: alleged false confessors, alleged true confessors, and suspects who resisted confession during questioning. He found the alleged false confessors to have the lowest IQ scores as well as the highest suggestibility scores compared to the other two groups (Gudjonsson & Clare, 1995). Finally, Clare and Gudjonsson (1995) examined perceptions of a videotaped suspect who provides a true and false confession during an interrogation and found that 38% of perceivers with intellectual disabilities, compared to only 5% of those without intellectual disabilities, believed the suspect would be allowed to go home while awaiting trial. Additionally, only 52% believed that the suspect should obtain legal advice if innocent, compared to 90% of others.

Personality and psychopathology. In terms of susceptibility to false confession, it is important to consider other individual factors of relevance to a person's decision to confess. Gudjonsson (2003) discusses a number of personal risk factors, including enduring personality traits (e.g. suggestibility, compliance) as well as psychopathology and personality disorders—categories within the DSM-IV Axis I and II diagnostic framework that are relevant to false confessions.

A number of large-scale studies of false confessions, carried out in Iceland, show the importance of antisocial personality traits and history of offending both among prison inmates (Sigurdsson & Gudjonsson, 2001) and community samples (Gudjonsson et al. 2004a; Gudjonsson, Sigurdsson, Bragason et al., 2004c; Gudjonsson, Sigurdsson, Asgeirsdottir, & Sigfusdottir, 2006, 2007). There have also been cases in which the personality disorder was considered crucial to understanding the false confession (Gudjonsson, 2006a; Gudjonsson & Grisso, 2008). One interpretation of this finding is that persons with antisocial personality disorder, or antisocial traits, are more likely to be involved in offending, more often interviewed by police, and prone to lie for short-term instrumental gain, and are not concerned about the consequences of their behavior. This increases their tendency to make false denials as well as false confessions depending on their need at the time.

Psychopathology seems to be linked to false confessions in that persons with mental illness are over-represented in these cases. Psychological disorder is often accompanied by faulty reality monitoring, distorted perception, impaired judgment, anxiety, mood disturbance, poor self-control, and feelings of guilt. Gudjonsson (2003) provided a number of examples of cases where false confessions were directly related to

specific disorders. Following the release of the Birmingham Six in 1991, research conducted for the British Royal Commission on Criminal Justice found that about 7% of suspects detained at police stations had a history of mental illness and that many more were in an abnormal mental state due to anxiety and mood disturbance (Gudjonsson, Clare, Rutter & Pearse, 1993). Similar findings were found in a recent study among suspects at Icelandic police stations (Sigurdsson et al., 2006). In the United States, research has consistently shown that people with serious mental illness are 1) more likely than others to get arrested; once arrested, they are more likely to be detained in jail (as opposed to released on own recognizance or have cases dismissed); and once jailed, they stay incarcerated 2.5 to 8 times longer (Criminal Justice/Mental Health Consensus Project, 2005). In one study, individuals exhibiting symptoms characteristic of mental illness had a 67% greater probability of being arrested (Teplin, 1984; 2000).

There is currently little research available to show how different disorders (e.g. anxiety, depression, schizophrenia) potentially impair the suspect's capacity to waive legal rights and navigate his or her way through a police interview (Redlich, 2004). However, there is recent evidence from two separate studies to suggest that depressed mood is linked to a susceptibility to provide false confession to police (Gudjonsson et al., 2006; Sigurdsson et al., 2006). Gudjonsson et al. (2007) also recently found that multiple exposures to unpleasant or traumatic life events were significantly associated with self-reported false confessions during interrogation. Rogers et al. (2007) found that most mentally disordered offenders exhibited insufficient understanding of *Miranda*, particularly when the warnings required increased levels of reading comprehension. Finally, Redlich (2007) found that offenders with mental illness self-reported a 22%

lifetime false confession rate—notably higher than the 12% found in samples of prison inmates without mental illness (Sigurdsson & Gudjonsson, 1996).

An important type of psychopathology in relation to false confessions is attention deficit hyperactivity disorder (ADHD), which consists of three primary symptoms: inattention, hyperactivity, and impulsivity (American Psychiatric Association, 1994). This condition is commonly found among offenders (Young, 2007). Moreover, research shows that people with ADHD cope during questioning by answering a disproportionate number of questions with "don't know" replies—which may lead police to be suspicious of their answers (Gudjonsson, Young & Bramham, 2007). They may also exhibit high levels of compliance. Gudjonsson et al. (in press) found that the rate of self-reported false confessions was significantly higher among prisoners who were currently symptomatic for attention deficit hyperactivity disorder (ADHD) than among the other prisoners (41% and 18%, respectively). These findings highlight the potential vulnerability during questioning of people who are currently symptomatic for ADHD.

Protections for vulnerable suspects in England. When the police interview mentally disordered persons and juveniles in England and Wales, there are special legal provisions available to ensure that their statements to police are reliable and properly obtained—for example, in the presence of "appropriate adults." The current legal provisions are detailed in the Codes of Practice (Home Office, 2003). Even when the police adhere to all the legal provisions, a judge may consider it unsafe and unfair to allow the statement to go before the jury. Here the crucial issue may be whether or not the defendant was "mentally fit" when interviewed. The term "fitness for interview" was

first introduced formally in the current Codes of Practice, which became effective in 2003.

Fitness for interview is closely linked to the concept of "legal competencies," which refers to an individual's physical, mental, and social vulnerabilities that may adversely affect his or her capacity to cope with the investigative and judicial process (Grisso, 1986). Historically, legal competence constructs relating to confession evidence have focused primarily on the functional deficits of juveniles (Drizin & Colgan, 2004), and adult defendants with mental retardation (Fulero and Everington, 2004) and mental illnesses (Melton, Petrila, Poythress & Slobogin, 1997). Increasingly, the construct of legal competence in criminal cases is also being applied to defendants with "personality disorder" (Gudjonsson & Grisso, 2008). The introduction of "fitness to be interviewed" within the current Codes of Practice in England and Wales is a significant step toward protecting vulnerable suspect populations (Gudjonsson, 2005). Indeed, a similar framework has been introduced in New Zealand and Australia (Gall & Freckelton, 1999).

Innocence as a Risk Factor

On Sept. 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).

On the basis of anecdotal and research evidence, Kassin (2005) suggested the ironic hypothesis that *innocence* itself may put *innocents* at risk. Specifically, it appears

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, by 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 (Hartwig, Granhag, Strömwall, & Vrij, 2005; Hartwig et al., 2006).

Based on observations of live and videotaped interrogations, Leo (1996b) found that four out of five suspects waive their rights and submit to questioning—and that people who have no prior record of crime are the most likely to do so. In light of known recidivism rates, this result suggested that innocent people in particular are at risk to waive their rights. Kassin and Norwick (2004) tested this hypothesis in a controlled laboratory setting in which some subjects but not others committed a mock theft of $100. Upon questioning, subjects who were innocent were more likely to sign a waiver than those who were guilty, 81% to 36%. Afterward, 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 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 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, Savitsky, & Medvec, 1998; Miller & McFarland, 1987). Whatever the mechanism, it is clear that

Miranda warnings may not adequately protect the citizens who need it most—those accused of crimes they did not commit (Leo, 1998).

These findings suggest that people have a naïve faith in the power of innocence to set them free. This phenomenology was evident in the classic case of Peter Reilly, an 18-year-old who falsely confessed to the murder of his mother. 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). Innocence may lead innocents to forego other important safeguards as well. Consider the case of Kirk Bloodsworth, the first death row inmate to be exonerated by DNA. In 1985, based solely on eyewitness identifications, Bloodsworth was convicted for the rape and murder of a nine year-old girl. He was exonerated by DNA eight years later and ultimately vindicated when the true perpetrator was identified. The day of his arrest, Bloodsworth was warned that there would be cameras present and asked if he wanted to cover his head with a blanket. He refused, saying he did nothing wrong and was not going to hide—even though potential witnesses might see him on TV (Junkin, 2004).

The Consequences of Confession

It is inevitable that some number of innocent people will be targeted for suspicion and subjected to excessively persuasive interrogation tactics, and many of them will naively and in opposition to their own self-interest waive their rights and confess. One might argue that this unfortunate chain of events is tolerable, not tragic, to the extent that the resulting false confessions are detected by authorities at some point and corrected.

Essential to this presumed safety net is the belief that police, prosecutors, judges, and juries are capable of distinguishing true and false confessions.

The process begins with the police. Numerous false confession cases reveal that once a suspect confesses, police often close their investigation, deem the case solved, and make no effort to pursue exculpatory evidence or other possible leads–even if the confession is internally inconsistent, contradicted by external evidence, or the product of coercive interrogation (Leo & Ofshe, 1998; Drizin & Leo, 2004). This trust in confessions may extend to prosecutors as well, many of whom express skepticism about police-induced false confessions, stubbornly refusing to admit to such an occurrence even after DNA evidence has unequivocally established the defendant's innocence (Findley & Scott, 2006; Hirsch, 2007; Kassin & Gudjonsson, 2004). Upon confession, prosecutors tend to charge suspects with the highest number and types of offenses, set bail higher, and are far less likely to initiate or accept a plea bargain to a reduced charge (Leo & Ofshe, 1998; Drizin & Leo, 2004; but see Redlich, in press).

Confessions are equally potent in the courtroom. When a suspect in the United States retracts his or her confession, pleads not guilty, and goes to trial, a sequence of two decisions is set into motion. First, a judge determines whether the confession was voluntary and hence admissible as evidence. Then a jury, hearing the admissible confession, determines whether the defendant is guilty beyond a reasonable doubt. But can people distinguish between true and false confessions? And what effect does this evidence have within the context of a trial?

Research on the impact of confessions throughout the criminal justice system is unequivocal. Mock jury studies have shown that confessions have more impact than

other potent forms of evidence (Kassin & Neumann, 1997) and that people do not fully discount confessions—even when they are judged to be coerced (Kassin & Wrightsman, 1980) and even when the confessions are presented secondhand by an informant who is motivated to lie (Neuschatz et al., 2007). For example, Kassin and Sukel (1997) presented mock jurors 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 verdict measure, this confession significantly increased the conviction rate. This increase occurred even in a condition in which subjects were specifically admonished to disregard confessions they found to be coerced. Similar results have recently been reported in mock jury studies involving defendants who are minors (Redlich, Ghetti, & Quas, 2008; Redlich, Quas, & Ghetti, 2008).

This point concerning the power of confession evidence is bolstered by archival analyses of actual cases. When proven false confessors pleaded 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 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).

There are at least three reasons why people cannot easily identify as false the confessions of innocent suspects. First, generalized common sense leads us to trust confessions the way we trust other behaviors that counter self-interest. Over the years, and across a wide range of contexts, social psychologists have found that social perceivers fall prey to the fundamental attribution error—that is, they tend to make dispositional attributions for a person's actions, taking behavior at face value, while neglecting the role of situational factors (Jones, 1990; Ross, 1977). Gilbert and Malone (1995) offered several explanations for this bias, the most compelling of which is that people draw quick and relatively automatic dispositional inferences from behavior and then fail to adjust or correct for the presence of situational constraints. Common sense further compels the belief that people present themselves in ways that are self-serving and that confessions must therefore be particularly diagnostic of guilt. Reasonably, most people believe that they would never confess to a crime they did not commit and cannot image the circumstances under which anyone would do so.

A second reason is that people are typically not adept at deception detection. We saw earlier that neither lay people nor professionals distinguish truths from lies at high levels of accuracy. Moreover, false confessions are not easier to spot than false denials and other non-truthful statements. To demonstrate, Kassin, Meissner, and Norwick (2005) interviewed male prison inmates on videotape providing true confessions to the crimes for which they were incarcerated and concocting false confessions to crimes selected by the experimenter that they did not commit. When college students and police investigators later judged these statements from videotapes or audiotapes, the results showed that neither group was particularly adept, exhibiting accuracy rates that ranged from 42 percent to 64

percent—typically not much better than chance performance. These findings suggest people cannot readily distinguish true and false confessions and that law enforcement experience does not improve performance. This latter result is not surprising, as many of the behavioral cues that typically form part of the basis for training (e.g., gaze aversion, postural cues, and grooming gestures) are not statistically correlated with truth-telling or deception (DePaulo et al., 2003).

On the assumption that "I'd know a false confession if I saw one," there is a third reason for concern: Police-induced false confessions often contain *content* cues presumed to be associated with truthfulness. In many documented false confessions, the statements ultimately presented in court contained not only an admission of guilt but vivid details about the crime, the scene, and the victim that became known to the innocent suspect through leading questions, photographs, visits to the crime scene, and other secondhand sources invisible to the naïve observer. To further complicate matters, many false confessors state not just what they allegedly did, and how they did it, but *why*—as they self-report on revenge, jealousy, provocation, financial desperation, peer pressure, and other prototypical motives for crime. Some of these statements even contain apologies and expressions of remorse. To the naïve spectator, such statements appear to be voluntary, textured with detail, and the product of personal experience. Uninformed, however, this spectator mistakes illusion for reality, not realizing that the taped confession is scripted by the police theory of the case, rehearsed during hours of unrecorded questioning, directed by the questioner, and ultimately enacted on paper, tape or camera by the suspect (see Kassin, 2006).

Recommendations for Reform

Confession is a potent form of evidence that triggers a chain of events from arrest, prosecution, and conviction, through post-conviction resistance to change in the face of exculpatory information. Recent DNA exonerations have shed light on the problem that innocent people, confident in the power of their innocence to prevail, sometimes confess to crimes they did not commit. Research has identified two sets of risks factors. The first pertains to the circumstances of interrogation, situational factors such as a lengthy custody and isolation, possibly accompanied by a deprivation of sleep and other need states; presentations of false evidence, a form of trickery that is designed to link the suspect to the crime and lead him or her to feel trapped by the evidence; and minimization tactics that lead the suspect and others to infer leniency even in the absence of an explicit promise. The second set of risk factors pertains to dispositional characteristics that render certain suspects highly vulnerable to influence and false confessions—namely, adolescence and immaturity; cognitive and intellectual impairments; and personality characteristics and mental illness.

In light of the many high-profile wrongful convictions involving false confessions that have recently been discovered, as well as advances in psychological research on interviewing, interrogations and confessions, there are renewed calls for caution regarding confessions and the reform of interrogation practices not seen since the Wickersham Commission Report (1931) and U.S. Supreme Court opinion in *Miranda* (1966). Professionals from varying perspectives may differ in their perceptions of both the problems and the proposed solutions. Hence, it is our hope that the recommendations to follow will inspire a true collaborative effort among law enforcement professionals,

district attorneys, defense lawyers, judges, social scientists, and policy makers, to scrutinize the systemic factors that put innocent people at risk and devise effective safeguards.

Electronic Recording of Interrogations

Without equivocation, our first and most essential recommendation is to lift the veil of secrecy from the interrogation process in favor of the principle of transparency. Specifically, *all custodial interviews and interrogations of felony suspects should be videotaped in their entirety with an equal focus on suspects and interrogators.* Stated as a matter of requirement, such a policy evokes strong resistance in some pockets of the law enforcement community. Yet it has also drawn advocates from a wide and diverse range of professional, ideological, and political perspectives (e.g., American Bar Association, 2004; Boetig, Vinson, & Weidel, 2006; Cassell, 1996; Drizin & Colgan, 2001; Geller, 1994; Gudjonsson, 2003; John Reid & Associates, 2003; Leo, 1996c; Slobogin, 2003; Sullivan, 2004; The Justice Project, 2007).

In England, under the Police and Criminal Evidence Act of 1984, the mandatory requirement for tape-recording police interviews was introduced to safeguard the legal rights of suspects and the integrity of the process. At first resisted by police, this requirement has positively transformed the ways in which police interviews are conducted and evaluated. For the same reasons, the need for taping on a regular basis has long pressed for action within the United States. In *Convicting the Innocent*, a classic study of wrongful convictions, Edwin Borchard (1932) expressed concern that police abuses during interrogations led to involuntary and unreliable confessions. His solution,

utilizing the technology of the time, was to make "[phonographic records" [of interrogations] which shall alone be introducible in court" (pp. 370-371).

Throughout the twentieth century, other advocates for recording were less concerned with preventing false confessions and more concerned with increasing the accuracy of the justice system by eliminating the swearing contests between police officers and suspects over what occurred during the interrogation (Weisberg, 1961; Kamisar, 1977). Still others saw that recording interrogations held tremendous benefits for law enforcement by discouraging note-taking and other practices that could inhibit suspects, helping police officers obtain voluntary confessions, nabbing accomplices, and protecting officers from false allegations of abuse (O'Hara, 1976; Geller, 1993). Despite these calls for recording, by the turn of the twentieth century only two states, by virtue of state supreme court decisions—Alaska (*Stephan v. State*, 1985) and Minnesota *(State v. Scales,* 1994)—required law enforcement officers to electronically record suspect interrogations. The pace of reform in this area, however, is picking up and once again a concern about false confessions seems to be the impetus. In the post-DNA age, and particularly in the past five years, as the number of wrongful convictions based on false confessions has continued to climb, concerns about the reliability of confession evidence have led to a renewed push for recording requirements (Drizin & Reich, 2006). As a result of statutes and court rulings, seven additional jurisdictions—Illinois, Maine, New Mexico, New Jersey, Wisconsin, North Carolina and the District of Columbia—have joined Minnesota and Alaska, in requiring recordings of custodial interrogations in some circumstances (Sullivan, 2007; Robertson, 2007). In several other states, supreme courts have stopped short of requiring recording but either have issued strongly worded opinions

endorsing recording—e.g., New Hampshire (*State v. Barnett*, 2002*)* and Iowa (*State v. Hajtic*, 2007)—or, in the case of Massachusetts, held that where law enforcement officers have no excuse for the failure to record interrogation, defendants are entitled to a strongly worded instruction admonishing jurors to treat unrecorded confessions with caution (*Commonwealth v. DiGiambattista,* 2004).

In addition to recent developments in state courts and legislatures, there is a growing movement among law enforcement agencies around the country to record interrogations voluntarily. Over the past seventy years, the idea has been anathema to many in law enforcement—including the FBI, which prohibits electronic recording, and John Reid & Associates, which used to vigorously oppose the practice (Inbau et al., 2001; but see Buckley & Jayne, 2005; for an historical review, see Drizin & Reich, 2006). Yet there are now signs that police opposition is thawing (e.g., Boetig et al., 2006). Several years ago, a National Institute of Justice study found that one-third of large police and sheriff's departments throughout the U.S. were already videotaping at least some interrogations or confessions and that their experiences with the practice were positive (Geller, 1993). A more recent survey of more than 465 law enforcement agencies in states that do not require electronic recording of interrogations, has revealed that the practice is widespread. Without any legislative or judicial compulsion, police departments in many states routinely record interviews and interrogations in major felony investigations. Without exception, they have reacted with strong support for the practice (Sullivan, 2007).

There are numerous advantages to a videotaping policy. To begin, the presence of a camera will deter interrogators from using the most egregious, psychologically coercive

tactics—and deter frivolous defense claims of coercion where none existed. Second, a videotaped record provides trial judges (ruling on voluntariness) and juries (determining guilt) an *objective* and *accurate* record of the process by which a statement was taken—a common source of dispute that results from ordinary forgetting and self-serving distortions in memory. In a study that demonstrates the problem, Lamb, Orbach, Sternberg, Hershkowitz, and Horowitz (2000) compared interviewers' verbatim contemporaneous accounts of 20 forensic interviews with alleged child sex abuse victims with tape recordings of these same sessions. Results showed that more than half of the interviewers' utterances and one quarter of the details that the children provided did not appear in their verbatim notes. Even more troubling was that interviewers made frequent and serious source attribution errors—for example, often citing the children, not their own prompting questions, as the source of details. This latter danger was inadvertently realized by D.C. Detective James Trainum (2007) who—in an article entitled "I took a false confession - so don't tell me it doesn't happen!"—described a case in which a suspect who had confessed to him was later exonerated: "Years later, during a review of the videotapes, we discovered our mistake. We had fallen into a classic trap. We believed so much in our suspect's guilt that we ignored all evidence to the contrary. To demonstrate the strength of our case, we showed the suspect our evidence, and unintentionally fed her details that she was able to parrot back to us at a later time. It was a classic false confession case and without the video we would never have known." Similarly, Police Commander Neil Nelson, of St. Paul, Minnesota, said that he too once elicited a false confession, which he came to doubt by reviewing the interrogation tape: "You realize

maybe you gave too much detail as you tried to encourage him and he just regurgitated it back" (Wills, 2005).

To further complicate matters of recollection, police interrogations are not prototypical social interactions but, rather, extraordinarily stressful events for those who stand accused. In a study that illustrates the risk to accurate retrieval, Morgan et al. (2004) randomly assigned trainees in a military survival school to undergo a realistic high-stress or low-stress mock interrogation. Twenty-four hours later, he found that those in the high-stress condition had difficulty even identifying their interrogators in a lineup. In real criminal cases, questions constantly arise about whether rights were administered and waived, whether the suspect was cooperative or evasive, whether detectives 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 among the many issues that become resolvable (in Great Britain, as well, taping virtually eliminated the concern that police officers were "verballing" suspects by attributing to them admissions that would later be disputed; see Roberts, 2007).

In recent years, Sullivan (2004, 2007) has tirelessly interviewed law enforcement officials from hundreds of police and sheriff's departments that have recorded custodial interrogations and found that they enthusiastically favored the practice. Among the collateral benefits they often cited were that recording permitted detectives to focus on the suspect rather than take copious notes, increased accountability, provided an instant replay of the suspect's statement that sometimes revealed incriminating comments that were initially overlooked, reduced the amount of time detectives spent in court defending their interrogation practices, and increased public trust in law enforcement. Countering the most

common apprehensions, the respondents in these interview studies reported that videotaping interrogations did not prove costly or inhibit suspects from talking to police or incriminating themselves. Typical of this uniformly positive reaction, Detective Trainum (2007) notes: “When videotaping was first forced upon us by the D.C. City Council, we fought it tooth and nail. Now, in the words of a top commander, we would not do it any other way.”

It is beyond the scope of this article to draft a model rule that would address such specific details as what conditions should activate a recording requirement, how the recordings should be preserved, whether exceptions to the rule should be made (e.g., if the equipment malfunctions, if the suspect refuses to make a recorded statement), and what consequences would follow from the failure to record (e.g., whether the suspect’s statement would be excluded or admitted to the jury with a cautionary instruction). As a matter of policy, however, research does suggest that it is important not only that entire sessions be recorded, triggered by custody, but that the camera adopt a neutral "equal focus" perspective that shows both the accused and his or her interrogators. In twenty-plus years of research on illusory causation effects in attribution, Lassiter and his colleagues have taped mock interrogations from three different camera angles so that the suspect, the interrogator, or both were visible. Lay participants 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 thus 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 whenever the interrogator is

on camera than when the focus is solely on the suspect (Lassiter & Geers, 2004; Lassiter, Geers, Munhall, Handley, & Beers, 2001). Under these more balanced circumstances, juries make more informed attributions of voluntariness and guilt when they see not only the final confession but the conditions under which it was elicited (Lassiter, Geers, Handley, Weiland, & Munhall, 2002). Indeed, even the perceptions of experienced trial judges are influenced by variations in camera perspective (Lassiter, Diamond, Schmidt, & Elek, 2007).

Reform of Interrogation Practices

In light of recent events, the time is ripe for police, district attorneys, defense lawyers, judges, researchers, and policymakers to evaluate current methods of interrogation. All parties would agree that the surgical objective of interrogation is to secure confessions from perpetrators but not from innocent suspects. Hence, the process of interrogation should be structured in theory and in practice to produce outcomes that are accurate, as measured by the observed ratio of true to false confessions. Yet except for physical brutality or deprivation, threats of harm or punishment, promises of leniency or immunity, and flagrant violations of a suspect's constitutional rights, there are no objective criteria by which to regulate the process. Instead, American courts historically have taken a "totality of the circumstances" approach to voluntariness and admissibility. Because *Miranda* does not adequately safeguard the innocent, we believe that the time is right to revisit the factors that comprise those circumstances.

As illustrated by the Reid technique and other similar approaches, the modern American police interrogation is, by definition, a guilt-presumptive and highly confrontational process—aspects of which put innocent people at risk. There are two

ways to approach questions of reform. One is to completely reconceptualize this model at a macro level and propose that the process be converted from "confrontational" to "investigative." Several years ago, after a number of high-profile false confessions, the British moved in this direction, transitioning police from a classic interrogation to a process of "investigative interviewing." The Police and Criminal Evidence (PACE) Act of 1984 sought to reduce the use of psychologically manipulative tactics. In a post-PACE study, Irving and McKenzie (1989) found that the use of psychologically manipulative tactics had significantly declined—without a significant drop in the frequency of confessions. In 1993, the Royal Commission on Criminal Justice further reformed the practice of interrogation by proposing the PEACE model described earlier, the purpose of which is fact-finding rather than confession. Observational research suggests that such investigative interviews enable police to inculpate offenders by obtaining useful information from them (for a review, see Williamson, 2006).

Similar techniques have been taught and employed in the United States as well, where Nelson (2007) reports from experience that it is highly effective. Recent laboratory research has also proved promising in this regard. In one series of experiments, interviewers more effectively exposed deceptive mock criminals when they strategically withheld incriminating evidence than when they confronted the suspects with that evidence (Hartwig et al., 2005, 2006). In an experiment using the Russano et al. (2005) cheating paradigm described earlier, Rigoni and Meissner (2008) independently varied and compared accusatorial and inquisitorial methods and found that the latter produced more diagnostic outcomes—lowering the rate of false confessions without producing a corresponding decrease in the rate of true confessions. Although more systematic

research is needed, it is clear that investigative interviewing offers a potentially effective macro alternative to the classic American interrogation.

A second approach to the question of reform is to address specific risk factors inherent within a confrontational framework for interrogation. On the basis of converging evidence from actual false confession cases, basic principles of psychology, and forensic research, the existing literature suggests that certain interrogation practices pose a risk to the innocent—whether they are dispositionally vulnerable or not. Focused in this way, we propose that the following considerations serve as a starting point for collaborative discussion.

Custody and interrogation time. As noted earlier, the human needs for belonging, affiliation, and social support, especially in times of stress, are a fundamental human motive. Prolonged isolation from significant others thus constitutes a form of deprivation that can heighten a suspect's distress and increase his or her incentive to escape the situation. Excessive time in custody may also be accompanied by fatigue and feelings of helplessness and despair, as well as the deprivation of sleep, food, and other biological needs. The vast majority of interrogations last from 30 minutes up to two hours (Wald et al., 1967; Irving, 1980; Baldwin, 1993; Leo, 1996b; Kassin et al., 2007), Inbau et al. (2001) caution against surpassing four hours, and Blair (2005) argues that interrogations exceeding six hours are “legally coercive.” Yet research shows that in proven false confession cases the interrogations had lasted for an average of 16.3 hours (Drizin & Leo, 2004). Following PACE in Great Britain, 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.

Presentations of false evidence. A second problem concerns the tactic of presenting false evidence, which is often depicted as incontrovertible, and which takes the form of outright lying to suspects—for example, about an eyewitness identification that was not actually made; an alibi who did not actually implicate the suspect; fingerprints, hair, or blood that was not actually found; or polygraph tests that they did not actually fail. In *Frazier v. Cupp* (1969), the U.S. Supreme Court reviewed a case in which police falsely told the defendant that his alibi had confessed and sanctioned this type of deception—seeing it as relevant to voluntariness but not disqualifying. Although some state courts have distinguished between mere false assertions, which are permissible, and the fabrication of reports, tapes, and other evidence, which are not, the Supreme Court has not revisited the issue.

From a convergence of three sources, there is strong support for the proposition that outright lies can put innocents at risk to confess by leading them to feel trapped by the inevitability of evidence against them. These three sources are: (1) the aggregation of actual false confession cases, many of which involved use of the false evidence ploy; (2) one hundred-plus years of basic psychology research, which proves without equivocation that misinformation can substantially alter people's visual perceptions, beliefs, motivations, emotions, attitudes, memories, self assessments, and even certain physiological outcomes, as seen in studies of the placebo effect; and (3) numerous experiments, from different laboratories, demonstrating that presentations of false evidence increase the rate at which innocent research participants agree to confess to

prohibited acts they did not commit. As noted earlier, scientific evidence for human malleability to influence by misinformation is broad and pervasive. With regard to a specific variant of the problem, it is also worth noting that the National Research Council Committee to Review the Scientific Evidence on the Polygraph (2003) recently expressed concern over the risk of false confessions produced by telling suspects they had failed the polygraph (see also Lykken, 1998).

Many law enforcement professionals will doubtless argue that lying to suspects under interrogation is sometimes a necessary evil. To this argument, two important points must be noted. First, direct observations and self-report surveys of American police suggest that the presentation of false evidence is a tactic that is occasionally used (e.g., Feld, 2006a, 2006b; Leo, 1996b; Kassin et al., 2007). Some interrogators no doubt rely on this ploy more than others do. Yet in a position paper on false confessions, the Wisconsin Criminal Justice Study Commission (2006) concluded that "Experienced interrogators appear to agree that false evidence ploys are relatively rare" (p. 6). Second, it is instructive that in Great Britain, where the Royal Commission on Criminal Justice only recently prohibited police from deceiving suspects about the evidence, there has been no evidence of a dramatic decline in confession rates (Clarke & Milne, 2001; Gudjonsson, 2003; Williamson, 2006).

In light of the demonstrated risks to the innocent, we believe that the false evidence ploy, which is designed to thrust suspects into a state of inevitability and despair, should be addressed. The strongest response would be an outright ban on the tactic, rendering all resulting confessions *per se* inadmissible—as they are if elicited by promises, threats, and physical violence (such a ban currently exists in England, Iceland,

and Germany; suspects are differently protected in Spain and Italy, where defense counsel must be present for questioning). A second approach, representing a relatively weak response, would involve calling for no direct action, merely a change of attitude in light of scientific research that will lead the courts to weigh the false evidence ploy more heavily when judging voluntariness according to a "totality of the circumstances."

Representing a compromise between an outright ban and inaction, a third approach would be to curtail some variants of the false evidence ploy but not others—or in the case of some suspects but not others. As noted earlier, some state courts have distinguished between mere false assertions and the fabrication of reports, tapes, photographs, and other evidence, the latter being impermissible. This particular distinction seems arbitrary. False evidence puts innocents at risk to the extent that it is perceived to be incontrovertible, sufficient as a basis for prosecution, and impossible to overcome. By this criterion, a confession produced by telling an adult suspect that his alleged alibi had confessed, the ploy used in *Frazier v. Cupp* (1969), might well be admissible. Yet a confession produced by telling a 14 year-old suspect that his hair was found in the victim's grasp, that the victim's blood was found in his bedroom, and that he failed an infallible lie detector test, the multiple lies presented to false confessor Michael Crowe, would be excluded (White, 2001).

Minimization tactics. A third area of concern involves the use of minimization techniques (often called "themes," "scenarios" or "inducements") that can communicate promises of leniency indirectly through pragmatic implication. While American federal constitutional law has long prohibited the use of explicit promises of leniency (*Bram v. United States,* 1897; *Leyra v. Denno,* 1954; *Lynumn v. Illinois*, 1963), uses of

minimization are less clear. There is some legal support for the proposition that implicit promises of leniency are also prohibited in federal constitutional law (White, 1997), though a majority of states hold that a promise of leniency is only one factor to be considered in determining whether a confession is involuntary (White, 2003).

Multiple sources support the proposition that implicit promises can put innocents at risk to confess by leading them to perceive that the only way to lessen or escape punishment is by complying with the interrogator's demand for confession, especially when minimization is used on suspects who are also led to believe that their continued denial is futile and that prosecution is inevitable. These sources are: (1) the aggregation of actual false confession cases, the vast majority of which involved the use of minimization or explicit promises of leniency (Drizin & Leo, 2004; Leo & Ofshe, 1998; Ofshe & Leo, 1997a, 1997b; White, 2001); (2) basic psychological research indicating, first, that people are highly responsive to reinforcement and make choices designed to maximize their outcomes (Hastie & Dawes, 2001), and second that people can infer certain consequences in the absence of explicit promises and threats by pragmatic implication (Chan & McDermott, 2006; Harris & Monaco, 1978; Hilton, 1995); and (3) experiments specifically demonstrating that minimization increases the rate at which research participants infer leniency in punishment and confess, even if they are innocent (Kassin & McNall, 1991; Klaver et al., 2008; Russano et al., 2005).

In light of the demonstrated risks to the innocent, we believe that techniques of minimization, as embodied in the "themes" that interrogators are trained to develop, which communicate promises of leniency via pragmatic implication, should be scrutinized. Some law enforcement professionals have argued that minimization is a

necessary interrogation technique (Inbau et al., 2001). As with the false evidence ploy, there are several possible approaches to the regulation of minimization techniques—ranging from the recommendation that no action be taken to an outright ban on minimization. Between these extreme positions one might argue that some uses of minimization but not others should be limited or modified.

Minimization techniques come in essentially three forms: those that minimize the *moral* consequences of confessing, those that minimize the *psychological* consequences of confessing, and those that minimize the *legal* consequences of confessing (Inbau et al., 2001; Ofshe & Leo, 1997a, 1997b). One possible compromise between the two extreme positions noted above would be to permit moral and psychological minimization, but ban legal minimization that communicates promises of leniency via pragmatic implication. With this distinction in mind, interrogators would be permitted, for example, to tell a suspect that he or she will feel better after confession (psychological minimization) or that God will forgive him (moral minimization), but not that the legal consequences of his actions will be minimized if he confesses (e.g., as may be implied by self-defense and other themes). More research is thus needed to distinguish among the different tactics that interrogators are trained to use (e.g., the provocation, peer pressure, and accident scenarios), and that pragmatic inferences they lead suspects to draw concerning the consequences of confession.

Protection of Vulnerable Suspect Populations

There is a strong consensus among psychologists, legal scholars, and practitioners that juveniles and individuals with cognitive impairments or psychological disorders are particularly susceptible to false confession under pressure. Yet little action has been

taken to modulate the methods by which these vulnerable groups are questioned when placed into custody as crime suspects. More than 45 years ago, the 1962 President's Panel on Mental Retardation questioned whether confessions from defendants with mental retardation should ever be admissible at trial (see Appelbaum & Appelbaum, 1994). In 1991, Fred Inbau wrote that "special protections must be afforded to juveniles and to all other persons of below-average intelligence, to minimize the risk of untruthful admissions due to their vulnerability to suggestive questioning" (White, 2001, pp. 9-10). Most recently, Inbau et al. (2001) advised against use of the false evidence ploy with youthful suspects or those with diminished mental capacity: "These suspects may not have the fortitude or confidence to challenge such evidence and, depending on the nature of the crime, may become confused as to their own possible involvement" (p. 429).

It is uniformly clear to all parties that vulnerable suspect populations—namely, juveniles and people who are cognitively impaired or psychologically disordered—need to be protected in the interrogation room. In operational terms, we believe that there are two possible ways to protect these vulnerable populations. The first concerns the mandatory presence of an attorney. At least with regard to juveniles, a parent, guardian, or other interested adult is required in some states to protect young suspects who face interrogation. Yet research suggests that the presence of an interested adult does not increase the rate at which juveniles assert their constitutional rights because these adults, often passive, frequently urge their youths to cooperate with police—a tendency observed both in the United States (Grisso & Ring, 1979; Oberlander & Goldstein, 2001) and in the United Kingdom, where the law provides for access to an "appropriate adult" (Pearse & Gudjonsson, 1996). For this reason, juveniles should be accompanied and advised by a

professional advocate, preferably an attorney, trained to serve in this role (see Gudjonsson, 2003).

As a second possible means of protection, law enforcement personnel who conduct interviews and interrogations should receive special training—not only on the limits of human lie detection, false confessions, and the perils of confirmation biases—but on the added risks to individuals who are young, immature, mentally retarded, psychologically disordered, or in other ways vulnerable to manipulation. In a survey of 332 Baltimore police officers, Meyer and Reppucci (2006) found that while respondents understood in general terms that adolescents lack maturity of judgment and are more malleable than adults, they did not by implication believe that juvenile suspects were at greater risk in the interrogation room. Hence, they reported using roughly the same Reid-like techniques with juveniles as they do with adults (e.g., confrontation, repetition, refusal to accept denials, false evidence, minimization, use of alternative questions). Interestingly, one third of these respondents stated that police might benefit from special training with regard to the interrogation of juvenile suspects. In light of research described earlier, as well as Inbau et al.'s (2001) cautionary notes on the interrogation of minors and their heightened risk for false confession, we agree.

In 1932, Edwin Borchard published *Convicting the innocent: Sixty five actual errors of criminal justice*, in which several false confession cases were included. Addressing the question of how these errors were uncovered, he noted how "sheer good luck" played a prominent role and lamented on "how many unfortunate victims of error have no such luck, it is impossible to say, but there are probably many." Today's generation of post-conviction exonerations well illustrate the role that sheer good luck

plays (e.g., as when DNA, long ago collected, was preserved; as when the true perpetrator finds a conscience and comes forward). With increased scientific attention to the problem of false confessions, we believe it possible to reduce the serendipitous nature of these discoveries and, we hope, to increase both the diagnosticity of confessions and the ability of police, prosecutors, judges, and juries to make accurate discriminations.

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