



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

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

### THE CONFESSION

In light of research showing that police are prone to misjudge truthful suspects as deceptive, that innocent people are prone to waive their *Miranda* rights, and that interrogators are trained to use highly scripted psychological techniques to elicit confessions, it is important to know whether interrogations are surgically precise, or “diagnostic,” in their effects, drawing

TABLE 3

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

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

confessions from suspects who are guilty, but not from those who are innocent. However, there is a perennial debate about the incidence rate of false confessions, with some scholars seeking to calculate estimates (Cassell, 1996b, 1999; Huff, Rattner, & Sagarin, 1986), and others maintaining that accurate incidence rates cannot be derived (e.g., Kassin, 1997b; Leo & Ofshe, 1998, 2001).

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

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

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

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

### Why People Confess: Theoretical Perspectives

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

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

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

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

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

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

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

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

such tactics as the communication of inevitability, repetition, guilt induction, gradual escalation, contrast effects, and imaginative exercises.

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

### Why People Confess: Research Findings

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

#### *Observational Studies*

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

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

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

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

#### *Retrospective Self-Report Studies*

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

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

**TABLE 4**

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

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Factor 1: External Pressure

7. Did you confess because of police pressure during the interview?
11. Are you now pleased that you confessed?
12. Do you think you would have confessed if at the time you had fully realised the consequences of doing so?
14. Did you confess because you were afraid about what would happen if you did not confess?
16. Do you think you confessed to readily or hastily?
17. Do you feel the police bullied you into confessing?
22. Did you confess because you were frightened of being locked up?
24. Did you feel you confessed because you did not cope well with the police interviews?
26. Do you now regret having confessed?
33. Did you confess because the police persuaded you it was the right thing to do?
34. Did you confess because you were frightened of the police?
36. Did you confess because at the time you believed the police would beat you up if you did not confess?

Factor 2: Internal Pressure

2. Did you confess because you felt guilty about the offense?
4. Did you feel you wanted to get it off your chest?
13. Did you experience a sense of relief after confessing?
18. Did you feel tense or nervous whilst being interviewed by the police?
28. Did the thought that you might be viewed by others as a criminal make you less willing to confess?
29. Did you confess because you had the need to talk to somebody?
30. Did you confess because at the time you felt you needed help?
31. Did you find it difficult to confess because you did not want others to know what you had done?
32. Did you find it difficult to confess because you did not want to accept what you had done?
38. Did you find it difficult to confess because you were ashamed about having committed the offense?
39. Did you confess because you felt isolated from your family and friends?

Factor 3: Perception of Proof

8. Would you have confessed to the police if they had not suspected you of the crime?
  35. Did you confess because you saw no point in denying at the time?
  43. Did you confess because it was obvious that you had committed the offense?
  44. Did you confess because you were apprehended committing the offense?
  46. Were you under the influence of alcohol during the police interview?
  49. Were you under the influence of alcohol when you committed the offense?
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phase of interrogation is effective at breaking down resistance and why internal and external pressures have their greatest impact when the police have little or no proof. Gudjonsson and

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

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

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

The findings of self-report studies, combined with those derived from naturalistic observations (e.g., Moston et al., 1992; Pearse & Gudjonsson, 1999), suggest that the outcomes of police interrogations result from a combination of factors, which may differ from case to case, rather than individual factors acting in isolation. For this reason, Gudjonsson (2003a) proposed an interactional perspective on interrogation, which can be used to guide research and the clinical assessment of individual cases. This framework highlights the importance of custodial factors (e.g., the pressure associated with arrest and detention; the interrogation techniques used; the personality, expectations, and behavior of the interrogator; the seriousness and notoriety of the crime; the initial responses of the suspect to the situation), personal vulnerabilities of the detainee (e.g., age; intelligence; physical and mental health; personality traits such as suggestibility, compliance, and antisocial personality), and the presence or absence of a legal advisor and other persons who may provide social support (e.g., parents, friends, and professionals). The impact of a legal advisor is a case in point. There is evidence that the mere presence during interrogation

of a responsible adult who is not a lawyer (known in England as an "appropriate adult," a legal requirement in cases involving juveniles and mentally vulnerable suspects), even if he or she does not intervene directly in the process, may positively influence the behavior of the police and legal advisors (Medford et al., 2003).

### False Confessions

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

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

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

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

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

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

#### *Types of False Confessions*

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

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

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

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

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

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

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

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

A number of cases illustrate this phenomenon. The case of 18-year-old Peter Reilly, mentioned earlier, provides a classic example. Reilly immediately called the police when he found

that his mother had been murdered, but he was suspected of matricide. After gaining his trust, the police told Reilly that he failed a lie-detector test, which was not true, and that the test indicated he was guilty despite his lack of a conscious recollection of committing the crime. After hours of relentless interrogation, Reilly underwent a chilling transformation from adamant denial through confusion, self-doubt, conversion (“Well, it really looks like I did it”), and eventual utterance of a full confession (“I remember slashing once at my mother’s throat with a straight razor I used for model airplanes. . . . I also remember jumping on my mother’s legs”). Two years later, independent evidence revealed that Reilly could not have committed the murder, and that the confession he came to believe was false (Barthel, 1976; Connery, 1977).

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

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

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

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

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

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

#### *Personal Risk Factors*

Clearly, in terms of how people react to the pressures inside the interrogation room, all suspects are not created equal. Per-

sonality, age, intelligence, and psychopathology all influence individuals' susceptibility to making false confessions.

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

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

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

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

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

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

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

It is clear that juvenile suspects are highly vulnerable to false confessions, particularly when interrogated by police and other figures of authority. In a related forensic context, research shows that child witnesses are more compliant and more suggestible than adult witnesses, and more likely to subscribe to memories of fictitious events when exposed to repetition, leading questions, peer pressure, and other social influence

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

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

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

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

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

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

retarded are limited in their capacity to foresee the consequences of their actions when making legal decisions (Clare & Gudjonsson, 1995; for a review of all these issues, see Fulero & Everington, 2004).

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

#### *Situational Risk Factors*

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

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

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

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

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

In the first such study, Kassin and Kiechel (1996) tested the hypothesis that the presentation of false evidence can lead individuals who are rendered vulnerable to confess to a prohibited act they did not commit, to internalize responsibility for that act, and to confabulate details consistent with that belief. In this experiment, subjects typed letters on a keyboard in what was supposed to be a reaction time study. They were then

accused of causing the experimenter's computer to crash by pressing a key they were instructed to avoid—at which point they were asked to sign a confession. All subjects were innocent, and all initially denied the charge. Two factors were independently varied. First, the subject's vulnerability was manipulated by varying the pace of the task, fast or slow. Second, the presentation of false evidence was manipulated by having a confederate tell the experimenter either that she did or that she did not witness the subject hit the forbidden key.

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

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

**TABLE 5**  
*Percentage of Subjects Who Exhibited the Three Types of Influence in False Confessions (Kassin & Kiechel, 1996)*

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

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

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

*Minimization: Promises Implied but Not Spoken.* After suspects are thrust into a state of despair by confrontation and the presentation of false evidence, the next step is to minimize the crime through “theme development,” a process of providing moral justification or face-saving excuses, making confession seem like an expedient means of escape. Interrogators are thus trained to suggest to suspects that their actions were spontaneous, accidental, provoked, peer pressured, drug induced, or otherwise justifiable by external factors. In the Central Park jogger case, every boy gave a false confession that placed his cohorts at center stage and minimized his own involvement (e.g., Kharey Wise said he felt pressured by peers)—and each said afterward that he thought he would go home after confessing.<sup>2</sup> Research shows that minimization tactics may lead people to infer that leniency in sentencing will follow from confession, even in the absence of an explicit promise. Kassin

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

and McNall (1991) had subjects read a transcript of an interrogation of a murder suspect (the text was taken from an actual New York City interrogation). The transcript was edited to produce three versions in which the detective made a contingent promise of leniency, used the technique of minimization by blaming the victim, or used neither technique. Subjects read one version and then estimated the sentence that they thought would be imposed on the suspect. The result: As if explicit promises had been made, minimization lowered sentencing expectations relative to when no technique was used.

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

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

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

**TABLE 6**  
*Percentage of True and False Confessions and Resulting Diagnosticity Ratio as a Function of Interrogation Condition (Russano, Meissner, Kassin, & Narchet, in press)*

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

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

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

### CONFESSION EVIDENCE IN COURT

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

In cases involving a disputed confession, a preliminary hearing is held for a judge to determine its voluntariness and admissibility. In American courts, confessions deemed voluntary are then either admitted without special instruction or presented to the jury with the instruction that they should make

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

### Confessions and the Jury

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

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