False Confessions: Causes, Consequences, and Implications for Reform

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Abstract

In recent years, DNA exoneration cases have shed light on the problem of false confessions and the wrongful convictions that result. Drawing on basic psychological principles and methods, an extensive body of research has focused on the psychology of confessions. This article describes the processes of interrogation by which police assess whether a suspect is lying or telling the truth and the techniques used to elicit confessions from those deemed deceptive. The problem of false confessions emphasizes personal and situational factors that put innocent people at risk in the interrogation room. Turning from the causes of false confessions to their consequences, research shows that confession evidence can bias juries, judges, lay witnesses, and forensic examiners. Finally, empirically based proposals for the reform of policy and practice include a call for the mandatory video recording of interrogations, blind testing in forensic crime labs, and use of confession experts in court.

Keywords

police interrogation, false confessions, social pressure, wrongful convictions, confirmation biases

Tweet

The psychology of interrogation reveals police techniques that can lead innocent people to confess, often producing wrongful convictions.

Key Points

- False confessions undermine justice, causing innocent people to get convicted for crimes they did not commit.
- False confession risk increases for susceptible suspects (e.g., juveniles, people with cognitive impairments or mental health problems) through the use of certain interrogation tactics—even if lawful (e.g., lengthy isolation, lies about evidence, minimization tactics that imply leniency).
- Mandatory videotaping of interrogations is necessary to lessen wrongful convictions based on false confessions.

Introduction

In the criminal justice system, confession evidence is common, persuasive, and so incriminating that, to quote one legal scholar, "the introduction of a confession makes the other aspects of a trial in court superfluous" (McCormick, 1972, p. 316). Confessions are not, however, infallible. Over the years, countless numbers of innocent people have been wrongfully convicted, imprisoned, and sometimes sentenced to death after confessing to crimes they did not commit. This phenomenon has long been recognized (Munsterberg, 1908), although the extent of the problem was unclear (e.g., Kassin & Wrightsman, 1985; *Miranda v. Arizona*, 1966). Then in 1992, the Innocence Project was founded to use new DNA technology for testing biological evidence in disputed convictions. At present, nearly 30% of more than 300 DNA exonerations have involved a false confession (www.innocenceproject.org/).

DNA exonerations represent only a fraction of all wrongful convictions. Confessions have proved false in other ways as well—as when it turns out that the confessed crime was never committed; when new evidence shows it was physically impossible for the confessor to have committed the crime; when the real perpetrator is captured; and when other non-DNA evidence establishes the confessor's innocence (Drizin & Leo, 2004). Contrary to the commonsense belief that people do not confess to crimes they did not commit, history exposes many such cases—not only in the United States but also elsewhere (see Kassin et al., 2010).

The study of confession evidence is conceptually grounded in psychological science. To understand why someone would confess to a crime he or she did not commit,

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it is necessary to understand the effects of reward and punishment on behavior, human decision making, memory and forgetting, self-regulation, social influence, social perception, childhood and adolescence, personality, and psychopathology. A wide range of methodologies also informs the study of confessions. Individual and aggregated *case studies*, involving singular instances of proven false confessions, reveal that they occur with some frequency; share certain common features; and occur in some types of people and situations more than others. Other empirical methods include *naturalistic observations* of live and videotaped police interrogations; *archival records* that enable comparisons of actual confessions and other evidence; *self-report methods*, used to estimate the incidence of various interrogation tactics and false confessions within various populations; and *laboratory and field experiments* that assess pre-interrogation judgments of truth and deception, the effects of certain interrogation tactics on true and false confessions, and the impact of confession evidence on others in the system.

To fully understand confession evidence, one must understand the following: (a) the processes of police interrogation (i.e., initial interviews used to assess whether a suspect is lying or telling the truth, the presentation of *Miranda* warnings, and the techniques used to elicit admissions and confessions); (b) the problem of false confessions (i.e., personal characteristics of suspects who are vulnerable, the interrogation techniques that prove coercive, and the paradoxical role that innocence plays in the mind of the innocent suspect); and (c) the consequences of confessions once taken, even if false (i.e., effects on juries, judges, lay witnesses, and forensic examiners). These research literatures suggest empirically based proposals for reforming policy and practice in ways that will prevent false confessions and their adverse effects.

Processes of Interrogation

Criminal Interrogations and Confessions, the cornerstone manual on interrogation (Inbau, Reid, Buckley, & Jayne, 2013), trains police in the two-step "Reid technique." First, a neutral, information-gathering interview is conducted to determine whether the suspect is lying; then a multistep accusatory interrogation is designed to elicit a confession.

Phase 1: The Pre-Interrogation Interview

When investigating crimes, police often identify suspects for interrogation, sometimes through witnesses, informants, or tangible evidence. Often, however, this identification derives from hunches formed during an interview. To assess whether a suspect is telling the truth, investigators conduct a preliminary interview in which they ask special "behavior-provoking" questions and observe the suspect's verbal and nonverbal reactions, attending to cues such as eye contact, pauses, qualified denials, posture, and fidgeting. This judgment of truth or deception becomes a pivot point in an investigation, determining whether a suspect is released or interrogated. Inbau et al. (2013) claim that trained interrogators can judge truth and deception at exceedingly high levels of accuracy.

Can police, from training and experience, discriminate between truths and lies? Research laboratories all over the world have shown that laypersons on average are not adept at truth and lie detection; the behavioral cues touted by the Reid technique are faint and not diagnostic; training in general does not appreciably improve performance compared with naïve control groups; and so-called experts (police, judges, psychiatrists, customs inspectors) perform only slightly better, if at all (for reviews, see Bond & DePaulo, 2006; DePaulo et al., 2003; Vrij, 2008; Vrij, Granhag, & Porter, 2010).

Some have argued that basic research does not generalize because most laboratory-based studies involve college students randomly assigned to lie or tell the truth who are unmotivated by the low stakes of the situation (Buckley, 2012; O'Sullivan, Frank, Hurley, & Tiwana, 2009). Yet, a recent statistical analysis of studies across 144 samples containing 9,380 speakers, providing a total of 26,866 messages, and spanning more than 40 years refutes this claim. Across studies, deception detectability did not differ according to whether the speaker was a college student or non-student; whether the speaker's motivation to evade detection was high or low; whether the truths and lies were accompanied by high or low levels of emotion; or whether they were told in a monologue, a social interaction, or a face-to-face interview (Hartwig & Bond, 2014).

Two studies specifically evaluated the Reid technique of lie detection, and the results are not impressive. In one, some participants but not others committed a mock crime and were incentivized to evade detection. All participants were then interviewed using the recommended protocol. Yet, responses to the behavior-provoking questions did not significantly distinguish between truth tellers and liars (Vrij, Mann, & Fisher, 2006). Similarly, no evidence supports the diagnostic value of the behavioral cues that investigators are trained to observe. In a test of this hypothesis, some participants, but not others, were randomly trained in using Reid's "behavioral symptoms." All participants then watched videotaped interviews of mock suspects—some who committed mock crimes, others who did not. All of them denied involvement. As in the typical layperson experiment, observers could not reliably differentiate between true and false denials. What is more, those who trained were significantly less accurate, more confident, and more biased toward seeing deception (Kassin & Fong, 1999). A follow-up study using these same taped interviews showed that experienced police detectives exhibited the same erroneous and biased responses. In short, police tend to prejudge guilt, with confidence, which is frequently in error (Meissner & Kassin, 2002).

Phase 2: The Nine-Step Interrogation

During the early 20th century, American police often used "third-degree" methods of interrogation—inflicting physical

pain and discomfort to extract confessions (e.g., prolonged confinement and isolation; explicit threats of harm or punishment; deprivations of sleep, food, and other needs; extreme sensory discomfort; and physical violence). After the Supreme Court—as in *Brown v. Mississippi* (1936)—ruled inadmissible those confessions extracted by physical coercion, a psychological approach to interrogation developed that relied instead on trickery and deception (for an historical overview, see Leo, 2008). Specifically, this approach is designed to overcome the resistance of suspects presumed guilty. To achieve this goal, police isolate the suspect in a small, windowless room, a non-supportive environment that increases the incentive to escape. Next, a nine-step process combines positive and negative incentives using the tactics of "maximization" and "minimization" (Kamisar, 1963; Kassin, 1997; Starr, 2013).

Maximization tactics convey the interrogator's certain belief that the suspect is guilty and that denials will fail. Such tactics include making an accusation, interrupting denials, overriding objections, and citing evidence, real or manufactured, to shift the suspect's mental state from confident to hopeless. In contrast, minimization tactics are designed to provide the weakening suspect with moral justification and face-saving excuses for the crime in question. Using this approach, the interrogator offers sympathy and understanding, minimizes the crime, and offers the suspect motivation "themes"—for example, suggesting that a murder was spontaneous, provoked, peer-pressured, or accidental rather than the work of a cold-blooded premeditated killer. Finally, once a suspect is persuaded to admit guilt, the trained interrogator seeks to convert the admission into a full, detailed, narrative confession—on tape or in writing.

These techniques are commonly used. Observations of 182 live and videotaped interrogations at three California police departments revealed that detectives averaged 5.62 different techniques per interrogation, with Reid-like approaches particularly common (Leo, 1996). Similar practices are found in Canada (King & Snook, 2009) and juvenile interrogations in the United States. (Feld, 2013). In a survey, 631 North American police estimated their most frequent tactics, in order: Physically isolate the suspect, typically in a small private room; identify contradictions in the suspect's account; try to establish rapport to gain the suspect's trust; confront the suspect with evidence of guilt; and appeal to self-interests (Kassin et al., 2007).

The Problem of False Confessions

DNA exonerations represent but a small fraction of all wrongful convictions. Although calculating a precise incidence rate is not possible, false confessions occur in different ways and for different reasons. Drawing on legal history and the social psychology of influence, researchers distinguish three types of false confession: voluntary, coerced-compliant, and coerced-internalized (Kassin & Wrightsman, 1985). This taxonomy has provided a useful framework for the study of false confessions (see, for example, Gudjonsson, 2003).

Voluntary false confessions arise when innocent people offer self-incriminating statements without pressure from police (often to protect someone else or to gain attention in high-profile crimes, as when 200 people confessed to the 1,932 kidnapping of Charles Lindbergh's baby son). Other false confessions are induced through a process of interrogation. *Coerced-compliant false confessions* occur when knowingly innocent people move from denial to confession as an act of behavioral compliance—to escape the stress of a harsh interrogation or because they are led to perceive that confession will prove less punishing than continued denial. In contrast, *coerced-internalized false confessions* occur when innocent people, subjected to misleading claims about the evidence, become confused, question their own innocence, infer their own guilt, and sometimes confabulate false memories to support that inference.

To understand and prevent this non-intuitive behavior, researchers try to identify risk factors present in vulnerable suspects and in the use of certain perilous interrogation tactics. In addition, research has examined the paradox that *innocence* may put *innocents* at risk.

Personal Risk Factors

Some people resist influence more than others when confronted by authorities pressing for a confession. In particular, research has identified three strong sources of vulnerability: youth, intellectual disability, and psychological disorders—such as autism and attention-deficit/hyperactivity disorder (Gudjonsson, 2003).

Juveniles are notably vulnerable suspects (Owen-Kostelnik, Reppucci, & Meyer, 2006). Within a sample of 125 cases, youth under age 18 composed 32% of known false confessors (Drizin & Leo, 2004; National Registry of Exonerations reports a similar rate of 28%). In addition, juveniles are more likely than adults to be wrongfully convicted because of a false confession (Gross, Jacoby, Matheson, Montgomery, & Patel, 2005). Other types of research support these statistics. In a popular laboratory paradigm that urges innocent participants to confess to causing a computer crash, false confession rates varied with age: 78% among 12- to 13-year-olds, 72% among 15- to 16-year-olds, and 59% among young adults (Redlich & Goodman, 2003). Similar age differences were found in responses to hypothetical vignettes (Goldstein, Condie, Kalbeitzer, Osman, & Geier, 2003). High self-reported rates of false confessions to actual crimes are also found among adolescents throughout Europe (Gudjonsson, Sigurdsson, & Sigfusdottir, 2009) and in the United States (Malloy, Shulman, & Cauffman, 2014).

Developmental neuroscience research sheds light on why juveniles are malleable and at risk: Children's brains are not fully formed until young adulthood (National Institute of

Mental Health, 2001). With the adolescent brain being a work in progress, juveniles exhibit *immaturity of judgment*, focusing myopically—as adults often do (Madon, Yang, Smalarz, Guyll, & Scherr, 2013)—on short-term gains and losses rather than on the longer-term consequences of their actions (Cauffman & Steinberg, 2000). This tendency is manifested in a lack of impulse control, inability to delay gratification, and the discounting of delayed rewards—all abetting false confession as an expedient way of a difficult situation.

Situational Risk Factors

Two structural aspects of a typical police interrogation are notable. First, interrogation is by definition a guilt-presumptive social interaction led by an authority figure who has formed a strong belief about the suspect and who single-mindedly measures success by confession. The guilt-presumption that marks the start of interrogation thus provides fertile ground for the operation of cognitive and behavioral confirmation biases. In an experiment that demonstrated the point, some participants, but not others, committed a mock crime. Then all were questioned by interrogators, who by random assignment were induced presumed guilt or innocence. Interrogators who presumed guilt asked more incriminating questions, conducted more coercive interrogations, and tried harder to get the suspect to confess. In turn, this more aggressive style made the suspects sound defensive and led observers who later heard the tapes to judge them guilty, even when innocent (Kassin, Goldstein, & Savitsky, 2003; for replications, see Hill, Memon, & McGeorge, 2008; Narchet, Meissner, & Russano, 2011).

The second striking feature of interrogation concerns the "Milgram-like" nature of the process itself. In the first of his classic obedience experiments, Milgram (1963) found that 65% of participants obeyed an experimenter's commands to deliver increasingly painful electric shocks to a confederate—up to 450 V (for reviews, see Blass, 2004; Milgram, 1974). The parallels between police interrogations and these experiments are striking. In both, the subject is isolated—without access to friends, family, or other means of social support. In both, the subject encounters an authority figure—a psychology experimenter or a detective. In both, the subject then engages a contract-like agreement to proceed—volunteering and receiving payment in Milgram's paradigm; signing a waiver of *Miranda* rights in the interrogation setting. In both situations, the authority figure uses deception to reframe the subject's actions and makes a series of unwavering demands. Milgram used four scripted prompts; Reid-trained interrogators use nine steps. In both, full obedience is achieved through the elicitation of gradually escalating acts of compliance, culminating in 450 V in Milgram—and, of course, a full confession in a police interrogation.

Shifting from a macro-level analysis of interrogation to a micro-level analysis, three specific risk factors can lead innocent people to confess. The first concerns physical custody and interrogation time. Observational studies in the United States show most interrogations lasting from 30 min to 2 hr (Feld, 2013; Leo, 1996). In a survey, 631 North American police estimated the average interrogation as 1.60 hr and their longest lasting an average of 4.21 hr (Kassin et al., 2007). Yet, cases involving false confessions contrast sharply with these norms. In 125 proven false confessions, 34% of interrogations lasted 6 to 12 hr, 39% lasted 12 to 24 hr, and the average length was 16.3 hr (Drizin & Leo, 2004).

People understandably capitulate after lengthy interrogations. The needs for belonging and affiliation, especially in times of stress, comprise a fundamental human motive (Baumeister & Leary, 1996). People under stress seek out others for the psychological and physiological benefits that social support provides. Prolonged isolation is thus a form of deprivation. Depending on interrogation length and conditions, sleep deprivation may also become relevant. Sleep deprivation can lower people's resistance to influence and impair sustained attention, flexibility of thinking, suggestibility in response to leading questions, and complex decision making (Blagrove, 1996). One recent study has linked sleep deprivation to false and distorted memories (Frenda, Patihis, Loftus, Lewis, & Fenn, 2014). Hence, researchers have concluded that sleep deprivation strongly impairs human functioning (Harrison & Horne, 2000; Pilcher & Huffcutt, 1996).

A second interrogation tactic that can lead innocent people to confess is presenting false evidence. In convincing suspects that denial is futile, American police are permitted by law to lie about the presence of incriminating evidence (e.g., a fingerprint, hair sample, eyewitness identification, or failed polygraph)—even if that evidence does not exist. Yet, research warns of the risk. Two types of evidence support this conclusion. First, numerous proven false confession cases have featured the false evidence ploy. In one illustrative case, 17-year-old Marty Tankleff was accused of murdering his parents despite a complete absence of evidence. Tankleff denied the accusation for several hours. Then, his interrogator told him that his hair was found on his mother; that forensic testing indicated that he had showered, washing off blood; and that his hospitalized father had emerged from his coma to identify Marty as his assailant (in fact, his father never regained consciousness). Tankleff became disoriented and confessed. Although he quickly came to his senses and retracted the confession, Tankleff was convicted and spent 18 years in prison until his conviction was vacated and he was set free (Firstman & Salpeter, 2008).

Controlled experiments clearly indicate that false evidence increases false confessions. In the first of these studies, participants were accused of hitting a forbidden computer key during a typing task and crashing a computer (Kassin & Kiechel, 1996). A confederate eyewitness confronted some participants, but not others, claiming to have seen the participant hit the key. Despite their innocence and initial denials,

participants were then asked to sign a confession and queried to determine whether they also believed in their own culpability. The effects were striking: The presentation of false evidence nearly doubled the number of students who signed a confession and internalized belief in their guilt.

Follow-up studies have replicated these basic effects—to the extent that the alleged transgression was plausible (Horselenberg et al., 2006), even when participants were told that confession would bear a financial or other consequence (Horselenberg, Merckelbach, & Josephs, 2003; Redlich & Goodman, 2003), and even among informants pressured to report on a confession supposedly made by another person (Swanner, Beike, & Cole, 2010). Using a different paradigm, Nash and Wade (2009) used digital editing software to fabricate video evidence of participants in a computerized gambling experiment "stealing" money from the "bank" during a losing round. Presented with this false evidence, all participants confessed and most internalized the confession (see also Wright, Wade, & Watson, 2013).

A third situational risk factor concerns minimization. In addition to confrontation, trained interrogators minimize the crime through "theme development" offering the suspect moral justification and face-saving excuses, suggesting their actions were spontaneous, accidental, provoked, or otherwise attributable to external factors. These themes are used to lessen the anxiety associated with confession and do so by implying leniency in punishment. To demonstrate, participants in one study read a transcript of a murder suspect's interrogation (Kassin & McNall, 1991). Three versions of the transcript were produced, where the detective (a) explicitly promised leniency in exchange for confession, (b) used the technique of minimization, or (c) used no special technique. After reading one of these versions, participants estimated the sentence that they thought would be imposed on the suspect. The result is as follows: As if explicit promises had been made, minimization lowered sentencing expectations relative to the control condition.

A laboratory paradigm was then used to assess the behavioral effects of minimization (Russano, Meissner, Narchet, & Kassin, 2005). Participants, paired with a confederate for a problem-solving study, were directed to work alone on some problems and jointly on others. In the guilty condition, the confederate asked for help on a solo problem, inducing a "crime." In the innocent condition, the confederate did not make this request. The experimenter soon alleged too much similarity in their solutions, separated them, and accused the participant of cheating—a possible violation of the university honor code. To get the participant to sign a confession, the experimenter made an explicit promise of leniency, made minimizing remarks, used both tactics, or used no tactics. Overall, the confession rate was higher among guilty participants, when leniency was promised, and when minimization was used. In short, minimization statements may not communicate an explicit offer of leniency, but they nevertheless lead people to act on the inference that leniency will follow from confession.

Does Innocence Put Innocents at Risk?

Anecdotal evidence from wrongful conviction cases suggests that innocence is accompanied by a mental state that can increase the risk of false confession (Kassin, 2005). Innocent people naively believe that truth and justice will prevail. Hence, innocent participants in a mock crime experiment were more likely than perpetrators to waive their *Miranda* rights even to an officer who was accusatory, hostile, and closed-minded (Kassin & Norwick, 2004; also see Moore & Gagnier, 2008). Innocent people are generally open, rather than strategic in their interactions with police (Hartwig, Granhag, Strömwall, & Vrij, 2005); they offer up alibis freely, without regard for the fact that police may view these with suspicion (Olson & Charman, 2012); and they become less physiologically aroused by the stress of interrogation (Guyll et al., 2013). The reassurance that accompanies innocence may stem from a generalized "belief in a just world," where people get what they deserve and deserve what they get (Lerner, 1980), and by an "illusion of transparency" by which we overestimate the extent to which our inner states—in this case, innocence—are known to others (Gilovich, Savitsky, & Medvec, 1998).

Feeling reassured can have unintended consequences for the innocent suspect who is interrogated. Interrogators often use an apparently benign bluff technique, pretending to have evidence, without asserting outright that it implicates the suspect (e.g., stating that biological evidence was sent to a laboratory for testing). Underlying the bluff is the theory that perpetrators will fear the inevitability of detection, succumb, and confess; not fearing that alleged evidence, innocents should not succumb and confess. Yet, in two experiments, innocent participants were substantially more likely to confess to pressing a forbidden key, causing a computer to crash, when told that their keystrokes had been recorded for later review. In a third experiment, they were more likely to confess to willful cheating when told that a surveillance camera had taped their session. In both sets of studies, innocent participants explained that the bluff implied future exoneration—which, paradoxically, made it easier to confess (Perillo & Kassin, 2011).

The Power of Confession Evidence

Inevitably, some innocent people will be targeted for suspicion and harshly interrogated, and will waive their rights and confess. Arguably, tragedy could be avoided if the resulting false confessions were detected by authorities and corrected. However, the combination of wrongful convictions and empirical research casts doubt as to the efficacy of this presumed safety net.

The problem begins with the fact that people are not accurate judges of confessions. In a study that assessed the commonsense belief that "I'd know a false confession if I saw one," male prison inmates took part in a pair of videotaped interviews. Each inmate gave two statements: a true narrative confession to the crime for which he was incarcerated and a newly concocted false confession to a crime, identified by the experimenter, that he did not commit (Kassin, Meissner, & Norwick, 2005). Through his procedure, videotapes were compiled of 10 inmates, each giving a true or false confession to one of five crimes. College students and police investigators judged these statements and the results paralleled those described earlier for judgments of true and false denials. Neither group exhibited much accuracy; the police were more confident in their performance (this result was replicated for juvenile offenders; Honts, Kassin, & Craig, 2014).

Persuasive Confessions in the Courtroom

Research on the impact of confessions at trial has highlighted the persuasive power of this evidence. Mock jury studies have shown that confessions have a more incriminating effect than other potent forms of evidence (Kassin & Neumann, 1997) and that people do not fully discount confessions, even when they see those confessions as coerced and even when it is legally and logically appropriate to do so (e.g., Kassin & Wrightsman, 1980; Neuschatz, Lawson, Swanner, Meissner, & Neuschatz, 2008).

In a mock jury experiment that illustrates the impact of confessions, participants were presented with one of three versions of a murder trial transcript (Kassin & Sukel, 1997). In a low-pressure version, the defendant confessed to police immediately on questioning. In a high-pressure version, the defendant was interrogated aggressively for a long period of time. A control version contained no confession in evidence. In the high-pressure condition, participants reasonably perceived the confession to be involuntary and said that it did not influence their verdicts. Yet, this confession significantly increased the conviction rate. This precise pattern of results—that high-pressure confessions seen as coerced still boost the rate of guilty verdicts—recently replicated in an experiment involving 132 experienced judges (Wallace & Kassin, 2012). These findings bring to life Drizin and Leo's (2004) description of 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 two reasons why confessions overwhelm judges and juries (Kassin, 2012). First, false confession seems implausible to the average person as a matter of *common sense*. Although people recognize the coerciveness of certain interrogation tactics, they do not perceive an accompanying risk of false confession or the factors that would increase it (Blandon-Gitlin, Sperry, & Leo, 2010; Henkel, Coffman, & Dailey, 2008; Leo & Liu, 2009). The second reason is that false confessions typically contain not only an admission of guilt but also numerous *content cues* commonly associated with truth telling. In an analyzed sample of 38 proven false confessions, most contained accurate details about the crime that police had communicated to the suspect, inadvertently or purposefully, through the process of interrogation (Garrett, 2010). Moreover, a content analysis of 20 false confessions showed that besides containing visual and auditory details that formed a story of what each suspect allegedly did, many included statements of motivation, assertions of voluntariness, hand-drawn sketches, and apologies and expressions of remorse (Appleby, Hasel, & Kassin, 2013).

Do Confessions Corrupt Other Evidence?

Basic research in social cognition suggests a second troubling mechanism by which confessions exert influence: by tainting the perceptions of eyewitnesses, alibis, forensic examiners, and others who are supposed to contribute independent evidence to the courts. This results in the operation of *forensic confirmation biases* (Kassin, Dror, & Kukucka, 2013).

It is clear that expectations color an individual's subsequent perceptions and behaviors in a self-perpetuating cycle (Nickerson, 1998). The effects on laypersons can prove substantial. In a study involving eyewitnesses, participants witnessed a staged theft and then made an identification decision from a target-absent lineup. Two days later, they received additional information and an opportunity to change their decision. When told that another suspect had confessed, 61% of the participants changed their initial decision and identified the suspect who had allegedly confessed. Those told that the identified individual had confessed became more confident in their decision. Among participants who had correctly indicated that the culprit was not present in the original lineup, nearly half went on to identify an innocent person after being told that someone had confessed (Hasel & Kassin, 2009). A similar effect recently appeared in a study of alibis who had vouched for a participant accused of theft—until that participant was said to have confessed (Marion, Kukucka, Collins, Kassin, & Burke, 2014).

Knowing that a suspect has confessed, a powerfully incriminating fact, can also corrupt contemporaneous judgments—such as lay people's perceptions of whether degraded speech recordings betray incriminating remarks (Lange, Thomas, Dana, & Dawes, 2011), whether a suspect's handwriting sample is similar to that appearing in a bank robbery note (Kukucka & Kassin, 2014), whether polygraph examiners interpret ambiguous physiological charts as indicating deception (Elaad, Ginton, & Ben-Shakhar, 1994), and whether latent fingerprint experts judge two samples as a match or not (Dror & Charlton, 2006). Even the interpretation of complex DNA mixtures is subject to contextual bias (Dror & Hampikian, 2011).

The biasing effect of confessions is not a mere laboratory phenomenon. An analysis of the first 241 DNA exonerations tested whether confessions prompt additional evidentiary errors, by examining other contributing factors present in DNA exoneration cases containing a false confession (Kassin, Bogart, & Kerner, 2012). Additional errors were present in 78% of these cases—significantly more than in non-confession cases. Specifically, false confessions were accompanied by invalid or improper forensic science (63%), mistaken eyewitness identifications (29%), and snitches or informants (19%). Consistent with the causal hypothesis that the false confessions influenced these other errors, the confession was obtained first rather than later in the investigation in two thirds of these cases. To sum up, by creating a strong expectation of guilt, confessions can taint the perceptions, memories, and judgments of lay and expert witnesses, thereby creating an illusion of corroboration for the confession itself.

Implications for Reform

The research reviewed in this article compels proposals for reform designed to protect vulnerable suspect populations and to ban or limit the use of coercive interrogation practices. The most important safeguard, however, is to require the video recording of all suspect interviews and interrogations—the entire process, not just the confession. This was the primary recommendation in a recent White Paper: "Without equivocation, our most essential recommendation is to lift the veil of secrecy from the interrogation process in favor of the principle of transparency" (Kassin et al., 2010).

The process of reform is underway. A growing number of states, up to 17, now require the recording of interrogations in major felony investigations. In a marked departure from past practice, the U.S. Justice Department recently announced that the FBI and other federal law enforcement agencies would also be required to videotape interrogations in their entirety (Schmidt, 2014). Interviews with police detectives who adopted the practice have shown that the reaction has been uniformly favorable (Sullivan, 2004; Sullivan, Vail, & Anderson, 2008). However, what are the actual effects on behavior?

Two sets of benefits should follow from video recording. First, it will increase accountability among police and thereby, deter their use of particularly coercive interrogation tactics. This effect recently appeared in a mock crime and investigation field study involving experienced officers from a midsized police department (Kassin, Kukucka, Lawson, & DeCarlo, 2014). The second benefit comes from providing an accurate factual record for judges and juries to assess the voluntariness and credibility of confessions presented in court. In this regard, not only must entire sessions be recorded, but the camera must adopt a neutral "equal focus" perspective that shows both the accused and his or her interrogators. In several studies, mock interrogations were taped from three different camera angles so that the suspect, the interrogator, or both were visible. Consistently, participants who see the equal-focus perspective render more informed attributions of voluntariness and guilt, making them better fact finders (Lassiter, Diamond, Schmidt, & Elek, 2007; Lassiter, Geers, Handley, Weiland, & Munhall, 2002).

Finally, it is important to note that although video recording is an important step to deter false confessions, two additional measures should be taken to slow the rippling effects of these confessions once produced. The first problem concerns the empirical fact that confessions can corrupt other evidence from lay witnesses and experts alike. The simplest way to protect against this bias is to ensure that eyewitnesses and crime-lab examiners are "blind" as to the presence or absence of a confession (Kassin et al., 2013; Saks, Risinger, Rosenthal, & Thompson, 2003). A second means of protection concerns the use of expert testimony at trial. Current research can inform the courts about vulnerable suspects and perilous interrogation techniques. Over the years, however, U.S. courts have varied in their willingness to admit such testimony. Yet in several recent briefs submitted to state supreme courts (e.g., *People of New York v. Thomas*, 2013), the American Psychological Association (APA) has concluded from existing research that judges and juries have difficulty assessing confession evidence, that the phenomenon of false confession is counterintuitive, that the science concerning risk factors is reliable, and that psychological experts would assist the triers of fact.

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