American Psychological Association
American Psychology-Law Society
Law and Human Behavior


ISSN: 0147-7307
2025, Vol. 49, No. 1, 7–53
https://doi.org/10.1037/lhb0000593

# Police-Induced Confessions, 2.0: Risk Factors and Recommendations

Saul M. Kassin[1], Hayley M. D. Cleary[2], Gisli H. Gudjonsson[3], Richard A. Leo[4], Christian A. Meissner[5], Allison D. Redlich[6], and Kyle C. Scherr[7]

[1] Department of Psychology, John Jay College of Criminal Justice of the City University of New York
[2] L. Douglas Wilder School of Government and Public Affairs, Virginia Commonwealth University
[3] Institute of Psychiatry, Psychology and Neuroscience, King's College London
[4] University of San Francisco School of Law
[5] Department of Psychology, Iowa State University
[6] Department of Criminology, Law, and Society, George Mason University
[7] Department of Psychology, Central Michigan University

Wrongful conviction databases have shed light on the fact that innocent people can be induced to confess to crimes they did not commit. Drawing on police practices, core principles of psychology, and forensic studies involving multiple methodologies, this article updates the original Scientific Review Paper (Kassin et al., 2010) on the causes, consequences, and remedies for police-induced false confessions. First, we describe the situational and personal risk factors that lead innocent people to confess and the collateral consequences that follow—including the corruptive effects of confession on other evidence, the increased likelihood of conviction at trial, the increased tendency to plead guilty despite innocence, the stigma that shadows false confessors even after exoneration, and the failure of Miranda to serve as a safeguard. Next, we propose the following remedies: (1) mandate the video recording of all suspect interviews and interrogations in their entirety and from a neutral camera angle; (2) require that police have an evidence-based suspicion as a predicate for commencing interrogation; (3) impose limits on confrontational interrogations, namely with regard to detention time, presentations of false evidence, and minimization themes that imply leniency; (4) adopt a science-based model of investigative interviewing; (5) protect youthful suspects and vulnerable adults by mandating the presence of defense attorneys during interrogation, and a suitable appropriate adult where required; (6) shield lay witnesses and forensic examiners from confessions to ensure the independence of their judgments; and (7) abolish contributory clauses from compensation statutes that penalize innocent persons who were induced to confess and/or plead guilty. These recommendations should help to prevent confession-based wrongful convictions and improve the administration of justice for all concerned.

***Public Significance Statement***
In recent years, numerous cases have come to light involving innocent people who confessed to police, leading to their wrongful conviction and incarceration. This article reviews psychological research on the interrogation tactics that can cause this to happen, the kinds of people who are most vulnerable, the collateral consequences that follow, and the reforms to policy and practice needed to prevent future occurrences.

*Keywords:* police, interviewing, interrogations, deception, false confessions, guilty pleas, forensic confirmation biases, stigma, proposed reforms

This article was published Online First February 10, 2025.
Saul M. Kassin https://orcid.org/0000-0002-0495-8377
Hayley M. D. Cleary https://orcid.org/0000-0002-0859-7134
Gisli H. Gudjonsson https://orcid.org/0000-0002-8817-0797
Richard A. Leo https://orcid.org/0009-0008-1154-9011
Christian A. Meissner https://orcid.org/0000-0002-6094-5167
Allison D. Redlich https://orcid.org/0000-0002-1088-4247
Kyle C. Scherr https://orcid.org/0000-0002-9694-0624

Over the course of posting and presenting earlier drafts, we received substantive feedback from several individuals within and outside the field. We want to thank these individuals for their input. For comments on an earlier draft of this article, we also thank Thomas Grisso, Elizabeth Loftus, Gary Wells, and three anonymous reviewers.



All authors were involved in the conceptualization, writing-original draft, writing-review, and editing.

Correspondence concerning this article should be addressed to Saul M. Kassin, Department of Psychology, John Jay College of Criminal Justice, City University of New York, 524 West 59th Street, New York, NY10019, United States. Email: skassin@jjay.cuny.edu

***Executive Summary***

Throughout the world, confessions serve an important function in law enforcement and the administration of criminal justice. Analyses of wrongful convictions in the United States and elsewhere, however, have shown that admissions and confessions drawn from innocent people—a highly counterintuitive phenomenon—are a major contributing factor. In 2010, Kassin et al. published a Scientific Review Paper (SRP) in which they reviewed basic principles of psychology and forensic research that identified the types of police interrogation practices and suspect vulnerabilities that increase the risk. In light of additional exonerations and an explosion of new research, this article aims to update and expand that earlier review by considering not only the causes and correlates of false confessions but the harmful consequences that follow and the remedies that should be implemented to prevent their occurrence.

This article is motivated by four objectives. The first is to bring together a multidisciplinary group of scholars (from clinical, social, cognitive, and developmental psychology; law and criminology) to review the state of the relevant science. Our second objective is to identify the personal and situational factors that compromise the reliability of confession evidence. Third, we seek to extend our analysis to the consequences of confessions—namely, their biasing effects on eyewitnesses, alibis, and forensic examiners; their tendency to increase the rate of false guilty pleas and jury convictions at trial; and the stigma that follows innocent confessors through the system, even after exoneration. Fourth, we summarize recent research on science-based cognitive alternatives to suspect interviewing that help to prevent police-induced false confessions.

In light of data showing that Miranda warnings fail to safeguard the accused, we propose the following remedies: (1) mandate the video recording of all suspect interviews and interrogations in their entirety and from a "neutral" camera angle; (2) require that police have an evidence-based suspicion before commencing a guilt-presumptive interrogation; (3) curb the use of accusatorial tactics by imposing limits on detention and interrogation time and banning the presentations of false evidence and minimization themes that imply leniency; (4) adopt a science-based model of cognitive interviewing as an alternative; (5) protect youthful suspects and vulnerable adults by mandating the presence of a defense attorney, and a suitable appropriate adult where required; (6) shield lay witnesses and forensic examiners from confessions to ensure the independence of their judgments; and (7) abolish contributory clauses from compensation statutes that penalize innocent individuals who confessed and/or pled guilty. These reforms should help to prevent confession-based wrongful convictions and improve the administration of justice for all concerned.

Throughout the world, confessions serve an important function in law enforcement and the administration of criminal justice. Historically, confession evidence has proved to be common, potent, and persuasive both in court and in public opinion. In his classic treatise on evidence, John Henry Wigmore (1940) described confession, even when recanted, as the most potent evidence presentable in court. According to one legal scholar, "the introduction of a confession makes the other aspects of a trial in court superfluous" (McCormick, 1972, p. 316). Alongside this long-standing assessment of the potency of confession evidence, however, is the realization that confessions are fallible—sometimes reported secondhand by police or informants, raising questions as to authenticity, and at other times induced through a highly pressured or deceptive process of interrogation, raising questions about voluntariness and reliability.

Until the 18th century, confessions at common law were admissible at trial regardless of how they were obtained. Then the courts began to exclude confessions deemed involuntary on the grounds that they are potentially untrustworthy, because they violate a defendant's due process rights, and/or to deter offensive interrogation practices that overbear a suspect's free will (for descriptions of case law pertaining to confessions, see Grano, 1994; Leo, 2008; Penney, 1998). In *Brown v. Mississippi* (1936), for example, the Court unanimously reversed the convictions of three Black defendants who were beaten into confessions, convicted, and sentenced to death solely on the basis of these indisputably coerced statements. As a result of this decision, U.S. police departments shifted toward using primarily psychological methods of interrogation. In light of that shift, trial judges assess voluntariness by considering the totality of circumstances. In making this determination, they consider both the interrogation methods used (e.g., physical force, threats, promises, excessive detention times, denial of food or sleep) and the personal characteristics of the suspect (e.g., age, intelligence, emotional stability).

With this in mind, it is important to note that the courts seldom find confessions involuntary if elicited through psychological techniques, even if deceptive (e.g., *Frazier v. Cupp*, 1969). Even when a trial judge erroneously admits an involuntary confession into evidence, appellate courts may later uphold that conviction by ruling that the erroneously admitted confession was a mere "harmless error" (*Arizona v. Fulminante*, 1991). As we will see, research has addressed both of these issues.

## Overview, Background, and Objectives

The pages of American legal history are rich with stories about false confessions. These stories date back to the infamous Salem witch trials of 1692. Following 300 years during which a "witchcraft craze" rippled through Europe, yielding thousands of executions, some 200 colonial men, women, and children were accused of witchcraft. Interrogated, sometimes blindfolded, shackled, stripped, beaten, and sleep deprived, 55 individuals confessed. Nineteen out of 20 who did not confess were executed (Rosenthal, 2009; Schiff, 2015). Fast-forward to 1819 and the first known wrongful convictions in the United States: Brothers Stephen and Jesse

Boorn were convicted and sentenced to death in Manchester, Vermont, for killing their sister's husband, Russell Colvin. Both brothers had confessed under the pressure of interrogation and were convicted. Stephen was set to be hanged when Colvin was found alive in another state (Warden, 2005).

Thereafter, history uncovered numerous additional instances. In 1932, Edwin Borchard published *Convicting the Innocent: Sixty-Five Actual Errors of Criminal Justice*, which included several false confession cases (also see Bedau & Radelet, 1987; Frank & Frank, 1957; Leo, 2005). Then in 1989, Gary Dotson became the first person to be proven innocent through DNA testing. Since that time, additional cases have surfaced involving innocent individuals who were convicted, only later to be exonerated, many of whom had confessed. Although the precise incidence rate of false confessions is not knowable for various reasons, two national databases provide informative data.

In 1992, the Innocence Project was founded to use DNA technology to examine postconviction claims of innocence. Since then, the Innocence Project found that false confessions (by the exoneree or a codefendant whose confession implicated the exoneree) had contributed to nearly 30% of DNA exonerations in the United States (Garrett, 2011; Scheck et al., 2000; https://www.innocenceproject.org/). Founded in 2012, the National Registry of Exonerations (NRE)—a more diverse U.S. database that has archived over 3,600 exonerations and counting, from 1989 to 2024, by all means, not just DNA—reports that 13% of those wrongfully convicted had themselves confessed (https://www.law.umich.edu/special/exoneration/Pages/about.aspx). Interestingly, the percentage of confessions in both datasets is higher (61% and 23%, respectively) within the subsample of homicide cases. First launched in 2024, the European Registry of Exonerations (EUREX)—modeled after the NRE—has thus far archived 136 exonerations in 20 countries, 37% of which involved false confessions (once again, up to 52% in homicide cases (https://www.registryofexonerations.eu/scientific-briefs/).

Self-incrimination in these cases has taken the form of a partial or full *admission* of guilt. Sometimes this admission is accompanied by a narrative *confession* containing a chronology of details. After analyzing 125 proven false confessions in the United States from 1971 to 2002, Drizin and Leo (2004) noted four ways to prove that a confession is false: (a) when it turns out that no crime was committed (e.g., the presumed murder victim is found alive, a "shaken baby" autopsy reveals a natural cause of death); (b) when additional evidence shows that it was physically impossible for the confessor to have committed the crime (e.g., the person was demonstrably elsewhere); (c) when the real perpetrator, having no connection to the defendant, is apprehended and linked to the crime (e.g., by knowledge of nonpublic crime details and/or corroborating physical evidence); and (d) when forensic tests affirmatively establish the confessor's innocence (e.g., as excluded by DNA testing of semen, blood, hair, or saliva).

Whatever the basis of exoneration, it is important to note three points about false confessions. First, the official databases do not include the countless false confessors whose innocence was established before trial, prompting their release and dismissal of charges; those who pled guilty to lesser offenses for a reduced sentence, thereby preempting critical scrutiny of their cases; and those whose confessions were taken in venues outside the criminal justice system (e.g., military and loss-prevention settings). Also unknown are the "off the books" cases involving convicted inmates whose confessions are highly concerning but who remain incarcerated (e.g., Brendan Dassey; see American Psychological Association [APA], 2018) or those who served their time and moved on (e.g., Alvin Mitchell; see Kassin, 2017b). In short, the number of false confession cases that are discovered represent some unknown fraction of the total.

Second, although many case studies have been based in the United States, false confessions have been documented all over the world—a problem that is by no means limited to totalitarian regimes in which confessions are often coerced for political and propaganda purposes (e.g., see Amnesty International, 2015). Through less purposeful mechanisms, false confessions also have been documented in other countries—such as Australia (Adam & van Golde, 2020), Canada (Campbell, 2018), Finland (Santtila et al., 1999), Germany (Schneider & May, 2022), Iceland (Cox, 2018), India (Kaur, 2022), Ireland (Inglis, 2004), Israel (Sangero, 2014), Italy (Lupária & Greco, 2020), Japan (Onishi, 2007), the Netherlands (Brants, 2013; Wagenaar, 2002), Norway (Sherrer, 2008), Sweden (Josefsson, 2015; Stridbeck, 2020), and Taiwan (Lin, 2021)—to name just a few (for more on the cross-national scope of false confessions, see Gudjonsson, 2018; Lupária, 2015).

The third important point is that false confessions yield a profound secondary cost to public safety. Norris et al. (2020) examined a broad range of wrongful convictions in which DNA was used both to exonerate the innocent and to identify the actual perpetrator. Within that set, they identified 109 true perpetrators who had escaped arrest and prosecution, 102 of whom committed 337 additional offenses—including 43 homicides and 94 sex offenses. By extrapolation, Norris et al. estimated that the wrongful convictions that occur annually may lead to more than 41,000 additional violent, but often preventable, crimes. When a case is closed on an innocent confessor, the real perpetrator remains at large and likely to reoffend.

In light of historical precedent, the discovery of new wrongful convictions, and a wave of new empirical research, social scientists and policymakers have come to recognize the role that psychological science can play. Hence, the American Psychology-Law Society published an SRP on confessions (Kassin et al., 2010; for an introduction to this article and the vetting process, see Thompson, 2010). This SRP was the second in American Psychology-Law Society history, the first addressing the topic of eyewitness identifications (Wells et al., 1998; for an update, see Wells et al., 2020).

The Kassin et al. (2010) SRP brought together a diverse group of experts, each focused on an aspect of false confessions. Reviewing the relevant literatures, they identified suspect vulnerabilities and interrogation tactics that influence confessions as well as the effects on judges and juries. They concluded with a strong recommendation for the mandatory electronic recording of interrogations from a "neutral" camera angle and noted other needs for additional research, the reform of interrogation practices, and protection of vulnerable suspect populations. In the years since this SRP was published, a lot has happened. In 2012, the NRE was founded, exposing a new generation of false confessions (the 2024 founding of EUREX is already having that effect). In contrast to the 2010 landscape, some 30 states now require the video recording of custodial interrogations for some or all crimes (Garrett, 2024). Beginning in 2021, several state legislatures also have passed bills

that would limit police deception of youthful suspects. Other states are now considering the same. The 2010 SRP has served as a template for several amicus briefs on false confessions by APA. Importantly, APA also adopted two resolutions on the interrogation of criminal suspects, in 2014 and 2022, in which it reiterated the SRP recommendations (https://www.apa.org/about/policy/interrogations).

Also since the SRP was published, additional studies have expanded our knowledge base concerning personal and situational risk factors and a range of related topics—including the demeanor-based judgments that lead police to see a suspect as deceptive; guilty plea decisions, including false guilty pleas and their link to prior confessions; the processes of contamination that produce richly detailed false confession narratives; the effects on juries of "secondary confessions" reported by jailhouse informants; the ways in which confessions taint lay witnesses and forensic examiners through the operation of confirmation biases; the stigma that follows confessors through the system—even after exoneration; the methods used to interrogate minors and what protective role, if any, parents play; the question of what constitutes "custody"—the condition that triggers Miranda and the video recording of interrogations where mandated; the failure of Miranda to safeguard the accused, including competent adults; and the effects of video recording interrogations on police, suspects, and jurors.

Of particular importance, new research has identified alternative approaches to suspect interviewing that stand to benefit law enforcement and the system as a whole. Aimed at developing science-based methods in the laboratory that are now finding their way into practice, psychologists—at times, in collaboration with police practitioners—have introduced, tested, and meta-analyzed cognitively oriented alternatives to traditional accusatorial approaches. These alternatives aim to reduce the risk of false confessions and increase the diagnosticity of the information obtained. In light of these developments, the time was ripe for an update.

This article is motivated by four objectives. The first objective is to review the state of the relevant science by bringing together a multidisciplinary group of scholars from three perspectives: clinical psychology (focused on personality and psychopathology), experimental psychology (focused on social, cognitive, and developmental processes), and criminology (focused on the empirical study of criminal justice, law, and procedure). Our second objective is to identify the factors that influence the diagnosticity of confession evidence. Third, we sought to extend our analysis from the causes and correlates of false confessions to their consequences—namely, the effects of confession on forensics and other evidence; guilty pleas; and judges, juries, and stigmatizing public perceptions. Finally, we summarize recent research on science-based alternatives to suspect interviewing that are designed to prevent police-induced false confessions.

## The Psychology of Confessions

Psychology's interest in confessions can be traced to its early days as a science. In *On the Witness Stand*, Hugo Munsterberg (1908) devoted an entire chapter to the topic of "untrue confessions" in which he discussed the Salem witch trials, reported on a then-contemporary Chicago confession that he believed to be false, and sought to explain this nonintuitive phenomenon (e.g., he used such words as "hope," "fear," "suggestion," "calculations," "shock," "fatigue," "auto-hypnosis," and "dissociation"). Munsterberg's insights regarding confessions lay mostly dormant for more than half a century. Inspired perhaps by *Miranda v. Arizona (1966)*, a smattering of psychologically oriented papers then appeared. Zimbardo (1967) analyzed the social influence tactics of police interrogations in the inaugural issue of *Psychology Today*; Driver (1968) published "Confessions and the Social Psychology of Coercion"; and Wald et al. (1967) reported on an observational study of 127 interrogations in New Haven, Connecticut, the first such study of its kind.

## Types of False Confessions

Although it is not possible to calculate a precise incidence rate, it is clear that false confessions occur in different ways and for different reasons. Drawing from the pages of legal history and borrowing from the classic literature on normative and informational influences, Kassin and Wrightsman (1985) introduced a taxonomy that distinguished three types of false confessions: voluntary, compliant, and internalized (also see Kassin, 1997; Wrightsman & Kassin, 1993). To be described later, this classification scheme provided a framework that has since been used, critiqued, extended, and refined by others (e.g., Gudjonsson, 2021; McCann, 1998; Ofshe & Leo, 1997).

### *Voluntary False Confessions*

Sometimes innocent people have claimed responsibility for crimes they did not commit without prompting or pressure from police. This has occurred in several high-profile cases. After Charles Lindbergh's infant son was kidnapped in 1932, 200 people volunteered confessions. In 2006, John Mark Karr volunteered a detailed false confession to the still-unsolved murder of young JonBenet Ramsey. In the 1980s, Henry Lee Lucas in Texas falsely confessed to hundreds of unsolved murders, making him the most prolific serial false confessor in history (Gudjonsson, 1992, 2003). Between 1993 and 2000, Sture Ragnar Bergwall, a psychiatric patient from Sweden, also known as Thomas Quick, confessed to more than 30 murders in Sweden, Norway, Denmark, and Finland. He was convicted of eight murders before being fully exonerated (regarding the outside influences that facilitated Quick's confessions, see Josefsson, 2015; Råstam, 2013; Stridbeck, 2020).

There is a host of idiosyncratic reasons that people have volunteered false confessions—such as a pathological desire for notoriety, a conscious or unconscious need for self-punishment, and an inability to distinguish fact from fantasy because of a breakdown in reality monitoring. Radelet et al. (1992) described one case in which an innocent man confessed to a murder to impress his girlfriend; Gudjonsson (2003) described another case in which a man confessed because he wanted to mislead police in an act of revenge. Perhaps the most prevalent motive is to protect the actual perpetrator, often a loved one. In one study, 17% of youthful detainees said they had falsely confessed to police; of those, 51.5% said they did so to protect someone else (Malloy et al., 2014). In a second study, 53% of innocent individuals with mental illness also reported confessing to protect the true perpetrator (Redlich et al., 2010). In field studies, several participants voluntarily accepted

blame for the misconduct of someone else in their group (Schell-Leugers et al., 2021).

### *Compliant False Confessions*

In contrast to voluntary false confessions are those in which innocent suspects are induced through the process of interrogation. In these cases, the suspect acquiesces to the demand for a confession despite self-perceived and actual innocence in order to escape a stressful situation, avoid harsh punishment, or gain a promised or implied reward. Demonstrating the kinds of effects observed in classic studies of social influence as well as expected utility models of decision making, this type of confession is an act of mere compliance by suspects who know that they are innocent but bow to the pressure, often coming to believe that the short-term benefits of confession relative to denial outweigh the long-term costs.

Reviewing actual cases, Gudjonsson (2003) identified some specific incentives for this type of compliance—such as being allowed to sleep, make a phone call, go home, or 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, alone, socially dependent, or fearful of detention. History is filled with stories of compliant false confessions. In the infamous Central Park jogger case of 1989, five teenagers confessed, four on videotape, after lengthy interrogations. They immediately retracted their confessions but were convicted at trial, only to be exonerated 13 years later (see Burns, 2011). Similarly, history is filled with cases in which false confessions were extracted through "enhanced" interrogation tactics and other forms of torture (Vrij, Meissner, et al., 2017).

### *Internalized False Confessions*

In the third type of false confession, innocent but malleable suspects, told that there is incontrovertible evidence of their involvement, not only capitulate in their behavior but come to believe that they may have committed the crime, sometimes confabulating false memories in the process. Gudjonsson and MacKeith (1982) noted that this kind of false confession occurs when people develop such a profound distrust of their own memory that they become vulnerable to influence from external sources. Similarly, Kassin and Wrightsman (1985) used the term "internalization" to describe the 1973 case of 18-year-old Peter Reilly, who found his mother bloodied and beaten to death. After hours of interrogation and being told that he failed an infallible polygraph, Reilly became confused. "This test is giving me doubts right now," he conceded. Hours later, using the language of inference, he said, "Well, it really looks like I did it." Still later he confabulated a vivid false memory of slashing his mother's throat with a razor. Reilly was convicted but released and exonerated shortly thereafter (Barthel, 1976; Connery, 1977).

Noting that the innocent confessor's belief is often transient and not fully internalized, Ofshe and Leo (1997) suggested the term "persuaded false confession" for this phenomenon. The case of 14-year-old Michael Crowe, whose sister Stephanie was stabbed to death in her bed, illustrates this type of persuasion. After a series of interrogations, during which time police confronted Crowe with false evidence, he concluded that he was a killer: "I'm not sure how I did it. All I know is I did it." Crowe went on to confess and implicate two friends. All charges were later dropped when a local drifter was found with Stephanie's blood on his clothing (Drizin & Colgan, 2004).

At other times, the process of internalization has appeared more enduring. In the 1970s in Iceland, six suspects made false confessions to two assumed murders after lengthy interrogations in solitary confinement. All were later convicted; five developed profound distrust of their memory and made internalized false confessions that lasted from a month to several years (Gudjonsson, 2017). In the wrongful convictions of the Beatrice Six, in Nebraska, four of the defendants confessed to murder after they were told that they were implicated by evidence and a police psychologist suggested that they had repressed their memories. They were DNA exonerated 20 years later. Yet two of the defendants had internalized their guilt so deeply that they still had vivid "memories" of committing the crime (Aviv, 2017).

## Relevant Core Principles of Psychology

Long before the first empirical studies of confessions, the core processes of relevance were familiar to generations of behavioral scientists. Dating back to Thorndike's (1911) law of effect, psychologists have known that people are highly responsive to reinforcement and subject to the laws of conditioning and that behavior is influenced more by short-term than long-term consequences. Of distal relevance to a psychological analysis of interrogation are the thousands of operant animal studies of appetitive, avoidance, and escape learning, as well as behavioral modification applications in clinics, schools, and workplaces (see Herrnstein, 1970; Skinner, 1938).

Also relevant to behavior in the interrogation room are studies of human decision making in a behavioral economics paradigm. A voluminous body of research has shown that people make choices they think will maximize their well-being given the constraints they face (Herrnstein et al., 1997). In addition, studies on temporal discounting show that people tend to be impulsive, preferring outcomes that are immediate, with delayed outcomes depreciating over time in their subjective value (Rachlin, 2000). This tendency is especially evident in children and adolescents (Owen-Kostelnik et al., 2006; Steinberg, 2014) and in stressful situations (Davis & Leo, 2012). Research shows that these same principles are at work in the interrogation room (Madon et al., 2013; for an overview, see Yang et al., 2017).

Rooted in the observation that people are inherently social beings, a second set of core principles is that individuals are highly vulnerable to influence from change agents who seek their compliance. Of relevance to an analysis of interrogation are the extensive literatures on attitudes and persuasion (Petty & Cacioppo, 1986), conformity (e.g., Asch, 1956; Sherif, 1936), sequential request strategies, as in the foot-in-the-door effect (Cialdini, 2009), and the gradual escalation of commands issued by figures of authority to obtain self- and other-defeating acts of obedience (Milgram, 1974). Conceptually, Latané's (1981) social impact theory provides a predictive model for the influence of police interrogators who bring power, proximity, and number to bear on their exchange with suspects.

A third set of core principles consists of the "seven sins of memory" that Schacter (2001; also see Schacter, 2022) identified from cognitive and neuroscience research—a list that includes

memory transience, misattribution effects, suggestibility, and bias. After the initial discovery of internalized false confessions, an extensive literature emerged on misinformation effects on the creation of false beliefs and memories (Loftus, 2005, 2017; Scoboria et al., 2017). As a result, experts can now better grasp the process by which people come to accept guilt for a crime they did not commit and the conditions under which this may occur (see Gudjonsson et al., 2014; Kassin, 2007).

## Scientific Methodologies and Consensus

The scientific study of confessions is grounded in a combination of basic principles of psychology, empirical research focused on interrogation and confessions, and actual cases. Thus, the current research literature is vast, multidisciplinary, and global in reach. The study of confessions also brings together a convergence of multiple methodologies. 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 methods include naturalistic observations of live and videotaped police interrogations that are coded for behaviors and outcomes, archival records that enable comparisons of confessions and other evidence, self-report surveys used to estimate the incidence of various interrogation tactics and confessions, and controlled laboratory and field experiments aimed at causal hypothesis testing. The bulk of this work is published in peer-reviewed journals, books, and edited book chapters.

Importantly, the research reported in this SRP is generally accepted within the relevant community of psychological scientists. In recent years, for example, APA has submitted 12 amicus briefs in which it affirmed this research literature (https://www.apa.org/about/offices/ogc/amicus/index-issues). Starting with *Wright v. Commonwealth of Pennsylvania*, APA (2008) stated, "Drawing on extensive scientific research, the APA submits that a voluntary confession does not conclusively establish guilt. On the contrary, numerous psychological factors may cause innocent suspects to tender false confessions" (p. 2). More recently, APA (2022) submitted a brief to the Court of Criminal Appeals of Texas on behalf of Melissa Lucio, who was convicted and, at the time, set to be executed on the basis of a troubling confession. General acceptance metrics of consensus were also found in a recent survey of experts. In that study, 87 PhD confession experts from several countries were surveyed about their opinions on 30 specific propositions. As indicated by an agreement rate of at least 80%, a strong consensus showed that the findings reported in this article are reliable—indeed, sufficiently so to present in court (Kassin et al., 2018).

Finally, it is important to note that the findings we report in this article are buttressed by some 20 meta-analyses of relevant literatures, all cited and referenced. As American Psychology-Law Society members are aware, meta-analyses statistically combine multiple data sets, assessing generalizability by enabling the computation of effect size across studies.

## Comment on Racial Bias

Black Americans make up 13.6% of the U.S. population; yet, according to a recent NRE report, 53% of the first 3,200 individuals wrongfully convicted in their database were Black—33% were White, and 12% were Hispanic (Gross et al., 2022). Although evidence indicates that Blacks are similarly overrepresented in samples of false confessors, there is little to no research indicating that Black suspects are at an increased risk when they appear in the interrogation room.

Existing research in criminal justice venues does, however, strongly support the hypothesis that Black people are more likely to become targets of suspicion in the first place and therefore more likely to get caught up in the crosshairs of a police investigation (Najdowski et al., 2015). Tracing back to Allport and Postman's (1947) demonstration of how racial stereotypes bias rumor transmission, social psychology experiments using the "dot-probe" method of planting subliminal images in a visual array (e.g., Eberhardt et al., 2004), shooting experiments (Correll et al., 2014), and other paradigms have demonstrated the often-implicit nature of racial prejudice. Similarly, criminal justice statistics and naturalistic field studies have shown that Black Americans are subjected to traffic stops and searches by police at rates disproportionate to their number in the population and rate of offending (for overviews of such bias, even if implicit, see Banaji & Greenwald, 2013; Eberhardt, 2019).

In studies of direct relevance, Camp et al. (2021) and Voigt et al. (2017) analyzed body-worn camera recordings of police traffic stops and found that 60% involved Black motorists, even though they constituted only 28% of the city's population. They were also more likely to be searched and handcuffed. Moreover, the tone of these stops as rated by condition-blind observers differed as a function of race, as police used less respectful language and a more hostile tone in their interactions with Black motorists. In one study, analyses showed that escalation could be predicted in the first 45 words spoken, where officers are more likely to issue commands and less likely to explain to drivers why they are being stopped—leading Black men exposed to audio clips of these exchanges to report more negative emotion, worry about force being used, and predict worse outcomes (Rho et al., 2023). These sorts of biases are not limited to the perception of adults. Goff et al. (2014) compared adult perceptions of boys and found that they judged Black boys to be older, less childlike, and less innocent than their same-age White peers—a potentially consequential form of "dehumanization" (also see Perillo et al., 2023).

Basic theory and research in nonforensic domains point to two possible mechanisms for such an effect. Najdowski (2011) proposed a stereotype threat perspective based on Steele's (1997) work: that innocent Black suspects, acutely aware of the stereotype that links race and criminality, are likely to experience stereotype threat when pulled into an interrogation setting, increasing physiological arousal and cognitive load. In turn, they may exhibit the kinds of anxious behaviors often associated with deception. As Najdowski (2023) recently noted, however, this chain of events has yet to be investigated in the context of confessions. A second possible mechanism stems from studies conducted in laboratories, classrooms, and other domains on the self-fulfilling prophecy, or interpersonal expectancy effect (for an overview, see Rosenthal, 2003). This research suggests that interrogators—guided by a race-biased expectation of guilt—are more likely to deploy harsh guilt-presumptive tactics during questioning, thereby increasing the risk that the innocent Black suspect would confess.

Taken together, the literatures on stereotyping, prejudice, and discrimination help to explain disparities in wrongful convictions. With regard to the specific effects of race on interviewing, interrogation, and false confessions, however, more research is sorely needed (Najdowski & Stevenson, 2022).

## Police Interrogations in Context

The practices of interrogation are subject to historical, cultural, political, legal, and other contextual influences. Indeed, although this article is focused on confessions in a criminal justice framework, similar processes occur, involving varying degrees of pressure, within the disparate frameworks of military intelligence gathering, corporate and retail loss-prevention investigations, school settings, and medical investigations into child injuries (e.g., questioning parents and daycare workers in head trauma cases). Focused on criminal justice, we examine case law on the admissibility of confession evidence, third degree practices, and current interrogation methods used by law enforcement in the United States as well as England and other countries.

### Third Degree Practices

From the 19th century through the 1930s, American police routinely employed "third degree" methods of interrogation—inflicting physical or mental pain and suffering to extract confessions from crime suspects. Commonly used techniques included physical violence, often hitting suspects with a rubber hose and other instruments that seldom left visible marks; prolonged isolation and incommunicado confinement; deprivations of sleep, food, and other needs; extreme sensory discomfort; and threats of physical harm and punishment (Wickersham Commission Report, 1931). These types of methods were commonplace, resulting in an indeterminate number of coerced false confessions (Leo, 2008).

Third degree methods declined precipitously from the 1930s through the 1960s, having been replaced by approaches that are more psychologically oriented. Indeed, the twin pillars of modern-day interrogation are behavioral lie-detection methods and the use of psychological tactics aimed at confession. Both were developed and memorialized in interrogation manuals and training programs. In 1967, the President's Commission on Criminal Justice and the Administration of Justice thus declared, "Today the third degree is virtually non-existent" (Zimring & Frase, 1979, p. 132). Declaration notwithstanding, physically and psychologically coercive interrogations are still used across the world (Amnesty International, 2022)—even in some democracies (Rejali, 2009). Although infrequent, these methods also have been documented in the United States, such as occurred in Chicago from 1972 to 1991 (Bauer, 2018). In addition, "enhanced interrogation" tactics (e.g., stress positions, sleep deprivation, waterboarding) were used by the Central Intelligence Agency in the aftermath of 9/11 (Senate Select Committee on Intelligence, 2015). Despite the seeming infrequency of physical coercion in the United States, the United States Supreme Court noted in *Miranda v. Arizona* (1966) that psychological approaches may also be "inherently compelling" when citizens are isolated and subjected to forms of trickery and deceit that communicate threats of adverse consequences and/or promises of leniency in exchange for confession.

### Current Law Enforcement Practices in the United States

American police typically receive brief instruction on interrogation in the academy and more specialized training when promoted from patrol to detective (see Trainum, 2016). Although formal training varies across the nearly 18,000 local, state, and federal agencies in the United States, the most influential approach has been the Reid technique—named after John E. Reid, who developed this approach in the 1940s in collaboration with Fred Inbau. In 1962, Inbau and Reid published the first edition of *Criminal Interrogations and Confessions*, now in its fifth edition (Inbau et al., 2013). Over the years, hundreds of thousands of investigators have been trained in the Reid technique, as have an estimated two-thirds of police executives in the United States (Zalman & Smith, 2007).

The Reid technique occurs primarily in two stages. Prior to interrogation, a pre-interrogation interview aims to determine whether prospective suspects are lying or telling the truth. This process is referred to as the Behavior Analysis Interview, or BAI (an idea that Reid introduced to supplement the physiological records in polygraph charts; Reid & Arther, 1953). The BAI features 15 to 20 "behavior-provoking questions" designed to evoke verbal responses assumed to be diagnostic of guilt (e.g., an unwillingness to speculate as to the actual culprit) and a host of nonverbal and demeanor cues (e.g., slouching, gaze aversion) assumed to betray concealment and deception. To be noted shortly, empirical research does not support the efficacy of this approach.

If a Reid-trained investigator decides that a suspect is deceptive, the process shifts to a nine-step accusatorial interrogation designed to overcome the suspect's resistance by increasing the stress associated with denial and decreasing the stress associated with confession (Inbau et al., 2013). Conducted behind the closed door of a private room, the process opens with a "positive confrontation," an unequivocal assertion of guilt, during which time the suspect's denials are rebuffed and incriminating evidence is presented, even if false. At the same time, Reid-trained investigators may feign sympathy and develop "themes" that appear to excuse or morally minimize the crime (e.g., that the actions were accidental, provoked, or otherwise justifiable; for a description of minimization themes customized for different crimes, see Senese, 2016). This latter process culminates in "the alternative question," which offers the suspect a choice between a morally reprehensible admission and a sympathetic admission—for example, "Are you a cold-blooded killer or was this an accident?" (innocence is not an option). The objective is to elicit an initial admission that can then be converted into a full narrative confession.

Over the years, use of these types of techniques, by Reid-trained investigators and others, has been well documented in naturalistic observational studies (e.g., Feld, 2013; King & Snook, 2009; Leo, 1996a) and in surveys of North American investigators (e.g., Kassin et al., 2007; Kostelnik & Reppucci, 2009; Miller et al., 2018). Yet new approaches have begun to emerge. In 2017, Wicklander-Zulawski and Associates, a large interrogation training firm, also from Chicago, discontinued its training in the Reid technique, citing the risk of false confessions and advances in evidence-based interviewing. To be discussed shortly, other alternatives, focused on the use of rapport and open-ended questions for information-gathering purposes, also have been developed. In short, training

is now available in multiple methods that investigators can choose from.

## Practices in England and Elsewhere

In London in April 1972, three boys, ages 14 to 18 years, were manipulated by police into confessing to arson. Two of the boys also confessed to the murder of Maxwell Confait, who lived at the premises; the third boy confessed merely to being present. All were convicted of arson on the basis of their confessions; two boys were also convicted of murder and manslaughter. Three years later, amidst considerable public pressure, the case was reconsidered by the Court of Appeal, and the convictions were quashed (Fisher Inquiry, 1977). The acquittal in this case had a great impact in Britain, as it highlighted the potential problems with confessions taken from youthful suspects and those with psychological vulnerabilities. This prompted a Public Inquiry headed by Sir Fisher (Fisher Inquiry, 1977), followed by the Royal Commission on Criminal Procedure (1977–1981) and the creation of the Police and Criminal Evidence Act, known as PACE, its Codes of Practice, and the electronic recording of suspect interviews.

In England and Wales, PACE (Home Office, 1985) became effective in January 1986. The act was later supplemented by Codes of Practice, which provided guidance to police officers concerning the appropriate treatment of suspects (Home Office, 2003). The most important interview procedures set out in PACE were that suspects detained at a police station must be informed of their rights; in any 24-hour block of time, they must be allowed a continuous period of rest of at least 8 hours; detainees who are vulnerable in terms of their age or mental functioning should have access to an "appropriate" adult whose function is to give advice, facilitate communication, and ensure that the interview is conducted properly; and all interviews shall be electronically recorded.

Despite the changes, law enforcement practice still aimed at obtaining confessions, often using tactics akin to those used in the United States (Pearse & Gudjonsson, 1999). The latter position was further enabled by the publication of a then-new interrogation manual that presented a mere adaptation of the Reid technique (Walkley, 1987). This changed years later with the introduction of a standardized police interview model and training, developed by a national committee on investigative interviewing. This began in the 1990s following landmark wrongful convictions involving the terrorist cases of the "Guildford Four" and "Birmingham Six" (Gudjonsson, 2003).

The British authorities therein initiated the Royal Commission on Criminal Justice (1993). The approach that emerged at that time was founded on seven principles. As described by Williamson (2006), (1) "The role of investigative interviewing is on obtaining accurate and reliable information from suspects, witnesses or victims in order to discover the truth about matters under investigation." (2) "The investigative interviewing should be approached with an open mind. Information obtained from the person who is being interviewed should always be tested against what the interviewing officer already knows or what can reasonably be established." (3) "When questioning anyone, a police officer must act fairly in the circumstances of each individual case." (4) "The police interviewer is not bound to accept the first answer given. Questioning is not unfair merely because it is persistent." (5) "Even when the right of silence is exercised by a suspect, the police still have a right to put questions." (6) "When conducting an interview, police officers are free to ask questions in order to establish the truth, except for interviews with child victims of sexual or violent abuse which are to be used in criminal proceedings." (7) "Vulnerable people, whether victims, witnesses or suspects, must be treated with particular consideration at all times" (p. 154).

The above principles provided the framework for the current PEACE model. Following the Guildford Four and Birmingham Six, the Association of Chief Police Officers for England and Wales published the first national training program for interviewing suspects and witnesses. This new approach was developed through a collaboration of law enforcement officers, psychologists, and lawyers. As introduced in 1992, the mnemonic PEACE describes the five distinct parts of this approach: "Preparation and Planning," "Engage and Explain," "Account," "Closure," and "Evaluate" (see Clarke & Milne, 2001; Milne & Bull, 1999; Williamson, 2006). Post-PEACE analyses of recorded police-suspect interviews in England have revealed that confrontation-based tactics, relative to information seeking, were used less often (e.g., Soukara et al., 2009).

Vaughan et al. (2022) recently recommended additional specialized training for police managers and practitioners responsible for high-stakes crimes investigations such as murder and rape. The aim of this training is to ensure that all interviewees are treated ethically and legally using research-based methods that are effective, while minimizing the risk of false confession (see Thielgen et al., 2022; for comparisons of the PEACE and accusatorial approaches, see Meissner et al., 2014; Shepherd & Griffiths, 2013). Importantly, variants of PEACE have been adopted in several countries (Walsh et al., 2016; for an overview of practices since World War II, see Oxburgh et al., 2022).

# What Causes False Confessions?

As described earlier, the process of interrogation is designed to overcome the anticipated resistance of individuals identified for suspicion and to obtain legally admissible confessions. The primary objective is to increase the anxiety associated with denial and reduce the anxiety associated with confession. To achieve these goals, officers typically isolate the suspect and offer or imply both negative and positive incentives. On the negative side, investigators confront the suspect with accusations of guilt, assertions made with certainty and often bolstered by evidence, real or manufactured, and a rejection of alibis and denials. On the positive side, they offer sympathy and moral justification, introducing themes that normalize and minimize the crime and lead suspects to see confession as an expedient means of escape. In this section, we describe the situational and personal factors that put innocent people at risk.

## Situational Risk Factors

There are two structural aspects of a typical police interrogation that serve as a backdrop for understanding the process. The first aspect concerns the fact that interrogation is, by definition, a *guilt-presumptive process*—a theory-driven social interaction led by an authority figure who has formed a strong belief about the suspect and who single-mindedly measures success by whether they are able to extract a confession. The guilt presumption that accompanies the start of interrogation provides fertile ground for the operation of cognitive and behavioral confirmation biases.

In the Reid technique, investigators are trained to conduct a pre-interrogation interview aimed at determining whether a prospective suspect is telling the truth or lying and, hence, is worthy of interrogation. In laboratories all over the world, extensive research has shown that many of the cues that investigators are trained to use (e.g., eye contact, changes in posture, emotionality) are not reliably diagnostic of deception, that laypeople on average are only 54% accurate, and that training and experience are not associated with significant improvements (Bond & DePaulo, 2006; Denault et al., 2022; DePaulo et al., 2003; Luke, 2019; Vrij et al., 2019).

Studies specifically focused on the BAI have shown that verbal responses to the prescribed behavior-provoking questions are not predictive of guilt (Vrij et al., 2006), that the "behavioral symptoms" purportedly indicative of deception merely codify common sense (Masip et al., 2012), and that use of these cues yields only a modest if any increase in judgment accuracy (Kassin & Fong, 1999; Mann et al., 2004; Masip et al., 2005; Meissner & Kassin, 2002). In short, this approach may lead police to presume guilt, which increases the tendency to misclassify innocent people for investigation (Yang et al., 2023). In contrast to forming a true evidentiary basis for suspicion, this approach may thus increase the number of innocents who are interrogated and hence the risk of false confession (Moody et al., 2023).

Whatever the basis of suspicion, a guilt-presumptive mindset may lead detectives to ask leading and provocative questions, reject denials, and ratchet up the pressure, in turn making the suspect more anxious and the detective more determined to get a confession. In a study that demonstrated the process, Kassin et al. (2003) had some participants but not others commit a mock crime, after which all were questioned by participant interrogators who were led to presume guilt or innocence. Consistent with many classic confirmatory hypothesis-testing studies (e.g., Snyder & Swann, 1978), participants 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, leading observers who later listened to the tapes to judge them as guilty—even when they were innocent. Follow-up research has provided support for this chain of events in suspect interviews conducted by laypeople (Hill et al., 2008; Narchet et al., 2011) and police officers (Lidén et al., 2018).

The second structural aspect of interrogation worthy of note is its resemblance to Milgram's studies of obedience. Sixty years ago, Milgram (1963) published his classic, the first of 18, obedience experiment in which 65% of participants obeyed an experimenter's commands to deliver increasingly painful electric shocks to a confederate—in their view, up to 450 volts. Milgram (1974) described his methods, findings, and implications in *Obedience to Authority* (for retrospective accounts, see Blass, 2004; Miller, 1986; for evidence of replicability, see Burger, 2009; Doris et al., 2024). The parallels between police interrogations and the Milgram protocol are striking. In both venues, the subject is isolated in a specially designed space, confronted by a figure of authority, engaged by a contractual agreement to proceed, deceived as to the purposes and consequences of the subject's actions, and subjected to a stepwise series of unwavering demands. Notably, in both settings, full obedience is achieved through gradually escalating acts of compliance—up to 450 volts in Milgram's lab and a full narrative confession in the interrogation room (for a fuller discussion of these parallels, see Kassin, 2015).

Against the structural backdrop of a guilt-presumptive and Milgramesque process, research has singled out four situational risk factors commonly associated with false confessions: (a) prolonged custody and isolation, (b) the presentation of false evidence, (c) minimization themes that imply leniency, and (d) the phenomenology of innocence. These factors are highlighted because of the frequency with which they appear in cases involving proven false confessions and their consistency with psychological research in which these factors have been independently varied.

### *Prolonged Custody and Isolation*

Investigators using confrontational approaches such as the Reid technique are trained to remove suspects from friends, family, and familiar surroundings and question them in the police station, alone—preferably in a small, bare, windowless, soundproofed room, seated in a hard-back chair. The objective is to "establish a sense of privacy" and "remove all distractions" (Inbau et al., 2013, pp. 46–47).

Most interrogations are brief. In the United States and Britain, observational studies involving adult suspects and minors have shown that the vast majority of sessions last from approximately 30 minutes to 2 hours (e.g., Baldwin, 1993; Feld, 2013; Kelly et al., 2016). In a self-report survey of police, 631 North American investigators estimated from experience that the mean length of a typical interrogation is 1.60 hours and that the longest on average lasted 4.21 hours (Kassin et al., 2007; also see Brimbal et al., 2024). In a self-report survey of suspects, respondents similarly estimated that their sessions lasted an average of 1.49 hours (Cleary & Bull, 2021).

In contrast to these norms are interrogations that yield false confessions. In their analysis of 125 proven false confessions, Drizin and Leo (2004) found that in 47 cases in which custodial interrogation times were recorded, 34% lasted 6 to 12 hours, 39% lasted 12 to 24 hours, and the mean was 16.3 hours—far in excess of prevailing norms. On this point, it is important to note that these session times are measured from start to finish—regardless of whether the questioning was continuous or discontinuous.

It is not particularly surprising that false confessions tend to occur after long periods of time. The need for belonging, especially in times of stress, is a fundamental human motive (Baumeister & Leary, 1995). People under stress seek to affiliate for the psychological and physiological benefits of social support (Rofé, 1984; Uchino et al., 1996). In one experiment, for example, subjects reacted to a physical stressor with greater increases in blood pressure and cortisol reactivity when alone than when accompanied by a supportive confederate (Roberts et al., 2015). Prolonged isolation thus constitutes a form of deprivation that can heighten a suspect's motive to escape.

Sleep deprivation, which may accompany lengthy periods of detention, can also heighten susceptibility to influence. Acute sleep deprivation impairs one's ability to sustain attention or recall newly learned material (e.g., Newbury et al., 2021); reduces inhibitory control, thereby interfering with the ability to anticipate the consequences of our actions (Harrison & Horne, 2000); and increases suggestibility to leading questions (Blagrove, 1996) and the production of false memories (Frenda et al., 2014). This literature is vast (see Newbury et al., 2021; Pilcher & Huffcutt, 1996). Importantly, these performance decrements have been observed

across a range of populations—for example, medical interns, truckers, and fighter pilots. Hence, 98% of confession experts surveyed agreed that "sleep deprivation lowers people's resistance to influence and impairs complex decision-making" (Kassin et al., 2018).

The use of sleep deprivation as a stressor is hardly novel. In *Psychology and Torture*, Suedfeld (1990) noted that it is historically and universally one of the most potent methods used to soften up political dissidents and prisoners of war. Even on a limited scale, the effects are measurable. Using the computer crash paradigm to be described shortly, Frenda et al. (2016) found that participants randomly assigned to remain awake rather than sleep through the night were more likely the next morning to sign a false confession. Across conditions, the odds of confessing were 4.5 times higher among individuals who self-reported high levels of sleepiness.

### *Presentations of False Evidence*

When suspects are isolated, investigators armed with a strong presumption of guilt make an accusation, stated with confidence, and seek to communicate that resistance is futile. This begins the confrontation process, during which interrogators exploit the psychology of inevitability to drive the suspect into a state of despair. This process also involves interrupting the suspect's denials, countering objections, and refuting alibis. At times, American police will overcome a suspect's denials by presenting supposedly incontrovertible evidence of guilt (e.g., a fingerprint, eyewitness identification, or failed polygraph)—even if that evidence does not exist.

In *Frazier v. Cupp* (1969), as noted earlier, the United States Supreme Court made it lawful for police to elicit confessions by outright lying to suspects about evidence. "The victim's blood was found on your pillow," "cell phone records prove you were there," "your hair was found in the victim's grasp," "your friend said she wasn't with you at that time," and "surveillance footage puts you at the scene" are some common examples. There appears to be no limit to the number, type, or magnitude of verbal deception that can be used. Unfortunately, lawful does not mean effective or diagnostic. Numerous false confessions in actual cases have demonstrated the power of this type of subterfuge.

In one case, 17-year-old Marty Tankleff found his parents lying unconscious in pools of blood and called 911. After several hours of accusations and denials, the lead detective told the boy that his father had regained consciousness in the hospital and implicated him in the assault. Hearing this lie (his father remained comatose and died shortly thereafter), Tankleff broke down and confessed. He was exonerated 18 years later (Firstman & Salpeter, 2008). In a second case, 41-year-old Gary Gauger woke up on the family farm in Illinois and found his parents stabbed to death. Detectives said they found blood-soaked clothes in his bedroom, which was a lie. They also falsely claimed that he failed a polygraph. Gauger was led to conclude that he must have killed his parents during an alcohol-induced blackout. After 5 years in prison, including time spent on death row, he was released and later pardoned; two motorcycle gang members were convicted of the murders (Gauger & von Bergen, 2008).

In much of the world, police are not permitted to deceive suspects in this way. Still, the United States is not alone. In Italy, police told Amanda Knox, falsely, that her boyfriend disavowed her alibi and that physical evidence placed her at the scene (Burleigh, 2011). In 2015, Italy's Supreme Court overturned her conviction and stated that the case was without foundation. In a case depicted in the 2017 documentary, *Shadow of Truth*, Roman Zadorov, a Ukrainian immigrant in Israel and suspect for the murder of a girl, was interrogated on and off for several days. At one point, detectives told Zadorov that the victim's blood was found on his toolbox and clothing. "Impossible" was his response. Yet that night, he was video recorded in jail, confused, asking his cell mate if police can make up evidence. "No, they wouldn't do that," he was told. "This isn't Russia!" That cell mate was an undercover detective, in place to bolster the deception. Disoriented by his own lack of memory, Zadorov confessed (Timor et al., 2017). His conviction was recently overturned (Starr & Silkoff, 2023).

Consistent with real-world cases, more than 100 years of behavioral science warns of the risk. Across a range of subdisciplines, research has shown that misinformation renders people vulnerable to manipulation. To cite but a few classics: The presentation of false information—via confederates, witnesses, counterfeit test results, bogus norms, false physiological feedback, and leading questions—can substantially alter subjects' visual judgments, beliefs, emotional states, self-assessments, memories for observed and experienced events, and even certain medical outcomes, as seen in the classic placebo effect. Scientific evidence for human malleability in response to misinformation is broad and pervasive (Loftus & Klemfuss, 2024; with specific regard to confessions, see Snook et al., 2021).

Concerns about the polygraph are illustrative in this regard. Best known for its use as a lie-detector test, the polygraph has proved controversial (for a critique, see Iacono & Ben-Shakhar, 2019; for a meta-analysis of 138 data sets indicating that comparison question testing can yield accurate results, see Honts et al., 2021). In particular, posttest "failure" feedback—a ploy that John Reid used in 1955, which elicited a false confession (see Starr, 2013)—is often used to pressure suspects. In one egregious instance, Christopher Tapp of Idaho spent 20 years in prison for a murder he did not commit after confessing in response to a sequence of five recorded polygraph exams, each followed by false feedback (https://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=5592). This problem is so common that Lykken (1998) coined the term "fourth degree" to describe the tactic (p. 235), and the National Research Council (2003) warned of polygraph-induced false confessions (for a critique of federal polygraph practices that put innocents at risk, see Honts, 2024). Importantly, the so-called "voice stress analyzer test," which has never been validated for lie-detection purposes (Hollien et al., 2008), has also elicited false confessions—as in the case of Michael Crowe described earlier (Drizin & Leo, 2004).

The second source of evidence is found in laboratory experiments that test the causal hypothesis that false evidence leads innocent people to confess to prohibited acts they did not commit. In one study, Kassin and Kiechel (1996) accused participants of causing a computer to crash by pressing a key they were instructed to avoid. Despite their innocence and initial denials, subjects were requested to sign a confession. In some sessions but not others, a confederate said she witnessed the subject hit the forbidden key. This false evidence nearly doubled the number of students who signed a written confession, from 48% to 94%. A significant subsample of individuals who signed the confession also internalized the belief in their own culpability.

Using this paradigm, follow-up studies have replicated the false evidence effect even when the confession was said to bear a financial consequence (Horselenberg et al., 2006), and especially among vulnerable populations such as children and adolescents (Candel et al., 2005; Redlich & Goodman, 2003) and sleep-deprived adults (Frenda et al., 2016). This effect also has been produced using vastly different methods, leading innocent subjects to confess to cheating, in violation of a university honor code (Perillo & Kassin, 2011), and to recall past transgressions, including acts of violence (Shaw & Porter, 2015; also see Wade et al., 2018). In one novel 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 manipulation, all participants confessed and most internalized the belief in their own guilt (also see Wright et al., 2013). A recent meta-analysis showed that false evidence dramatically increases the risk of false confession compared with direct-questioning ($OR = 2.88$) and information-gathering ($OR = 4.34$) approaches (Catlin et al., 2023; also see Stewart et al., 2018).

Finally, it is important to note that sometimes police use what seems like a relatively benign version of the false evidence ploy. In what is called the *bluff technique*, interrogators pretend to have evidence to be harvested (that they do not actually have) without asserting that this evidence implicates the suspect (e.g., a rape kit sent to the laboratory for testing). One might expect that a bluff would produce diagnostic outcomes by threatening the actual perpetrator with certain detection, increasing the incentive to cooperate, without similarly pressuring innocent suspects. In light of research on the phenomenology of innocence, however, Perillo and Kassin (2011) found that to an innocent suspect under stress, the threat of proof implied by the bluff represents a promise of future exoneration, paradoxically making it easier to confess. In a series of experiments, innocent participants were more likely to confess to crashing a computer when told that their keystrokes had been recorded than when not presented with this bluff. They also were more likely to confess to willful cheating when told that a surveillance camera had taped their session for later review.

In light of the foregoing literatures, the scientific community is in agreement regarding the risk posed by false evidence. In 2014, APA passed a resolution "recommending that law enforcement agencies, prosecutors, and the courts recognize the risks of eliciting a false confession by interrogations that involve the presentation of false evidence" (https://www.apa.org/about/policy/interrogations; also see APA, 2022). In a survey of 87 PhD confession experts, 94% endorsed as reliable enough to present in court the proposition that "presentations of false incriminating evidence during interrogation increase the risk that an innocent suspect would confess to a crime he or she did not commit." A full 100% of respondents endorsed the proposition that "misinformation about an event can alter a person's memory for that event" (Kassin et al., 2018).

Research psychologists are uniformly critical of this type of deception (e.g., Woody & Forrest, 2020). Importantly, a growing number of experienced and enlightened practitioners also oppose the presentation of false evidence, citing the risk to innocents, the adverse effects on the public's trust, and public safety. In a recent article, for example, Kassin (2022b) quoted several practitioners commenting on this issue. (https://time.com/6241531/police-deception-tactics-suspects-consequences/): Mark Fallon, former special agent and counterterrorism expert with the Naval Criminal Investigative Service, stated, "Police should be banned from lying to suspects during interrogation. False confessions continue to result. … Trust must be restored between police and the public served." Andy Griffiths, senior investigating officer with the U.K. Police Force, stated, "A ban on lying to suspects is a significant step forward in criminal justice and law enforcement." Matt Jones, a retired homicide detective from Tempe, Arizona, wrote, "To my fellow brothers and sisters in law enforcement: you do not need to lie to get confessions … it's time to move on." Steven Kleinman, a retired colonel with the U.S. Air Force with experience interrogating suspected terrorists, put it this way: "Misleading individuals as to the nature and/or extent of the evidence increases the incidence of false confessions, an insidious phenomenon that continues to plague this nation." Similar warnings were expressed by Stuart Greer, a former police commander in New Jersey specializing in criminal investigations; David Thompson, President of Wicklander-Zulawski and Associates, a consulting and training organization based in Chicago; and James Trainum, a retired homicide detective from the D.C. Metro Police. In short, the landscape today is far less polarized than it was 15 years ago when SRP 1.0 was published.

### *Minimization Themes That Imply Leniency*

Recognizing the obvious risk to innocent people, American courts over the years have ruled to exclude confessions extracted not only by threats of harm or punishment but also by promises of leniency or immunity from prosecution. However, purveyors of confrontational approaches such as the Reid technique advocate the use of minimization tactics, in a process known as "theme development," through which promises unspoken may be implied. A detective might provide face-saving excuses, often accompanied by expressions of sympathy and understanding, and/or downplay the moral seriousness of an offense by suggesting to suspects that their actions were somehow justifiable, perhaps by factors outside their control. The theme used depends on the case: for a sex crime, "Joe, no woman should be on the street alone at night looking as sexy as she did"; for a workplace theft, "Man, how in the world can anybody with a family get along with the kind of money they're paying you? … Joe, your company is at fault." Different minimizing themes are scripted for auto theft, blackmail, arson, child abuse, fraud, and other crimes (Inbau et al., 2013; Senese, 2016).

Research indicates that these tactics, variously defined, are commonly used. It is important to note that "minimization" is not a single homogeneous construct. Through analyses of actual interrogations, Leo (1996a) and others (Kaplan & Cutler, 2022; Kelly et al., 2019) have observed the common use of this tactic as well as others that may be related, such as appealing to the suspect's self-interest and conscience. In a self-report survey, 631 North American investigators rated "offering the suspect sympathy, moral justifications and excuses" as a technique they often use (Kassin et al., 2007).

With regard to minimization themes that offer moral justification, basic cognitive research warns of the risks. When people read text or hear speech, they tend to process information between the lines and recall not what was stated in words but what was pragmatically implied. In various studies, for example, participants who read that "the burglar goes to the house" often mistakenly recalled that the burglar actually broke into the house; those who heard that "the flimsy shelf weakened under the weight of the books" often recalled that the shelf actually broke (Chan & McDermott, 2006; Harris &

Monaco, 1978; Hilton, 1995). Pragmatic implications can thus change the meaning of a communication, leading listeners to infer something that is not explicitly stated.

This research is directly applicable to the suspect lulled by minimizing themes. In three studies, Kassin and McNall (1991) tested the hypothesis that minimizing would lead people to infer leniency in punishment. Participants read the interrogation of an actual murder suspect. The transcript was edited to produce three versions: one in which the detective made a promise of leniency in exchange for confession, a second in which he made minimizing remarks by blaming the victim, and a third in which neither statement was made. Participants read one version and then estimated the sentence they thought would be imposed on that suspect. Compared with the no-techniques control group, participants who read the minimization transcript had lower sentencing expectations—as if an explicit promise had been made.

This basic effect has been variously replicated. Horgan et al. (2012) found that minimization tactics led participants to view the potential consequences of confessing as less severe. Redlich et al. (2020) found that juvenile participants, not just adults, also exhibited this pragmatic implication effect. Luke and Alceste (2020) presented an interrogation transcript in which the suspect was promised leniency outright, presented with a minimization theme, or merely questioned about the evidence. Across several experiments, moral minimization led participants to view the crime as less severe, which in turn reduced sentencing expectations—without leading them to believe that a direct promise had been made. Extending these effects, Fallon and Snook (2021) found that although participants inferred leniency from minimization, they perceived the tactic to be respectful, ethical, and harmless. This combination of results led these authors to suggest that minimization may bear a similarity to the Trojan horse of Greek mythology—"benign at first glance, yet hidden beneath the harmless exterior is a veritable army of coercion, manipulation, and persuasion" (pp. 1820–1821; also see Cleary & Bull, 2019).

Moving from inference to behavior, minimization tactics can lead innocent people to confess. Using the computer crash paradigm, Klaver et al. (2008) found that when the accusation concerning the forbidden key press was plausible, minimization remarks significantly increased the false confession rate. Russano et al. (2005) devised the now-classic cheating paradigm to assess the behavioral effects of minimization on the diagnosticity of confessions. In their study, some participants but not others were prompted to assist a confederate in a problem-solving study, which violated the terms of the experiment. The experimenter then accused participants of cheating and tried to get them to sign a confession through an overt promise of leniency, minimizing remarks, both tactics, or neither tactic. Overall, the confession rate was higher among guilty participants than innocent, when leniency was promised than when it was not, and when minimization was used than when it was not. Minimization—even without an explicit offer—lowered diagnosticity by increasing not only the rate of true confessions but even more so the rate of false confessions. A meta-analysis of the experimental literature has shown that minimization tactics increase the risk of false confession compared with direct-questioning ($OR$ = 2.61) and information-gathering ($OR$ = 4.00) approaches (Catlin et al., 2023). Importantly, Vallano et al. (2022) found that minimization was particularly effective at eliciting confessions when interviewers had first built a rapport with participants.

The minimization effect is not a mere laboratory phenomenon. Cases in which these tactics induced confessions are found throughout the archives of controversial convictions (Ofshe & Leo, 1997). In New York's Central Park jogger case, every boy gave a false confession that placed his cohorts on center stage and minimized his own involvement; each boy expected to be released upon confession (Burns, 2011). In another New York case, three boys confessed to the 1995 killing of a subway token booth clerk in which each minimized his own role. One boy said that he was just a "watch out," a second referred to himself as a "lookout," and the third called himself a "backup." As in the jogger case, no one confessed to taking the lead. After 27 years in prison, these men were exonerated (Kassin, 2022a). In Wisconsin, Brendan Dassey's *Making a Murderer* detectives let him off the moral hook in no uncertain terms. After befriending Dassey and feigning sympathy, one detective said, "It's not your fault—remember that. You've done nothing wrong." Shortly after Dassey agreed to confess to murder, he asked if he would get back to school in time for a project (Demos & Ricciardi, 2015).

Inbau et al. (2013) have argued that minimization does not inherently communicate leniency but rather that suspects are afflicted with "wishful thinking" (p. 213). Yet this position does not account for the fact that the effect is derived from the basic nonforensic literature on pragmatic implications. Nor does it account for the fact that minimization themes yield the inference of leniency even among neutral observers who are unmotivated to form the inference and have nothing to gain by doing so. In short, although U.S. courts do not typically accept confessions extracted by explicit promises of leniency noting the risk to innocents, promises unspoken via minimization essentially circumvent the law's intent.

### *The Phenomenology of Innocence*

Over the years, naturalistic studies have shown that an estimated 80% or more of all suspects waive their Miranda rights to silence and counsel (e.g., Feld, 2013; Leo, 1996b; Thomas & Leo, 2002; Wald et al., 1967). Several reasons for this high waiver rate will be described shortly. One reason, counterintuitively, stems from the state of mind that accompanies actual innocence. A wealth of archival and anecdotal evidence suggests that innocent suspects fail to appreciate the significance of their Miranda rights precisely because they harbor a *phenomenology of innocence*—a naive faith in the exculpatory power of their own innocence (Kassin, 2005).

This mental state may be rooted in a generalized belief in a just world (Lerner, 1980) and an illusion of transparency by which people overestimate the extent to which their true inner states can be seen by others (Gilovich et al., 1998). Research supports the idea that innocents maintain a naive belief in the exonerating power of their actual innocence. In the first empirical test of this hypothesis, innocent participants in a mock crime experiment were substantially more likely to sign a Miranda waiver than those who were guilty (81% and 36%, respectively). This pattern was obtained even when the interrogator appeared hostile and closed minded. When later asked to explain this decision, most innocent participants reasoned that they signed the waiver because "I did nothing wrong" and "I had nothing to hide" (Kassin & Norwick, 2004).

Converging evidence from independent studies has supported and extended this innocence effect on Miranda waivers—in a study

conducted in Canada (Moore & Gagnier, 2008), among participants who strongly believe in a fair and just world (Scherr et al., 2016), and even among those who fully understood the administration of rights (Scherr et al., 2018). In other studies, innocent participants were more likely to disclose information to interrogators without apprehension of the consequences (Hartwig et al., 2005, 2006) and offer alibi stories without regard for the inconsequential errors that police might view with suspicion (Olson & Charman, 2012).

Consistent with this subjective state is research showing that innocent participants "embody" their naiveté. In general, one would expect people to exhibit physiological stress reactions when accused of a crime. In a series of experiments, however, innocent participants exhibited less of a physiologic reaction to an initial accusation of cheating than did others who were guilty (Guyll et al., 2013, 2019; Normile & Scherr, 2018). They also self-reported experiencing less stress (Scherr & Franks, 2015). In short, innocent people, lacking a consciousness of guilt, do not feel sufficiently threatened by accusation and exhibit the belief that they have nothing to fear by talking to police. Under dire circumstances, the phenomenology of innocence may even "enable" innocent people under pressure to confess. After 16 years in prison for a rape and murder he did not commit, Jeffrey Deskovic was DNA exonerated. Asked about his confession, Deskovic explained, "Believing in the criminal justice system and being fearful for myself, I told them what they wanted to hear. … I thought it was all going to be O.K. in the end" (Santos, 2006). To innocents under stress, the suggestion that hard evidence would be available for later review represents a promise of future exculpation which, paradoxically, can make it easier to confess (see Perillo & Kassin, 2011).

## Personal Risk Factors—Dispositional and Transient

When in custody, some suspects are more compliant, more suggestible, and more vulnerable to manipulation than others. Individually and cumulatively, personal risk factors increase the likelihood of a false confession. The term *vulnerability* refers to any factor that impairs the functional capacity of suspects to understand their rights, the questions asked, and the implications of their answers; to communicate effectively; to cope with custody and interrogation; and to make rational and informed decisions. In the coming pages, we discuss the role of neurodevelopmental disorders, suggestibility and compliance, psychopathology, life adversity and trauma, and youth (for overviews, see Gudjonsson, 2018, 2021).

Before we proceed to describe these suspect vulnerabilities, it is important to comment on the role that language proficiency and culture may play in the processes of interviewing and interrogation. In recent years, sociolinguists have raised concerns about the potential for miscommunication when speakers are not fluent in the language—for example, in police interviews conducted in the United States with Spanish-speaking witnesses and suspects (Filipović, 2021) or in Australia, involving Aboriginal English speakers (Eades, 2012). For various reasons, both linguistic and cultural, these types of interrogations may result in false confessions (Berk-Seligson, 2009). To further complicate matters, research shows that observers are less likely to perceive nonnative speakers as truthful, suggesting that they are also at a disadvantage from a credibility assessment standpoint (Elliott & Leach, 2016, 2024). In light of these issues worldwide, more research is needed to examine language differences as a source of vulnerability in the interrogation room.

### *Neurodevelopmental Disorders*

As indicated in the first SRP, diminished intellectual capacity, as often measured by substantially below-average IQ scores, poses a significant risk. This is still the case. Although the problem is multifaceted and in need of additional research, archival studies suggest that persons with intellectual impairments are overrepresented in cases of proven and disputed false confessions (Mogavero, 2020; Schatz, 2018). It is also now possible to be more precise about the nature of this impairment. Neurodevelopmental disorders are conditions with an early onset that range from specific impairments (e.g., in learning and control of executive functions) to global impairments of intelligence or social functioning. The major neurodevelopmental disorders are intellectual disability (ID), autism spectrum disorder (ASD), and attention-deficit/hyperactivity disorder (ADHD) (American Psychiatric Association, 2013). A related problem, fetal alcohol spectrum disorder (FASD), afflicts people who had been exposed to alcohol during their mother's pregnancy, also causing functional deficits that can heighten vulnerability in a criminal justice setting (Brown et al., 2022).

All four conditions increase the risk of a false confession for different reasons. Research shows that suspects with ID often have difficulty understanding and implementing their legal rights, coping with the intellectual demands of interrogation, and making informed decisions (Clare & Gudjonsson, 1995; Perske, 2008). Individuals with ADHD may impulsively and inadvertently make incriminating statements, while giving vague (e.g., "don't know") answers to questions, leading them to become misclassified for suspicion (Gudjonsson, Gonzalez, & Young, 2021). Those with ASD have impaired social, cognitive, and communication skills, which can adversely impact their comprehension of rights (Salseda et al., 2011). Finally, individuals with FASD are, inter alia, vulnerable to suggestions and interrogative pressures (Brown et al., 2022). Importantly, various neurodevelopmental disorders commonly co-occur, and the presence of more than one condition typically exacerbates functional problems above those experienced by one condition alone (Young et al., 2020).

### *Suggestibility and Compliance*

In an interrogation, individual differences in certain nonpathological personality characteristics—most notably, suggestibility and compliance—may also increase the risk of a false confession. In 1986, Gudjonsson and Clark defined interrogative suggestibility by "the extent to which, within a closed social interaction, people come to accept messages communicated during formal questioning, as the result of which their behavioural response is affected" (p. 84). To measure this trait in a manner that was objective and reliable, Gudjonsson (1984, 1987) constructed two parallel forms of the Gudjonsson Suggestibility Scale (GSS 1 & GSS 2; for the administration manual, see Gudjonsson, 1997). These scales were designed to measure two types of suggestibility: (a) the extent to which a person *yields* in response to leading and misleading questions (as in research on misinformation effects on memory), and (b) the extent to which a person *shifts* their answers following negative feedback (mimicking a form of interrogative pressure).

Research has shown that yield scores are largely related to cognitive factors, whereas shift is a more social construct related to anxiety and self-esteem (Gudjonsson, 2003; for results in a U.S. sample, see Frumkin et al., 2012). Indeed, the tendency to shift in response to negative feedback is correlated with measures of social compliance (Gudjonsson, 2003; Mastroberardino & Marucci, 2013).

Whereas GSS 1 and GSS 2 use subtle procedures to assess the subject's response to external information, compliance—as measured by the Gudjonsson Compliance Scale—is a self-report measure of an individual's "tendency to go along with propositions, requests or instructions, for some instrumental gain" (Gudjonsson, 2003, p. 370). Out of 34 British cases of wrongful convictions between 1952 and 2003 that were based principally on confession evidence, 24 cases (70.6%) primarily involved suspects' mental vulnerabilities. Out of these, 19 cases (82.6%) involved high suggestibility and/or compliance as the most salient risk factors as determined by the appeal court—often accompanied by borderline IQ, anxiety, and low self-esteem (Gudjonsson, 2010).

Based on a review of the literature, Ridley and Gudjonsson (2013) drew an additional distinction between immediate and delayed suggestibility. Immediate suggestibility refers to the immediate effects of leading questions and negative feedback as measured by the GSS. In contrast, delayed suggestibility refers to instances in which people incorporate misleading postevent information into their subsequent recollections, later in time, as in experiments on the misinformation effect on memory (e.g., Loftus, 2005; Loftus et al., 1978). In a study of reported child victims of sex abuse, Vagni et al. (2015) successfully incorporated delayed suggestibility into the GSS 2 procedure at a 1-week follow-up as an additional measure. This finding helps to explain the powerful effects of trauma symptoms on delayed suggestibility (Gudjonsson et al., 2020).

In a recent meta-analysis, Otgaar et al. (2021) reviewed controlled experiments in which false confessions were evoked and suggestibility and compliance were measured as well as field data linking these characteristics to potential false confessions. This meta-analysis revealed a significant association between suggestibility and compliance, as personality traits, and vulnerability to false confession. The mean effect sizes using Cohen's *d* were large for field studies (1.09 for suggestibility; 1.28 for compliance) but smaller for experimental studies, where only suggestibility was significant (effect size = 0.33). Although noting the methodological weaknesses in each type of data set (i.e., establishing the ground truth of a confession in field studies and the restricted range of pressures that can be applied in experiments), the authors concluded, "These diverse databases converge to the same conclusion … that high levels of suggestibility (and to a lesser extent compliance) were associated with an increased vulnerability to falsely confess" (p. 445).

### *Psychopathology*

We use the term "psychopathology" to describe vulnerabilities related to mental illness (e.g., schizophrenia, major depression, bipolar disorder), personality disorders (e.g., antisocial, dependent), and substance misuse. In the archives of wrongful convictions, individuals with a history of mental health conditions are overrepresented in cases involving false confessions (Mogavero, 2020; Redlich et al., 2010). The figures obtained in studies conducted retrospectively must be treated with caution unless reliable preconviction diagnoses and their relevance to the confession can be ascertained (Gudjonsson, 2010). In one study, however, conducted in an Icelandic police station, Sigurdsson et al. (2006) found that suspects exhibited significantly more psychopathology than witnesses who were also interviewed by police. Moreover, their psychopathology, objectively assessed at the station, was associated with a reported history of false confession.

Internalized false confessions in particular have been linked to memory distrust syndrome (MDS), a situationally induced condition in which suspects come to accept police suggestions and question their own innocence. As noted earlier, MDS may lead to a confabulation of false memories, which in extreme cases may last several months or years (e.g., Aviv, 2017; Gudjonsson, 2017). To be sure, underlying psychopathologies can exacerbate a person's vulnerability to MDS during interrogation (see Gudjonsson, 2018). This link was evident in the case of David MacKenzie, who confessed to murdering two elderly women and then to other sex crimes he could not have committed—including an experimentally generated false confession to a fictitious murder. His convictions for killing the two women were quashed, inter alia, on the basis that his confessions to the other murders undermined his credibility (Gudjonsson, Heaton-Armstrong, et al., 2021). Pathological attention seeking is also well documented in the case of Henry Lee Lucas, a serial false confessor, noted earlier, who had confessed to hundreds of murders he had not committed. The nature of his psychopathology was multifaceted (Gudjonsson, 2003).

### *Life Adversity and Trauma*

Life adversity—and posttraumatic stress symptoms in particular—may also exacerbate the risks (Cleary et al., 2021; Gudjonsson, 2018). Specifically, a history of negative life events is associated with increased suggestibility, compliance, and false confession. The evidence consists of correlations between a history of negative life events and suggestibility (e.g., Childs et al., 2021; Drake, 2010, 2014; Gudjonsson et al., 2020); sexual, physical, and emotional abuse and compliance (Gudjonsson et al., 2011); and negative life events and false confessions (Drake et al., 2016; Gudjonsson et al., 2009, 2012). Essentially, this research shows that a history of trauma is indicative of a reduced resilience and ability to cope with interrogative pressure, as measured by the GSS and Gudjonsson Compliance Scale.

Using Leo and Drizin's (2010) "three errors" framework of police-induced false confessions, Cleary et al. (2021) suggested possible mechanisms through which adolescents with trauma histories (and adults too, for that matter) may be vulnerable in an interrogation, leading to three types of errors: (a) An aberrant stress response may cause the trauma victim to overreact or underreact to police questioning and create the appearance of deception; (b) this misperception may then trigger a guilt-presumptive interrogation that overcomes the youthful suspect's resistance; and (c) after police have elicited an admission, they may seek to elicit a full narrative confession, often contaminated with crime details communicated to the now-compliant suspect. With regard to this latter process, Cleary et al. (2021) postulated that trauma-induced failures in cognitive functions may increase suggestibility and impair the suspect's ability to process crime scene details, whether observed or imagined.

### *Adolescence and Developmental Immaturity*

Over the years, numerous young people have been induced into confessing to crimes they did not commit. Anthony Harris was 12 years old, Tyler Edmonds was 13, Michael Crowe was 14, Prakash Churaman was 15, and Nga Truong was 16. In one particularly egregious instance in 1998, two Chicago boys confessed to a murder that they could not have committed. An autopsy later revealed the presence of semen, as the victim was also raped. Yet the boys were 7 and 8 years old. Proven false confession cases often involve older teens as well. Hence, individuals younger than 21 years are highly overrepresented relative to the general population (Drizin & Leo, 2004; Gross & Shaffer, 2012).

Both social scientists and the courts recognize the empirical reality that young people exhibit age-related impairments in legal decision making relative to adults (Cleary, 2017; Owen-Kostelnik et al., 2006; Steinberg & Scott, 2003). Adolescents demonstrate impairments in adjudicative competence (Grisso et al., 2003; Redlich et al., 2003), understanding and appreciation of Miranda rights (Zelle et al., 2015), and legal knowledge (Woolard et al., 2008)—and a self-reported likelihood of false confession (Haney-Caron et al., 2018). Many law enforcement groups also acknowledge youths' susceptibility in these regards. The International Association of Chiefs of Police (IACP, 2012) offers specialized training and resources for interviewing youths. In doing so, they note that eliciting false information not only harms young suspects but also carries reputational and financial costs to the individual officer and the city, and it disserves public safety.

The United States Supreme Court has specifically recognized developmental immaturity as an impediment to legal decision making. In *Roper v. Simmons* (2005), the Court cited psychology and neuroscience showing adolescents' immature judgment, susceptibility to outside pressures, and ongoing character development as reasons to abolish the death penalty for individuals younger than 18 years. A series of cases followed this watershed decision, relying on this research (see Steinberg, 2017). One such case was *J.D.B. v. North Carolina* (2011), in which the Supreme Court's ruling cemented the idea that a suspect's age is specifically relevant to police interrogation for the purposes of custody analysis. In the majority opinion, Justice Sotomayor cited previous rulings in noting that "the settled understanding that the differentiating characteristics of youth are universal" (p. 3). She wrote that "a reasonable child subjected to police questioning will sometimes feel pressured to submit when a reasonable adult would feel free to go" (p. 8). Thus, *J.D.B.* not only reiterated the *Miranda* Court's stance that "custodial police interrogation entails inherently compelling pressures" (p. 2) but also acknowledged that youths may perceive those pressures more intensely than adults, that interrogation pressures are linked to false confessions, and that juveniles are at a heightened risk.

Understanding why adolescence is a risk factor requires understanding the relevant processes of human development. In turn, this requires clarifying what precisely constitutes "adolescence." The past two decades have ushered in a wave of neuroscientific research that has reconceptualized adolescence as a unique and evolutionarily important life stage. Adolescence begins with the onset of puberty and associated physical, social, cognitive, and emotional changes. The upper boundary of adolescence is demarcated by diminished neuroplasticity as well as social transitions in which young people take on adult social roles (National Academies of Sciences, Engineering, and Medicine, 2019). Indeed, research indicates continued maturation and socioemotional development in the early 20s (Casey et al., 2022; Center for Law & Brain & Behavior, 2022).

Developmental researchers thus agree that a broad conceptualization of adolescence that accounts for all legally relevant capacities generally comprises ages 10 to 25 years. Although demarcations vary across individual studies, this age range can be further divided into early adolescence (ages 10–13), middle adolescence (ages 14–17), late adolescence (ages 18–21), and emerging young adulthood (ages 22–25). According to the National Academies of Sciences, Engineering, and Medicine (2019), it would be "developmentally arbitrary … to draw a cut-off line at age 18" (p. 22). Accordingly, we use the term "adolescent" to refer to a young person's capacities or behavior and the term "juvenile" to refer to a young person's legal status as a minor. Competing theoretical models seek to explain the neurodevelopmental mechanisms underlying how adolescents evaluate risk, attend to rewards, and control their impulses (see Casey, 2015). These models agree that (a) differential development of neurocircuitry in the adolescent brain affects decision making and behavior and (b) the imbalance is a transitory feature of adolescence that diminishes as young people mature.

Recent research affirms the importance of context in the adolescent's ability to exhibit self-control and deliberative decision making. By age 15 or 16 years, adolescents on average have the cognitive resources to perform similarly to adults on simple tasks in low-stakes, emotionally neutral settings (Icenogle & Cauffman, 2021). Yet they perform worse than adults under conditions of emotional arousal (Cohen et al., 2016). External or social factors such as time pressure; the presence of peers, parents, or siblings; or interaction with persuasive adults can activate emotional arousal (Icenogle & Cauffman, 2021). In such contexts, adolescents exhibit impaired affective control (Schweizer et al., 2020) and diminished psychosocial maturity (Icenogle et al., 2019; Steinberg et al., 2009). Their heightened sensitivity to rewards, diminished ability to control impulses, and tendency to prioritize immediate over long-term outcomes may thus yield risky decisions (Cauffman et al., 2010). Overall, the ability to make strategic decisions in emotionally charged contexts continues to develop through one's early 20s (Casey et al., 2022).

In the high stakes of an interrogation, research shows that adolescents exhibit impaired legal decision making relative to adults. Grisso et al. (2003) found that teens younger than 16 years were more likely to exhibit compliance with multiple authority figures (i.e., police, defense counsel, and prosecutors). When asked whether the "best choice" in a hypothetical interrogation scenario was to confess to the offense, deny involvement, or refuse to speak, the proportion of respondents choosing confession diminished with age. In a study of detained youths who were actual defendants, only 13% reported invoking their right to silence and only 10% requested an attorney (Viljoen et al., 2005).

Through varied methods and samples, research shows that police often do employ high-pressure interrogation tactics with juvenile suspects. In one study with incarcerated youths, nearly one-third of participants said they felt police pressure to confess (Malloy et al., 2014). A large study with Icelandic youths found that self-reported false confessors felt pressured (17%) or threatened (7%) or wanted to escape from the stressful situation (17%; Gudjonsson et al., 2006). Police officers also report using psychologically manipulative techniques with juvenile suspects (Meyer & Reppucci, 2007).

Observational studies of real-life interrogations involving minors corroborate the use of high-pressure tactics (Cleary, 2014; Cleary & Warner, 2016; Feld, 2013). Notably, many law enforcement officers have expressed a desire for more developmentally informed training (Meyer & Reppucci, 2007; Snow et al., 2021).

Self-report studies are bolstered by laboratory experiments that can control ground truth and assess true and false confession rates. Using the computer crash paradigm, Redlich and Goodman (2003) found that younger adolescents (ages 12–13) and middle adolescents (ages 15–16) were more likely to sign a false confession statement than older adolescents and young adults (ages 18–26), especially when confronted with false evidence of their culpability. In an experiment using the cheating paradigm, innocent adolescents ages 14 to 17 years were more likely than college students to falsely confess, primarily to protect the true "perpetrator" (Pimentel et al., 2015). This result aligns with self-report studies showing that youths report falsely confessing to protect a peer or family member (Malloy et al., 2014; Viljoen et al., 2005).

The proposition that youth is a risk factor is generally accepted within the scientific community. In a survey of 87 confession experts, 94% of respondents endorsed as reliable enough to present in court the proposition that "compared to adults, adolescents who are interrogated are at greater risk to confess to a crime they did not commit" (Kassin et al., 2018). Interestingly, the public is not similarly informed. In one study, for example, respondents believed that around age 18 years, youthfulness no longer contributes to the risk of false confession—a stance that is inconsistent with the research (Mindthoff et al., 2018; also see Alceste et al., 2021; Kaplan et al., 2020).

## New Science-Based Approaches to Interrogation

As we stated at the outset of this article, confessions serve an important function in law enforcement and the administration of criminal justice. Precisely for this reason, efforts to increase the diagnostic value of this evidence are essential. In the aftermath of the 9/11 terrorist attack, the Central Intelligence Agency initiated an enhanced interrogation program in which suspects were subject to various forms of physical abuse. This program was hardly the first of its kind, as these methods are still prevalent in parts of the world (Amnesty International, 2022; Rejali, 2009). Ethical concerns aside, these techniques do not yield reliable information (Vrij, Meissner, et al., 2017).

Recently, the Association for the Prevention of Torture and the Norwegian Centre for Human Rights led an effort to propose a global standard of best practice: *Principles on Effective Interviewing for Investigations and Information Gathering* (Méndez, 2021). In a report filed in 2016, the *Principles* were named after Juan Méndez, an Argentine law professor and torture survivor, who later served as the United Nations Special Rapporteur on Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment. In his final report, Méndez called for the development of interviewing and interrogation guidelines that member states could adopt, emphasizing the need in law enforcement, national security, intelligence, and military contexts. This approach has been endorsed by the UN Committee Against Torture, the UN Human Rights Council, and other international bodies, with the goal of full endorsement by the UN General Assembly (see Schaeffer et al., 2023). Authors of the Méndez Principles include researchers, law enforcement practitioners, and legal scholars who have contributed to the science on effective interviewing and interrogation.

Within the United States, a pivotal report by the Intelligence Science Board (Fein et al., 2006) led the U.S. government to establish the High-Value Detainee Interrogation Group (HIG), a three-agency intelligence-gathering entity that brought together intelligence professionals from the Federal Bureau of Investigation, Central Intelligence Agency, and Department of Defense. Within the HIG, a research program was established to examine ethical, science-based practices—specifically, "to study the comparative effectiveness of interrogation techniques, with the goal of identifying those that are most effective and developing new techniques to improve intelligence interrogations" (for an overview, see Meissner et al., 2017).

Along with the earlier introduction of PEACE in the United Kingdom, the HIG program ushered in a general shift in research. In addition to evaluating the risks associated with accusatorial practices, researchers and practitioners have sought to develop and evaluate alternative approaches. This work has given rise to a science-based method of questioning suspects, referred to variously as a rapport-based, information-gathering approach. This approach focuses on (a) the development of rapport and trust to facilitate cooperation, (b) the use of productive and mnemonic questioning methods—such as the Cognitive Interview (Memon et al., 2010)—to facilitate recollection and increase the amount of information elicited, (c) the assessment of deception via the strategic use of evidence and evaluation of verbal cues, and (d) the strategic and truthful presentation of evidence to facilitate diagnostic admissions. These approaches contrast with the accusatorial approaches based not on science but on decades of customary practice (see Meissner et al., 2014, 2015).

The techniques that underlie each element of this approach have received considerable research attention (Meissner, 2021)—as in a recent field study that validated the effectiveness of a science-based training program (Russano et al., 2024). Two meta-analyses have thus evaluated efficacy with a focus on the extent to which these techniques elicit diagnostic confession evidence (Catlin et al., 2023; Meissner et al., 2014). The most recent of these demonstrated that accusatorial (vs. information-gathering) approaches tended to reduce the likelihood of a true confession ($OR = 0.56$) and sharply increase the likelihood of a false confession ($OR = 3.83$). In short, information-gathering approaches elicit confessions that are significantly more diagnostic of guilt.

Whereas confession has historically served as the primary objective of interrogation, the focus on information gathering reorients the goal. This shift should inhibit the kinds of guilt-presumptive tactics that promote confession, sometimes from innocent suspects. Instead, two key objectives have been identified: facilitating a suspect's cooperation and eliciting investigation-relevant information. Recent studies have thus focused on such metrics as suspect cooperation, resistance or counterinterrogation behaviors, and the types of information elicited. In the information-gathering context, the interviewer is encouraged to build rapport and trust, elicit a complete narrative by asking questions in an unbiased and productive manner, use mnemonic approaches that facilitate memory retrieval, and engage in strategic evidence disclosure to improve assessments of credibility. Research on these elements is discussed below.

## Developing Rapport and Trust

Investigators generally see rapport as foundational to an effective interview (Russano et al., 2014; Vallano et al., 2015). Consistent definitions of rapport are elusive in research and in practice (Vallano & Schreiber Compo, 2015). However, a thematic analysis of research offers an important set of constructs—including communication, mutuality, positivity, respect, successful outcomes, and trust (Neequaye & Mac Giolla, 2022). It is important to distinguish rapport and trust. Whereas rapport refers to the quality of the interaction between interviewer and subject, trust pertains to how the subject evaluates the interviewer's reliability, dependability, and goodwill, the primary function of which is to predict future behavior (Oleszkiewicz et al., 2024).

In studying rapport, researchers have used both direct-observational and suspect self-report measures. The most validated observational measure is the Rapport Scale for Investigative Interviews and Interrogation, which assesses attentiveness, trust/respect, expertise, cultural similarity, and connected flow (Duke et al., 2018). Self-report measures typically evaluate a subject's perceptions of how likable, interested, empathetic, patient, and respectful the interviewer was and/or how smooth, engaging, cooperative, and well coordinated the interaction was (Brimbal et al., 2019; Vallano & Compo, 2011).

In a taxonomy of interrogation techniques, Kelly et al. (2013) identified a set of tactics associated with rapport building that include developing common ground or shared experiences; demonstrating kindness, respect, and concern; and showing patience and a willingness to listen. Similarly, Gabbert et al. (2021) identified three functional aspects of rapport: personalizing the interview (e.g., developing common ground, self-disclosure), presenting an approachable demeanor (e.g., tone of voice, smiling), and paying attention (e.g., active listening, empathetic responses). A recent evaluation of rapport-based interview training indicated that use of rapport tactics significantly increased after training—as did subjects' perceptions of the investigators, thereby reducing resistance and increasing information yield (Brimbal et al., 2021).

Research supports the benefits (Gabbert et al., 2021; Vallano & Schreiber Compo, 2015). Rapport tactics generally increase the number of correct details elicited. Analyses of real interrogations and in the laboratory also indicate that rapport increases information yield, reduces counterinterrogation behaviors, and increases the likelihood of true confessions (Alison et al., 2013, 2014; Huang & Teoh, 2019; Wachi et al., 2018). Importantly, it appears most likely to exert this indirect effect by encouraging the subject to cooperate (Bettens et al., 2024; Brimbal et al., 2019; Dianiska et al., 2021).

## Eliciting Information

The frailty of human memory poses a significant challenge for investigative interviewers. Yet research has shown that interview subjects are often interrupted and asked direct, closed-ended questions (Fisher et al., 1987; Schreiber Compo et al., 2012)—and that suggestive questions can elicit inaccurate information, leading vulnerable individuals to give a false confession (Gudjonsson, 1997, 2010; Otgaar et al., 2021). In contrast, productive and mnemonic questions can significantly enhance the quality of information obtained (e.g., Colomb et al., 2013; Fisher et al., 1989; Rivard et al., 2014).

*Productive questioning* approaches involve asking questions that promote the elicitation of more information rather than a particular expected response. This involves asking questions that are open-ended (e.g., "describe" or "explain to me"), probing (who, what, when, where, or how), and closed-ended only when appropriate (e.g., to seek clarification of issues previously discussed). In contrast, unproductive questioning is suggestive, leading, and overly complex (e.g., questions that force a yes/no response, have a presumptive premise, or are repetitive). Studies have shown that productive questioning approaches increase the elicitation of relevant and accurate versus inaccurate information (Nunan et al., 2020; Oxburgh et al., 2014).

Whereas productive questioning alone can improve information disclosure, the retrieval of additional details can be enhanced by *mnemonic questioning* tactics. Techniques such as asking participants to mentally reinstate the context of their experience (Dianiska et al., 2019; Smith & Vela, 2001) or to close their eyes as they attempt to recall an experience (Perfect et al., 2008; Vredeveldt & Penrod, 2013) can help increase information retrieval. This can also be achieved by asking subjects to re-recall an experience from different sensory modalities or in reverse chronological order (Geiselman & Callot, 1990; Gilbert & Fisher, 2006; Vrij et al., 2008), asking them to sketch a visual representation (Dando et al., 2009; Eastwood et al., 2018), or using the Timeline Technique to organize events occurring over an extended period in the sequence in which they occurred (Hope et al., 2013, 2019).

Based on core principles of memory, cognition, communication, and social dynamics, the Cognitive Interview (CI) is perhaps the most validated approach (Fisher & Geiselman, 1992, 2018). Research shows that the CI yields substantially more investigation-relevant details from memory. In one study, Rivard et al. (2014) compared the CI to the Federal Law Enforcement Training Center's "five-step interview," which is used to train U.S. federal investigators. They found that the CI elicited 80% more episodic information about the target event. In a meta-analysis, Memon et al. (2010) found that the CI generated substantially more correct details than did standard interview conditions ($d = 1.20$, $k = 59$), with an average increase of 14 details across studies (in contrast, only a small, but significant, increase was observed in incorrect details; $d = 0.24$, $k = 43$). Although the CI is studied primarily in the context of cooperative interviews, researchers also have tested it in interrogative contexts and found significant benefits to information yield, admissions, and credibility assessment (e.g., Evans, Meissner, et al., 2013; Geiselman, 2012).

## Cognitive Credibility Assessment

Accusatorial approaches often assess prospective suspects through behavioral cues believed to indicate deception by indicating an increase in anxiety. As noted earlier, these cues are not diagnostic of truth and deception (Bond & DePaulo, 2006; Hartwig & Bond, 2011; Luke, 2019; Vrij et al., 2019). Yet a good deal of law enforcement training has followed this approach. Hence, research suggests that such training does not increase accuracy but rather leads to a bias toward seeing guilt (Kassin et al., 2005; Masip et al., 2005; Meissner & Kassin, 2002). Although the authors of an early study affiliated with Reid and Associates had suggested that the approach was valid (Horvath et al., 1994), subsequent research has shown that the BAI does not improve performance and merely

codifies the mistaken assumptions of common sense (Masip et al., 2011, 2012; Masip & Herrero, 2013; Vrij et al., 2006).

In an effort to improve deception detection performance, researchers have tested alternative approaches. Studies have shown that lying is more cognitively demanding than telling the truth, so it takes more time (e.g., Geven et al., 2020; for a meta-analysis, see Suchotzki et al., 2017). Research also shows that verbal or story-based cues are more diagnostic than nonverbal behavior, so training in the use of these cues increases detection accuracy (Hauch et al., 2016). In light of these differences, researchers have examined strategic interviewing methods that help to elicit useful cognitive cues. Referred to as Cognitive Credibility Assessment (CCA), this technique aims to magnify differences between liars and truth tellers, enabling observers to distinguish between them. Three general approaches have been examined: (a) asking unexpected questions, (b) increasing cognitive load, and (c) encouraging subjects to provide more information that can be verified. Meta-analyses have shown that these tactics increase differences in the amount of information provided by truthful and deceptive subjects (Palena et al., 2021; Verschuere et al., 2021; Vrij, Fisher, & Blank, 2017) and that observers trained in CCA are more accurate (Mac Giolla & Luke, 2021). Law enforcement agents can thus be trained to improve performance (Vrij et al., 2015, 2016).

To begin with, unexpected questioning approaches seek to leverage the different strategies that liars and truth tellers bring to an interview. When individuals lie, they often prepare to recite a simple and consistent story, so they have more difficulty with questions that pertain to unexpected or ancillary matters. Asking specific questions about spatial, temporal, or planning details or drilling down on various aspects of an experience (e.g., "You mentioned being at a conference. Who was the keynote speaker?") improves our ability to distinguish between liars and truth tellers (Lancaster et al., 2013; Ormerod & Dando, 2015; Vrij et al., 2009).

Based on the fact that it is more effortful to lie than to tell the truth, a second approach to CCA involves increasing cognitive load in a manner that disrupts the already overtaxed liar more than the truth teller. Studies have tested this hypothesis by having subjects engage in a concurrent secondary task during the interview or requesting that subjects recall their narrative in reverse chronological order. These tactics impede storytelling for deceptive subjects to a greater extent than for truthful subjects, making it easier for observers to distinguish the two groups (Evans, Michael, et al., 2013; Vrij et al., 2008).

A third approach is to ask subjects to provide more information that can be verified. Whereas truth tellers often can report about a specific event memory, deceptive subjects must either fabricate or draw on similar experiences to generate a compelling narrative. Narrative credibility assessments thus rest on the assumption that truthful statements will contain richer genuine narratives than fabricated accounts. Indeed, meta-analysis suggests substantial validity for this means of distinguishing truthful and fabricated narratives ($d$s = 0.86 and 0.74, $k$s = 55 and 23, respectively; Oberlader et al., 2021). CCA approaches leverage this distinction by encouraging participants to provide more details (Harvey et al., 2017), by enhancing recall through mnemonic questioning tactics (Geiselman, 2012; Logue et al., 2015; Noc et al., 2023), and by asking subjects to provide verifiable details that can later be independently evaluated (Nahari et al., 2014a, 2014b).

## Strategic Approaches to Presenting Evidence

Confrontational approaches such as the Reid technique accuse suspects at the outset of an interrogation. This "positive confrontation," expressed with certainty, is accompanied by a rejection of denials and often accompanied by the presentation of incriminating evidence, whether true or false, or bluffs about future evidence. As noted earlier, these tactics increase the risk that innocent individuals will confess. In recent years, however, research has offered an alternative "strategic" approach to the presentation of evidence (Dando & Bull, 2011; Hartwig et al., 2005).

The Strategic Use of Evidence (SUE) technique aims to make veracity judgments more accurate by actively eliciting cues to truth and deception (Granhag & Hartwig, 2008, 2015; Hartwig et al., 2007). Guilty suspects who do not know what evidence against them exists are more likely to proffer statements that contradict that evidence. Withholding evidence until later in the interview, rather than disclosing it at the outset, can thus trap an unwary deceptive suspect into a statement that is inconsistent and thereby improve investigators' ability to detect their deception (Hartwig et al., 2005; Luke et al., 2014; Sandham et al., 2022). A recent meta-analysis indicated a robust effect of late disclosure in producing greater statement-evidence inconsistencies among suspects who are guilty ($d = 0.70, k = 10$) versus innocent ($d = –0.03, k = 8$; Oleszkiewicz & Watson, 2021).

In a variant of SUE, the Tactical Use of Evidence framework advocates for "drip-feeding," in which facts are disclosed gradually and systematically throughout the interview (Dando et al., 2015; May et al., 2017; Tekin et al., 2015). In this approach, interviewers question suspects in a sequential manner that allows them to test each item of evidence, first by asking general and specific questions and then by disclosing the evidence in a manner that allows the subject to directly address the inconsistency or confirms that their narrative aligns with the interviewer's knowledge. This approach can induce a "shift of strategy" in which the sequential presentation of evidence moves subjects from withholding to a more forthcoming posture (Luke & Granhag, 2023). A meta-analysis indicated that this approach induces greater statement-evidence inconsistencies compared with an immediate disclosure condition ($d$ = 0.81, $k$ = 7; Oleszkiewicz & Watson, 2021). Such methods can also elicit new information and admissions by guilty subjects (Luke & Granhag, 2023; Tekin et al., 2015, 2016).

## Consequences of Confessions

Science-based approaches to interviewing, which increase the diagnosticity of outcomes, are potentially transformative in their impact and, hence, an important reform to be presented later. In the absence of these advances, it is unfortunate but inevitable that some number of innocent people will be misclassified, targeted for suspicion, accused, and interrogated—and that some will waive their rights and confess. One might argue that this chain of events is tolerable, not tragic, to the extent that the coercion and resulting false confessions are detected by authorities and corrected. Essential to this presumed safety net is the belief that police, prosecutors, judges, and juries will discount questionable confessions.

The problem begins with law enforcement. In their first edition, Inbau and Reid (1962) wisely cautioned that "confession is not the end of the investigation" (p. 136). Today, however, numerous false

confession cases reveal that when a suspect confesses, police often close the investigation and overlook compelling exculpatory information (e.g., in the Central Park jogger case, the five defendants were tried and convicted in the absence of corroborating evidence—even after they were excluded by DNA testing of the rape kit; see Burns, 2011).

There are at least three psychological reasons that police, like other humans, do not dutifully discount unreliable confessions. First, attribution research has shown that people tend to accept self-reports at face value. Illustrating the "fundamental attribution error," we are quick to make dispositional attributions for other people's actions while underestimating the role of situational forces (Gilbert & Malone, 1995; Ross, 1977). When it comes to confessions, a second problem is that people have a reasonable intuitive tendency to trust statements against self-interest as a matter of common sense (Jones & Davis, 1965). Hence, observers are far more likely to believe a suspect's admissions of guilt than denials (Levine et al., 2010). Third, as noted earlier, people cannot reliably distinguish truths from lies (e.g., Luke, 2019; Vrij et al., 2019). Consistent with this body of research, Kassin et al. (2005) videotaped men incarcerated in prison as they gave true confessions for their crimes and concocted false confessions to crimes they did not commit. Neither college students nor police investigators were adept at distinguishing true from false confessions—although police participants were more confident in their judgments. This finding was later replicated in studies in which police and polygraph examiners could not accurately assess the veracity of juvenile detainees' true and false confessions (Honts et al., 2014, 2019).

Anecdotes from wrongful convictions suggest that this trust in confessions may extend to prosecutors, some of whom persist even in the face of irrefutable exculpatory evidence (Findley & Scott, 2006). For example, Bruce Godschalk was exonerated of two rape convictions after 15 years in prison when DNA tests conclusively indicated that he was not the rapist. Yet the district attorney refused at first to accept the results. When challenged afterward, he said, "I have no scientific basis. I know because I trust my detective and my tape-recorded confession. Therefore the results must be flawed until someone proves to me otherwise" (Rimer, 2002, p. A14). This is not an isolated incident. Some instances are so flagrant that *The New York Times Magazine* published an article about prosecutors who generate implausible theories to reconcile the DNA exclusion of suspects who have given prior confessions (Martin, 2011). As a result of this tendency for the gatekeepers to move forward on the basis of disputed confessions, it is important to know what effect, if any, confessions have on the course of an investigation; how juries then perceive confession evidence and whether the trial process serves as a safety net; and what role, if any, confessions play in the resolution of cases via guilty pleas.

## How Confessions Corrupt Other Evidence

The already potent impact of confessions in court is often buttressed by the fact that confessions can taint witnesses, alibis, informants, and forensic science examiners and pathologists, thereby creating the illusion that they are independently corroborated.

Over the years, psychologists have identified a number of confirmation biases by which people tend to seek, perceive, interpret, and create new evidence in ways that verify their preexisting beliefs. The problem is pervasive. Classic studies have shown that prior exposure to images of a face or a body, an animal or a human, or letters or numbers, can bias what people see in an ambiguous stimulus (Nickerson, 1998). More recent research shows that our impressions of other people can similarly be tainted (for an overview in forensic domains, see Kassin et al., 2013; Saks et al., 2003). For example, participants who were led to believe that a suspect is guilty perceived more resemblance between that suspect and a facial composite (Charman et al., 2009) and heard more incrimination in degraded speech recordings (Lange et al., 2011).

In light of the potent effects of confession on perceptions of guilt, researchers have examined whether confessions in particular taint other subsequently collected evidence. Kassin et al. (2012) analyzed DNA exonerations from the Innocence Project case files. Consistent with the corruption hypothesis, multiple evidence errors were found in 78% of false confession cases, significantly more than in nonconfession cases. False confessions were accompanied, in order of frequency, by invalid or improper forensic science, eyewitness identification errors, and informants who lied. In the cases containing multiple errors, confessions were most likely to have been obtained first.

Controlled experiments are consistent with this result. In one study, participants observed a staged theft that they believed to be real, after which they made identification decisions from a blank photo lineup. One week later, individual witnesses were told that the person they had identified denied guilt, that the person confessed, or that another lineup member confessed. At that point, many witnesses changed their decisions, selecting the confessor with confidence (Hasel & Kassin, 2009). In a second study, prior knowledge of a confession biased lay judgments of handwriting. Participants compared handwriting samples taken from a bank robbery note and from a particular suspect. When told that the suspect had confessed and retracted that confession, they were more likely to conclude, erroneously, that the two samples were derived from the same individual (Kukucka & Kassin, 2014; for a replication via secondary confessions, see Jenkins et al., 2021).

In 2009, the National Academy of Sciences published a scathing assessment of the forensic sciences, concluding that there are problems with standardization, reliability, accuracy and error, and the potential for contextual bias. It is not surprising, therefore, that even professional examiners can be tainted by confessions. In one study, Israeli Police Force polygraph examiners perceived more deception in polygraph charts when they believed the suspect had confessed than in a no-confession control condition (Elaad et al., 1994; also see Krapohl & Dutton, 2018). In another study, Dror and Charlton (2006) presented five latent fingerprint experts with pairs of prints from a crime scene and suspect in an actual case in which they had previously made a match or exclusion judgment. The prints were accompanied by no extraneous information, an instruction that the suspect had confessed, or an instruction that the suspect was in custody. The latter misinformation produced a change in 17% of the original, previously correct judgments. Similarly, contextual information can influence examiners' interpretations of complex DNA mixtures (Dror & Hampikian, 2011), skeletal remains (Nakhaeizadeh et al., 2014), and crime scene analyses (van den Eeden et al., 2016). In contrast to this literature, hundreds of forensic examiners who were surveyed exhibited a "bias blind spot," denying the effects of contextual information on their own judgments (Kukucka et al., 2017).

Of relevance to cases involving disputed confessions, studies have shown that the exposure to nonmedical information can also bias forensic pathologists' determinations as to the manner of death (Dror et al., 2021, 2022; also see Findley & Strang, 2022; Simon, 2019). The problem of contextual bias in this domain is now under scrutiny. Noting that "irregularities have been used to hold innocent people criminally liable for natural or accidental deaths," the National Academies of Sciences, Engineering, and Medicine (2024) is currently examining the problem (https://www.nationalacademies.org/our-work/advancing-the-field-of-forensic-pathology-lesson-learned-from-death-in-custody-investigations).

Anecdotes from wrongful convictions suggest that confessions can not only spawn false incriminating evidence but also suppress exculpatory information. In one case, Pennsylvania exoneree Barry Laughman was induced to confess, after which two witnesses told police that they had seen the victim alive after the alleged time of the murder. Yet police sent these witnesses home. Then when serology evidence failed to match Laughman's blood type, the state forensic chemist explained away the critical mismatch. In a second case, New York exoneree John Kogut named several alibi witnesses he was with on the night of the confessed murder. Initially, his alibis confirmed his whereabouts. However, they later withdrew their support when informed that Kogut had confessed. In a third case, Illinois exoneree Juan Rivera was wearing an electronic ankle bracelet, which placed him more than 2 miles from the crime scene. Yet the prosecutor speculated without proof that the bracelet had malfunctioned or was otherwise disabled (for fuller descriptions, see Kassin, 2022c). With regard to this effect of confession on exculpatory information, experiments suggest that alibi witnesses are malleable. After a confederate in one study was accused of stealing money from an adjacent office, only 45% of participants who were in the physical presence of that confederate at that time continued to vouch for her after being told that she had orally admitted the theft but refused to sign a confession (vs. 95% who were told that she had denied involvement; Marion et al., 2016; also see Kienzle & Levett, 2018).

## Confession Effects on Juries

When a suspect in the United States retracts a confession, pleads not guilty, and proceeds to trial, a sequence of two decisions is set into motion. First, a judge determines at a pretrial suppression hearing whether the confession was voluntary and hence admissible. Then a jury, hearing the admissible confession, determines whether the defendant is guilty beyond a reasonable doubt. Over the years, mock jury experiments have shown that confessions have a substantial impact on verdicts—more so than other forms of evidence (Kassin & Neumann, 1997). In one study, Kassin and Sukel (1997) presented mock jurors with one of three versions of a murder trial. In a low-pressure version, the defendant was said to have confessed to police immediately upon questioning. In a high-pressure version, participants read that the suspect was interrogated aggressively by a detective who exhibited his gun. A control version contained no confession in evidence. Presented with the high-pressure confession, participants appeared to respond in the legally prescribed manner. They judged the statement to be involuntary and said that it did not influence their decisions. Yet when it came to verdicts, this confession significantly increased the conviction rate. This increase occurred even when participants were specifically admonished to disregard confessions they found to be coerced.

Additional studies have shown that false confessions are highly counterintuitive (Kassin, 2017a). Hence, people do not fully discount a confession even when it was elicited by explicit promises of leniency (Kassin & Wrightsman, 1980); even after learning that police lied about evidence, a tactic that is seen as coercive (Woody et al., 2018); even when told that the defendant suffered from a mental illness or was under duress (Henkel et al., 2008); even when the defendant was a minor (Redlich et al., 2008); even when the suspect was sleep deprived (Shifton, 2019); even at times when the confession was contradicted by exculpatory DNA (Appleby & Kassin, 2016); and even when the defendant's confession was reported only secondhand by an informant who was motivated to lie (Neuschatz et al., 2008; Wetmore et al., 2014; for an overview, see Neuschatz & Golding, 2022). In a recent meta-analysis of 83 independent samples, Mindthoff et al. (2024) found that although jurors are less influenced by confessions that are coerced versus noncoerced, even the coerced confessions significantly increased conviction rates relative to no-confession baseline conditions. Noting the importance of educational safeguards, the authors concluded that more research is needed to identify effective forms of jury instructions and expert testimony.

Perhaps it is not surprising that confessions bias lay triers of fact. But judges may be similarly affected. Wallace and Kassin (2012) presented 132 experienced judges with a case summary containing strong or weak evidence and a confession elicited by high- or low-pressure interrogation tactics, plus a no-confession control group. As per the law, most judges saw the confession extracted through high-pressure tactics as coerced, not voluntary, and hence not properly admitted into evidence. Yet this coerced confession substantially increased their guilty verdicts. This research on the power of confessions is bolstered by archival analyses of actual cases, which led Drizin and Leo (2004) to describe confessions as "inherently prejudicial and highly damaging to a defendant, even if it is the product of coercive interrogation, even if it is supported by no other evidence, and even if it is ultimately proven false beyond any reasonable doubt" (p. 959).

As to why judges and juries are so enamored of confession evidence, it is important to realize that in addition to the commonsense myth that innocent people never confess, police-induced confessions typically contain not only an admission of guilt but a compelling detail-filled narrative that appears to offer "proof" of guilty knowledge. In *Miranda v. Arizona (1966)*, the United States Supreme Court warned that the psychologically oriented Reid technique "trades on the weakness of individuals" (p. 1618). This comment was accompanied by a footnote to a then-recent New York City case involving a 19-year-old Black man named George Whitmore. On August 28, 1963, two young professional women were killed. Several months later, with these high-profile "career-girl murders" still unsolved, homicide detectives picked up Whitmore. After 26 hours unrecorded interrogation, they emerged with an exquisitely detailed 61-page confession to both murders, a third murder, and a rape. Ultimately, Whitmore was exonerated and released. It turned out that he had a solid alibi: On the day of the murders, he was in southern New Jersey, watching Reverend Martin Luther King's historic "I have a dream" speech from the Lincoln Memorial on TV. Yet shockingly, Whitmore's false confession contained specific, accurate, rich details about the career girl murders and crime scene that were not

known to the public—the kinds of facts, we were told, that only the perpetrator could have known (see English, 2011; Shapiro, 1969).

The historic Whitmore case is not an isolated incident. Garrett (2010) examined the first 38 false confessions from the Innocence Project's DNA exoneration case files and found that 36 of these confessions contained facts about the crime that were both accurate and not in the public domain. In a follow-up analysis, Garrett (2015) expanded the database to 66 cases and found that 62 of these statements, or 94%, contained accurate facts not in the public domain: details that only the perpetrator (and police) could have known. In some of these cases, the innocent confessors obtained the information secondhand through exposure to witnesses, news reports, or word on the street; in other cases, detectives communicated these facts to the innocent confessor through processes of "contamination."

To their credit, Reid and Associates advises investigators to withhold nonpublic crime facts from suspects so they can determine whether confessors can corroborate their admissions with proof of guilty knowledge (Inbau et al., 2013). Yet the wholesale contamination identified by Garrett and others makes it difficult for factfinders to evaluate false confessions when they lack access to recordings of the entire interrogation—especially when the confession was rehearsed (Alceste et al., 2024). As to how contamination comes about, there are two possible mechanisms: Sometimes, nonpublic crime details find their way into confessions through purposeful acts of police misconduct (National Registry of Exonerations, 2020; Stephens, 2019). At other times, however, the process is inadvertent, as when police ask leading questions, show suspects crime scene photos, take them to the crime scene, or overshare nonpublic facts on the basis of the guilt-presumptive belief that the suspect already possesses that common-ground knowledge (for a firsthand law enforcement account of how this can occur, see Trainum, 2014; for an experimental demonstration, see Alceste et al., 2020).

To further complicate factfinding, false confession narratives often contain other credibility cues as well. Appleby et al. (2013) analyzed the contents of 20 known false confessions and found that they all contained visual and auditory details about the crime and scene. Overall, 95% of the statements referenced alleged accomplices, witnesses, and other actors; 80% recounted what the victim allegedly said; 55% described the victim's mental or emotional state; and 40% expressed sorrow, remorse, and/or heartfelt apologies. "This was my first rape," said 16-year-old Korey Wise, an innocent Central Park Five exoneree, "and it's going to be my last." Consistent with research showing that vividness increases perceptions of credibility (Bell & Loftus, 1989; Johnson, 2006), Appleby et al. (2013) found in a mock jury study that compared with a simple admission of guilt, detailed confessions increased the conviction rate and confidence.

In light of the reasons that confessions are so potent, it is important to know whether expert testimony serves to increase judges' and juries' sensitivity to risk factors and ability to discriminate between true and false confessions. Although early indications are favorable (e.g., Costanzo et al., 2016; Henderson & Levett, 2016), more research is needed to address this important question.

## Confession Effects on Guilty Pleas

Just as confessions exert a potent effect on juries at trial, an important ultimate question concerns what effect, if any, confessions have on guilty pleas, a form of confession. In the United States, the right to forgo one's day in court and plead guilty was introduced in the 19th century (Redlich et al., 2017). Since then, the prevalence of guilty pleas has climbed. Of those arrested or indicted today, on average about 65% to 75% resolve their case via a guilty plea; among those convicted, approximately 97% occur via guilty pleas. Hence, only 3% of convictions follow from an adversarial process in which defendants get their day in court, accompanied by a presumption of innocence, the presentation of evidence under oath, and a standard of proof beyond a reasonable doubt (Redlich et al., 2022). This trend prompted the United States Supreme Court to acknowledge that "criminal justice today is for the most part a system of pleas, not a system of trials" (*Lafler v. Cooper*, 2012, p. 3). Guilty pleas (or close equivalents) also account for numerous case resolutions elsewhere in the world (Fair Trials, 2021). More than 65 countries have adopted the practice, most within the past 25 years. A notable trend in these countries is that after they adopt plea bargaining, upwards of 80% of their criminal cases are resolved in that way (Fair Trials, 2021; Redlich et al., 2017).

Given this heavy reliance on guilty pleas, one would hope that the system metes out fair and just outcomes. According to Alschuler (2016), however, "Convicting defendants who would be acquitted at trial is one of the principal goals of plea bargaining." Hence, he continues, we have "a nearly perfect system for convicting the innocent" (p. 919). It is now clear that there is cause for concern. Helm et al. (2018) surveyed defense attorneys and found that 89% had represented clients who pleaded guilty while proclaiming their innocence; 45% had clients who pleaded guilty whom they, as defense counsel, believed to be innocent. These impressions are buttressed by objective data. Recently, the NRE noted that 879 of its first 3,618 wrongful convictions (24%) resulted from a guilty plea. As with false confessions, both situational and dispositional factors can place innocent defendants at heightened risk in this process (e.g., juveniles are particularly vulnerable; see Zottoli et al., 2016).

Of relevance to this article is the effect of confessions on guilty pleas. As with trial verdicts, confessions increase the rate of convictions by guilty plea. The mechanism is largely the same. As described earlier, confession evidence is potent. If defendants are rational actors in the "shadow of trial"—as per the dominant theory underlying plea decision making (Bibas, 2004; Bushway & Redlich, 2012; Edkins & Redlich, 2019)—then they and their attorneys would forecast an increased likelihood of conviction at trial when a confession is present, thereby leading them to plead guilty.

The case of then 19-year-old Joseph Buffey illustrates the point. In 2001, Buffey was induced to confess to police and then plead guilty to sexual assault and robbery, despite his adamant denials. In this case, the prosecutor offered a harsh, time-limited plea deal and failed to disclose exculpatory DNA tests when Buffey accepted the plea. Uninformed that the DNA results had conclusively excluded his client, Buffey's attorney advised him to plead guilty. In 2015, the West Virginia Supreme Court allowed Buffey to withdraw his plea after concluding that the State had violated his due process rights by failing to disclose the DNA evidence. West Virginia thus became one of the few states to require the disclosure of exculpatory evidence at the plea stage (*Buffey v. Ballard*, 2015; see Zottoli et al., 2019). There is a postscript to this story: Rather than dismiss the charges in response to the state supreme court's ruling, and even though the DNA identified the actual perpetrator, Buffey's prosecutor vowed to retry him and then offered him an "Alford plea" by which he could plead guilty while proclaiming his

innocence in exchange for a sentence of time served. Reluctant to risk reincarceration, Buffey accepted the offer in exchange for his freedom (Valente, 2016). Thus, he was never officially exonerated and is not eligible for statutory compensation.

As the Buffey case illustrates, one issue concerns the excessive rewards and prosecutorial retaliation in sentencing when plea offers are rejected. Alternatively called the "plea discount" or "trial penalty" (Yan & Bushway, 2018), the problem stems from the disparity between the would-be punishment received upon trial conviction and that received via the guilty plea. Plea sentencing discounts average as high as 96% to 98% (Zottoli et al., 2016). For example, a defendant convicted at trial receives a 10-year prison sentence, but if this same defendant accepts a plea offer, it could result in a 73-day jail sentence—a 98% reduction. Discounts this large are often too good to pass up, even for innocent defendants. In a series of studies, Cardenas (2023) found that a prosecutor's threat of a high potential sentence served as an anchor point that led innocent mock defendants to accept a less consequential plea offer. Helm (2022) further demonstrated that categorical sentence differentials (e.g., probation vs. custodial time) may be even more enticing to innocent defendants than quantitative sentence differentials (i.e., reduced custodial time). Indeed, research using hypothetical scenarios suggests that avoiding incarceration either at the front end (e.g., via release from pretrial detention; Edkins & Dervan, 2018) or at the back end (e.g., via a sentence of probation; Yan et al., 2024) increases innocent defendants' willingness to accept a plea offer.

Research indicates a significant confession effect on guilty pleas. Using a hypothetical case vignette, Bushway et al. (2014; also see Redlich et al., 2016) found that practicing defense attorneys were the most likely to bargain in the shadow of trial compared with prosecutors and judges. They were also significantly more likely to recommend that their client accept plea offers when a confession was present (86.9%) versus absent (77.3%). Although lawyers may not be highly accurate in their trial verdict predictions (Goodman-Delahunty et al., 2010), research suggests that they do advise plea offers in the shadow of trial (Kramer et al., 2007; Pezdek & O'Brien, 2014). In a study involving hypothetical decisions, for example, Hellgren and Kassin (2022) found that when the evidence was weak and the defendant did not confess, only 3% of practicing defense attorneys recommended a plea offer. When their "client" had confessed but the judge ruled this evidence inadmissible, that rate remained low at 10%. When the same confession was deemed admissible, however, 39% of attorneys recommended plea acceptance.

The confession effect on guilty pleas has been amply demonstrated in other ways as well. In one study, Redlich et al. (2016) presented a hypothetical criminal case to more than 1,500 prosecutors, defense attorneys, and judges, which contained a set of labeled folders. Participants were asked to click as many folders as needed to make an informed decision. Results showed that confession evidence was the most sought out item (94% of participants chose to view that folder) and the presence of a confession increased the tendency to recommend the plea option—especially among defense lawyers. In another study, DiFava et al. (2024) used a virtual avatar simulation to manipulate whether an avatar defendant was implicated by a confession or an eyewitness when deciding to accept or reject a plea offer. Regardless of guilt or innocence, participants in the confession condition were significantly more likely to accept plea offers than those in the eyewitness condition ($OR = 2.12$). Among those who accepted plea offers, 51% in the confession condition later cited strength of the evidence as a rationale for their decision, compared with 27% in the eyewitness condition.

The "confession-to-plea pipeline" is also evident in actual cases. Redlich et al. (2018) examined the links between the type of police statement given (denials, partial or full confessions) and plea outcomes from presumably guilty defendants. Approximately 70% of suspects who denied involvement to police later pled guilty. In contrast, partial and full confessions were associated with near-ceiling rates of guilty pleas (i.e., 97%–100%). The same pattern is found in false guilty plea cases. In 2015, the NRE reported that false guilty pleas in non-drug cases were 3 times more likely when a false confession was present than when absent.

Recently, Redlich et al. (2025) compared wrongful convictions by trial versus guilty plea using data from the NRE. In a multiple regression analysis involving more than 10 factors predicting trial/plea status, the presence of a false confession substantially increased the likelihood of a false guilty plea, with an odds ratio of 4.28. In contrast to the other known canonical risk factors of wrongful conviction (e.g., eyewitness identification, ineffective counsel, forensic science errors), false confession was the only factor to positively predict false guilty pleas. In an analysis of Innocence Project DNA exonerations, Cooper et al. (2019) noted a similar pattern. Among false guilty plea cases, 60% also contained a false confession (by the defendant, a codefendant, or both) compared with 24% in cases resolved by trial, a pattern that was especially evident in homicide cases.

The Chinese saying, "Convictions begin with confessions" (Belkin, 2011, p. 279), has received strong empirical support in research using diverse methodologies—regardless of the conviction mechanism and regardless of actual guilt or innocence. Simply put, police-induced confessions increase the likelihood of conviction, whether by trial verdict or by plea. Undoing a wrongful conviction by guilty plea is notoriously difficult, in part because the primary route to exoneration is through the appeals process, a right often waived when pleading guilty (Redlich & Bonventre, 2015). Thus, the pernicious effects of false confession extend beyond increased convictability, with effects that include a range of postconviction obstacles.

### The Stigma of Confession

Over the years, research has demonstrated the adverse effects of social stigma on individuals who are shunned by others (Goffman, 1963; Link & Phelan, 2001; Major & O'Brien, 2005). Consistent with this work, people who confess to crimes are subject to the same effects—which often persist through the appeals process and even after exoneration (Scherr, Redlich, & Kassin, 2020).

## Within the Courts

Once convicted, individuals in the U.S. legal system have four general routes for postconviction relief: (a) a motion for a new trial; (b) a series of direct appeals to intermediate state courts that might be considered by state supreme courts and the United States Supreme Court; (c) a postconviction review, sometimes called a collateral review, by which defendants can challenge a conviction on grounds that could not have been raised on direct appeal; and (d) a habeas

corpus petition filed in federal court, in which defendants must demonstrate that a constitutional violation occurred in their case.

The United States Supreme Court has often prioritized finality of conviction over truth and justice, so it is not surprising that postconviction relief attempts are seldom successful (Findley, 2009; Garrett, 2011). Cases involving confessions, especially in the absence of exculpatory DNA, are particularly difficult (Garrett, 2015). In fact, Innocence Project analysts have candidly noted that "false confession cases typically require more than exculpatory DNA in order to secure an exoneration. Often that has to come in the form of a 'hit' to the real perpetrator" (West & Meterko, 2015, p. 765; also see Gross & Shaffer, 2012).

The stigma attached to confession can even prevent individuals from accessing DNA evidence in the first place. In the earlier discussed case of Bruce Godschalk in Pennsylvania, Godschalk requested that DNA samples collected from rape kits be tested. Yet the appellate court denied his request, explicitly noting that "appellant's conviction rests largely on his own confession which contains details of the rapes which were not available to the public" (*Commonwealth v. Godschalk*, 1996). Godschalk's DNA was eventually tested, and he was exonerated in 2002, which spurred Pennsylvania legislators to pass a statute facilitating access to DNA testing. Then in 2006, however, also in Pennsylvania, Anthony Wright was denied his request for DNA retesting on the grounds that he had confessed to rape and murder. In response, the APA (2008) submitted an amicus brief on behalf of Wright to the state supreme court, which overruled the lower court. The DNA was then tested—and it both excluded Wright and identified the actual perpetrator.

Wright's experience is not isolated. Release from incarceration and official exoneration are unique legal events. Judges can authorize an individual's release (e.g., because of an appeal or motion from a prosecutor). At that point, prosecutors can dismiss the charges and, in so doing, officially exonerate the individual (Webster, 2020). Although many exonerations result from acquittals or the dismissals of charges, individuals can also be officially exonerated, declared factually innocent, or relieved of the consequences of a conviction by government officials or other authorized bodies. The effects of confession in this process are measurable. Examining the archives of the NRE for murder and related cases, Scherr and Normile (2022) found that in approximately half the cases catalogued, release and official exoneration were nearly simultaneous events. In the others, however, there was a delay between release and exoneration. Further breakdowns revealed that compared with wrongful convictions involving other contributing factors, those involving a false confession were associated with significantly longer delays between release and official exoneration—a mean delay of 772 days. During these more than 2-year delays, innocent individuals face the possibility of retrial. They also struggle to secure housing, employment, and other means of reintegration because they still have the felony conviction on their record (Levy, 2015).

## After Exoneration

Exoneration is a monumental milestone for wrongfully convicted innocents to achieve (Gross & Possley, 2016). Once they are exonerated, however, the promise of a new beginning often comes with a different reality, as the stigma often persists. A growing body of research using both qualitative and quantitative methods has shown that individuals exonerated after a wrongful conviction are branded compared with those with no history of legal system involvement. Stemming from foundational work indicating that exonerees suffer the effects of social stigma (e.g., Huff et al., 1996; Radelet et al., 1992), research has further demonstrated the effects on social perceptions. In one study, for example, Clow and Leach (2015a) had participants rate individuals who were convicted of a crime they had committed, were exonerated for a crime they did not commit, or had no legal system involvement. Relative to the no-involvement group, the exonerees were seen as less friendly, likable, warm, and respectable but more aggressive—much like the guilty offenders. Additional research has shown that conviction, even when known to be wrongful, has consequences for the exoneree's future employment (Kukucka et al., 2020), housing (Kukucka et al., 2021), intimate relationships (Westervelt & Cook, 2012), and even physical health and life expectancy (Catlin & Redlich, 2023).

Among those wrongfully convicted, individuals who had confessed are uniquely disadvantaged. In an article subtitled "All Exonerees Are Not Perceived Equal," Clow and Leach (2015b) had participants read a fictional news article about an individual who was DNA exonerated, having been wrongfully convicted because of a false confession, mistaken eyewitness identification, or jailhouse snitch. They found that participants were most negative in their judgments of the individual who had confessed. Across a range of subsequent studies, false confessors—relative to other exonerees—were viewed as less intelligent, more likely to suffer from mental health issues, not clearly innocent, more responsible for their convictions, and less deserving of reintegration aids (Kieckhaefer & Luna, 2024; Kukucka & Evelo, 2019; Savage et al., 2018; Scherr et al., 2018). These adverse effects may be particularly acute when the exoneree who had confessed was Black (Howard, 2019). In what may be the ultimate adverse effect, statistics indicate that false confessors die 6 years earlier than other wrongly convicted persons who had not confessed (Catlin & Redlich, 2023).

Collectively, the foregoing research highlights the cumulative disadvantage that exonerated false confessors must endure (Scherr, Redlich, & Kassin, 2020). Viewed in that light, a disturbing reality exists in many state compensation statutes, in which provisions mirror laypeople's negative stereotypes. Often referred to as "contributory clauses," such provisions may preclude wrongfully convicted individuals who confessed or pled guilty from accessing reintegration aids. The rationale is that by implicating themselves, they were responsible for their own fate. That some policymakers continue to fall prey to the fundamental attribution error, even today—presuming free choice despite the prolonged and often intense pressures of interrogation and plea bargains—indicates a type of victim blaming that exacerbates the stigma.

Consider the case of Douglas Warney, an intellectually impaired individual with mental health issues. He was convicted in a 1997 murder in New York State largely on the basis of a confession. After spending 9 years incarcerated, Warney was DNA exonerated. Yet when he sought compensation via New York's compensation statute, he was denied on the grounds that his wrongful conviction was his own fault. Noting that innocents may confess because of personal vulnerabilities and situational pressures, APA (2010) filed an amicus brief on his behalf. Warney was eventually compensated when the State Court of Appeals overturned the lower court ruling (*Warney v. State of New York*, 2011).

Perhaps there is reason for optimism. In two studies of a three-study project conducted in Canada, participants rated exonerees more favorably—including those who were convicted by confession—after watching a video of a single exoneree describing his experience. They indicated more support for financial compensation, self-reported less anxiety about a personal meeting, and were more inclined to believe in their innocence (Zannella et al., 2024). At this point, more work is needed to determine whether other such educational videos have this effect and whether the effect endures over time.

## Miranda as a "Safeguard"

In light of the personal and situational factors that increase the risk of false confessions and the cumulative disadvantages that follow, one wonders what safeguards are in place. The answer is Miranda. An estimated 108 countries dispersed throughout the globe now recognize Miranda-like rights that are embodied through warning-and-waiver requirements (the warnings specified in these jurisdictions vary, but typically, they include the right to remain silent and the right to legal counsel; The Law Library of Congress, 2016; also see Weisselberg, 2017). What is the origin, evolution, and current law pertaining to this presumed means of protection, and what are the implications?

### Origin, Evolution, and Current Law

In 1966, the United States Supreme Court handed down *Miranda v. Arizona*—one of its most highly cited opinions (https://home.heinonline.org/blog/2018/09/most-cited-u-s-supreme-court-cases-in-heinonline-part-iii/). Reaching back to its one-off decision in *Bram v. United States* (1897), the Court ruled that the Fifth Amendment privilege against self-incrimination applied to custodial police interrogations. According to the *Miranda* Court, psychological interrogation impeded the privilege against self-incrimination because it contained "inherently compelling" pressures. The Court thus held that investigators must inform suspects of their right to silence, counsel, and notice that their words can be used against them; that they must elicit a voluntary, knowing, and intelligent waiver before interrogation can commence; and that the state bears a heavy burden to demonstrate that these requirements have been met.

Although *Miranda v. Arizona* (1966) represented a significant effort to protect suspects, it is, in practice, largely ineffective at preventing involuntary and/or unreliable confessions. The post-*Miranda* Supreme Court went on to "deconstitutionalize" Miranda (*Oregon v. Elstad*, 1985) and limit the original requirements in three fundamental ways. First, it has carved out numerous exceptions to the requirements. In 1971, the Court created an "impeachment" exception whereby suspects whose confessions were excluded at trial because of a Miranda violation could nevertheless have their confessions introduced into evidence if any of their testimony was deemed inconsistent (*Harris v. New York*, 1971). The Court also created a "public safety" exception, noting that police need not administer warnings or elicit a waiver if the interrogation is "reasonably prompted by a concern for public safety" (*New York v. Quarles*, 1984, p. 656), as well as a routine booking exception through which police need not Mirandize suspects to ask only "routine booking questions" (*Pennsylvania v. Muniz*, 1990).

Second, the Court redefined the meaning of custody, a condition that triggered the need for *Miranda* in the first place. Originally, custody was defined as existing when a suspect is not free to leave. Then in *California v. Beheler* (1983), the Court ruled that a suspect who made a statement at the stationhouse but was not arrested until days later was not in custody at the time of interrogation and, therefore, no Miranda warnings were required. This gave rise to "Beheler warnings" in which police tactically advise suspects at the station that they are not under arrest and hence free to leave. Having done so, they can declare the situation noncustodial and forgo the requirement. The Court then declared that roadside traffic stops were not custodial even though detained motorists are not free to leave (*Berkemer v. McCarty*, 1984) and that the situation is noncustodial when a suspect is interrogated by an undercover officer while physically detained in a jail cell (*Illinois v. Perkins*, 1990). This ruling thus gave rise to Miranda-less interrogations by proxy, now known as "Perkins operations" (Davis et al., 2023). In short, the post-*Miranda* Supreme Court has redefined the meaning of custody in ways that enable police investigators to legally circumvent Miranda.

Third, the invocation and waiver requirements were changed. In 1966, the Court held that suspects must explicitly waive their rights, and do so knowingly and voluntarily. Interrogators would thus ask two follow-up questions: (a) Do you understand your rights? (b) Are you willing to speak to me at this time? In 1979, however, the United States Supreme Court held that waivers can be "implicit" (i.e., inferred from context even if not explicitly waived), leading police to discern that it is no longer necessary to ask these follow-up questions (*North Carolina v. Butler*, 1979). Then in *Berghuis v. Thompkins* (2010), the Court declared that a suspect must, ironically, expressly invoke the right to silence; asserting that right by silence is not enough.

### Are Waivers Knowing, Intelligent, and Voluntary?

In the immediate aftermath of *Miranda*, it became clear that most suspects waive their rights (Wald et al., 1967). Later observational studies in the U.S. as well showed that roughly four out of five suspects, or more, waive their rights and submit to questioning (Feld, 2013; Kassin et al., 2019; Leo, 1996b). In a police self-report survey, 631 North American investigators estimated that 81% of "people in general" waive their Miranda rights (Kassin et al., 2007). In light of these high rates, research has focused on the question of whether people forgo their rights knowingly, intelligently, and voluntarily (for an overview, see Smalarz et al., 2016).

#### *Questions of Comprehension*

Using standardized instruments normed across thousands of individuals, psychologists early on sought to assess comprehension by the extent to which people factually understand the Miranda warnings (e.g., knowing they have a right to a lawyer) and appreciate their consequential significance (e.g., grasping what a lawyer does). These assessments showed that many adults do not fully understand and appreciate their rights (Goldstein et al., 2012; Grisso, 1998; Rogers et al., 2010). When asked to define legal terms and paraphrase statements from warnings, even well-adjusted adults assessed in benign situations exhibit less-than-full comprehension (e.g., Clare et al., 1998; Eastwood & Snook, 2010; Grisso, 1998). In

addition, many people harbor perilous misconceptions. In one study, for example, roughly one-third of respondents erroneously believed that "once you give up the right to silence, it is permanent"; 46% believed that "if you ask for something to be off the record during an interrogation, it can't legally be used against you"; and 62% believed that "I *might* want a lawyer" qualifies as an invocation of the right to counsel (Rogers et al., 2010, 2013).

The *Miranda* Court did not compose a standardized, word-for-word warning. Law enforcement agents thus have considerable discretion, resulting in a great deal of variability (such discretion is also evident in many European countries; see Panzavolta et al., 2015). Rogers et al. (2007; Rogers, Hazelwood, Sewell, Harrison, & Shuman, 2008) compared Miranda warnings from more than 600 jurisdictions and discovered more than 900 sets of warnings, uniquely worded, that ranged in length from 21 words to 231 words and varied substantially in reading level. In terms of process, some agencies verbally inform suspects of their rights; others also do so in writing. Yet research indicates that verbal-only administrations reduce comprehension (Eastwood & Snook, 2010; Rogers et al., 2013). The lack of standardization can also create difficulties for nonnative speakers. For example, Spanish-language translations sometimes exclude important details needed to make a knowing and intelligent decision (e.g., continuing rights; Rogers et al., 2021).

Comprehension levels vary as a function of both dispositional and transient suspect characteristics. Consistently low levels of Miranda comprehension and appreciation are exhibited by adults with mental health issues (Cooper & Zapf, 2008) and intellectual impairments (Clare & Gudjonsson, 1995; Erickson et al., 2020; O'Connell et al., 2005; Tazi & Rogers, 2023). In one study, such vulnerable participants understood only about 25% of their rights (Rogers et al., 2007). Similarly, comprehension difficulties are found in adults who are intoxicated while being tested (Mindthoff et al., 2022).

Situational factors can also impact comprehension. In experiments in which mock suspects were accused of wrongdoing before a warning was presented, compared with those not accused, the stress induced by the accusation significantly compromised their performance (Rogers et al., 2011; Scherr & Madon, 2012). The use of various manipulative tactics often seen in naturalistic observations of actual interrogations (e.g., trivializing the importance of these rights) can have this effect as well (Scherr & Madon, 2013). Outside the lab, comprehension difficulties are also found in adults who are detained by police (Cooke & Philip, 1998; Fenner et al., 2002; Rogers et al., 2013).

### *The Question of Voluntariness*

Apart from the question of whether people have sufficient comprehension, the *Miranda* Court required that suspects waive their rights of their own free will—not prompted by threats, trickery, and cajoling. One potential problem is that people may fail to appreciate the long-term consequences of a waiver, often focusing on the perceived immediate risks associated with invoking their rights—for example, the fear that police and others will draw adverse inferences. Content analyses show that actual warnings seldom contain language to correct the misconception that an invocation cannot be used as evidence of guilt (Rogers, Hazelwood, Sewell, Harrison, & Shuman, 2008).

Commonly used police tactics are also designed to get suspects to waive their rights. Leo (1996b) observed both live and videotaped interrogations in which he identified several social influence tactics that police use to elicit waivers—for example, presenting themselves as an ally, framing the rights as a mere formality, presenting the "opportunity" as a time-limited offer, and constructing implicit waivers. Recent experiments demonstrate the effects on compliance. In one study, innocent mock suspects were significantly more likely to waive their right to silence when it was presented as trivial rather than as a means of protection (Scherr & Madon, 2013). In other studies, mock suspects were more likely to waive their right to silence in an implicit waiver condition in which the experimenter launched into questioning rather than when the rights were explicitly presented (Gillard et al., 2014; Scherr et al., 2016).

In light of historically high waiver rates, another troubling concern is that innocent suspects in particular are at risk. As noted earlier, Kassin and Norwick (2004) varied factual guilt and innocence in the lab and found that participants who were innocent of a mock theft were far more likely to sign a waiver than those who were guilty (81% and 36%, respectively). When later asked to explain this decision, most innocent suspects said they signed the waiver because they had done nothing wrong and had nothing to hide (also see Moore & Gagnier, 2008; Scherr & Franks, 2015; Scherr et al., 2018).

In summary, adults—including university students tested in a benign laboratory setting—often exhibit insufficient comprehension and a willingness to waive their rights. It is now clear, on the basis of several decades of research, that Miranda does not adequately safeguard the accused. This is not an exclusively American problem; comprehension difficulties also have been noted in Canada and the United Kingdom (Chaulk et al., 2014; Clare et al., 1998).

### *Developmental Considerations*

Over the years, research has examined relevant youth-specific factors. Across studies, samples, nations of origin, and testing instruments, a robust literature demonstrates impaired rights comprehension and reasoning relative to adults. Predictors of poorer comprehension include age (Freedman et al., 2014; Grisso, 1981; Viljoen et al., 2005), socioeconomic status (or a proxy; Viljoen & Roesch, 2005; Woolard et al., 2008), and IQ (especially verbal IQ; McLachlan et al., 2011; Rogers et al., 2016; Zelle et al., 2015). With adolescent populations, developmental language disorders also have been linked to impaired Miranda comprehension (Lieser et al., 2019).

Adolescents' errors on forensic assessment instruments reveal specific misconceptions. In an early large-scale study, more than one-fifth of adolescent defendants believed that police could revoke a suspect's right to silence—and a majority believed that suspects could be penalized for asserting that right or that judges could force defendants to implicate themselves (Grisso, 1981). In a later study as well, detained youths reported several misconceptions related to police and counsel. For example, 23% of respondents believed that people are allowed to retract their statements if police lie; 39% believed that police are "looking out for your best interests" (Rogers et al., 2014).

Studies using forensic assessments have greatly informed our understanding of Miranda's protection of youths. Language analyses show that juvenile-specific warnings are highly variable (Rogers, Hazelwood, Sewell, Shuman, & Blackwood, 2008) and sometimes longer and more complicated than general Miranda

warnings (Rogers et al., 2012). Notably, one study of 293 juvenile-specific warnings used in the United States found that 86% of waiver forms explicitly asked interviewees to *waive* their rights to silence and counsel; very few asked whether they wanted to *exercise* those rights (Rogers et al., 2012). Observations of actual juvenile interrogations suggest that rights administration is inconsistent and often problematic (Cleary & Vidal, 2016; Feld, 2013). In an observational study in England, for example, investigators tended to administer the police caution to juvenile suspects quickly, and their explanations were not always correct (Sim & Lamb, 2018).

## Proposed Remedies

Confession evidence is potent. Even when false, confessions can trigger a cascade of negative effects. The combination of confession-based wrongful convictions that have surfaced over the years, accompanied by a now-voluminous body of empirical research, has identified several personal and situational risk factors. Taken together, these sources also have shown that confessions, when taken, corrupt other evidence, increasing the likelihood of trial convictions, guilty pleas, and a stigma that persists even after exoneration. Importantly, it is also now clear that Miranda does not serve as an adequate safeguard. In an effort to prevent false confessions and the consequences that follow, we propose seven recommendations. It is our hope that these recommendations inspire collaborative efforts among law enforcement professionals, judges, attorneys, social scientists, and lawmakers to devise effective safeguards.

### 1. Video Record All Suspect Interviews and Interrogations

In the original SRP, Kassin et al. (2010) stated without equivocation that the most essential recommendation was to lift the veil of secrecy from the interrogation process: "Specifically, all custodial interviews and interrogations of felony suspects should be videotaped in their entirety and with a camera angle that focuses equally on the suspect and interrogator" (p. 25). We now reiterate that position.

In England, under the Police and Criminal Evidence Act of 1984, the mandatory requirement for tape-recording police interviews was introduced to protect suspects and the integrity of the process. At first resisted by police, this requirement positively transformed how suspect interviews were conducted and evaluated. The need for recording has pressed for action in the United States as well. In 1932, Borchard proposed using the technology of the time. His solution was to make "phonographic records" [of interrogations] which shall alone be introducible in court" (pp. 370–371). Over the years, others too have advocated for recording (for a historical overview, see Drizin & Reich, 2004). When the first SRP was published, only nine states mandated video recording of suspect interviews for some or all crimes. At present, 30 states, the District of Columbia, and federal law enforcement agencies have a requirement in place (Garrett, 2024). In several other states, the courts stopped short of a requirement but issued strongly worded opinions that endorsed recording (e.g., Massachusetts).

There are numerous advantages to a video recording policy. First, the presence of a camera, an accountability cue, will deter some interrogators from using egregious tactics and thereby help to prevent false confessions. Second, recording will inhibit frivolous defense claims of coercion where none existed. Third, a video record provides trial judges and juries with an objective and accurate record of the process by which the statement was taken and the origin of the details it contained—common sources of dispute that result from ordinary forgetting and self-serving distortions in memory.

Although law enforcement agencies used to oppose the practice of recording, much of this opposition has thawed. Interviews with more than 465 police and sheriff's departments revealed that the voluntary practice is widespread (Sullivan et al., 2008). Without legislative or judicial compulsion, some departments routinely record interviews and interrogations in major felony investigations and have declared support for the practice. Among the collateral benefits cited were that recording permits detectives to focus on the suspect rather than on taking copious notes, provides an instant replay of the suspect's statement that sometimes reveals incriminating comments initially overlooked, reduces the time that detectives must spend in court defending their practices, and increases public trust in law enforcement. Countering the most common apprehensions, most respondents in these interviews reported that the practice did not prove costly or inhibit suspects from talking (also see Sullivan, 2019). Today, many professional organizations support this practice—including the American Bar Association, APA, the National Association of Criminal Defense Lawyers, the National District Attorney's Association, and the International Association of Chiefs of Police.

Recent research provides empirical answers on the actual effects of video recording on the behavior of police, suspects, and juries. In a field study conducted in a midsize city police department, 61 police investigators inspected a staged crime scene and interrogated a male mock suspect in sessions that were surreptitiously recorded. Half the suspects had committed the mock crime; the other half were innocent. Half the police participants were informed that the sessions were being recorded; half were not informed. Condition-blind coding of the interrogations revealed the use of several common tactics designed to get suspects to confess. Interestingly, police in the camera-informed condition were less likely than those in the camera-uninformed condition to use minimization tactics. They were also perceived by suspects as trying less hard to elicit a confession (Kassin et al., 2014).

A second field study examined the hypothesis that recording provides a more accurate account and may thereby improve factfinding. In Phase 1, experienced officers investigated a mock crime scene, interrogated two innocent suspects, and filed an incident report. All 32 sessions were covertly recorded and later used to assess the accuracy of the reports. In Phase 2, lay observers read either a police report or a verbatim transcript of the interrogation. Results showed that police and suspects diverged in their perceptions of the interrogations; police committed frequent errors of omission in their reports, understating the use of various tactics; and Phase 2 observers who read a police report—compared with those who read a transcript—saw the process as less coercive and were more likely to misjudge suspects as guilty (Kassin et al., 2017).

These are not isolated results. Basic research shows that conversational memory is fraught with bias and error (Brown-Schmidt & Benjamin, 2018) and that people often commit source-monitoring errors, remembering what was said but not who said it (Johnson et al., 1993). In a study involving forensic interviewers of

alleged child abuse victims, Lamb et al. (2000) found that interviewers often neglected to report their own utterances in their verbatim notes, citing the children, not their own prompting questions, as the source of details. Indeed, this latter danger was noted by retired Detective James Trainum (2014), who recounted a case in which a suspect who had confessed to him was later exonerated. In reviewing the recording of the interrogation years later, he discovered that he was so convinced of the suspect's guilt that he unwittingly showed her evidence and disclosed details that she later incorporated into her confession. Without the video, he would not have known.

Despite the benefits of video recording, there is still opposition in the law enforcement community. Aside from strategic concerns (e.g., the fear that factfinders might not approve of the tactics used), opposition is centered on a pragmatic argument potentially relevant in two-party consent states: that the known presence of a camera will distract or inhibit suspects. In cooperation with a small city police department, Kassin et al. (2019) tested this hypothesis by randomly informing or not informing 122 crime suspects that their interrogations would be video recorded. Not a single camera-informed suspect refused to continue. In fact, they spoke as often and as much as did those who were not informed, they were as likely to waive Miranda at the outset and later, they were as likely to make admissions and confessions, and the lead detectives rated them afterward as no less cooperative or forthcoming. Importantly, no differences were observed in case dispositions when tracked 14 months later. Although more research is needed, results did not support the hypothesis that recording inhibits suspects.

For all the benefits cited above, in the absence of demonstrable costs and to ensure transparency, our first recommendation is that every suspect interview be recorded from start to finish, uninterrupted, without loopholes or excuses for the failure to do so. Several states now offer but should reject as excusing conditions a suspect's alleged refusal to go on camera or equipment unavailability or malfunction. Perhaps the most concerning loophole in recording laws is the temporal provision that only "custodial" interrogations must be recorded, not precustodial interviews. "Custody" is the condition that activates the Miranda requirement. Yet except for arrest, which signifies a suspect in custody, the courts have struggled with this construct. Research now shows that participant suspects and observers do not agree as to what constitutes the restriction on one's freedom to leave. Consistent with actor-observer differences in attribution, observers often infer a freedom that suspects themselves do not experience (Alceste et al., 2018). Indeed, a follow-up vignette study indicated that custody is subjective, as police and judges often overestimate how free they perceive a suspect to be compared with laypeople and social psychologists (Alceste & Kassin, 2021). In the digital 21st century, there is no defensible reason for mandatory recording laws to limit the requirement to so-called custodial situations.

There is also a *visual-spatial* aspect of what it means to record the entire process. As a matter of policy, it is important not only that all suspect questioning be recorded from start to finish but that the camera adopt a neutral "equal focus" perspective. In a series of studies on illusory causation effects in attribution, Lassiter and colleagues recorded mock interrogations from three different camera angles so that the suspect, the interrogator, or both were visible. Consistently, lay participants who saw only the suspect judged the situation as less coercive than those focused on the interrogator. By directing visual attention on the accused, the camera can lead observers to underestimate the pressure exerted by the "hidden" detective (Lassiter & Irvine, 1986). Additional studies too have shown that people are more attuned to the situational factors that elicit confessions when the interrogator is also on camera (Lassiter et al., 2001). Even trial judges are influenced by variations in camera perspective (Daniel Lassiter et al., 2007; for application to perceptions of bodycam footage, see Boivin et al., 2017; Poirier et al., 2022).

In light of known cases in which judges and juries continued to trust a false confession even when the interrogations were recorded (e.g., the egregious multi-polygraph-induced confession of Idaho exoneree Christopher Tapp, described earlier) and mock jury research reviewed earlier showing that people do not discount confession evidence even in the presence of risk factors (reviewed earlier), one might well argue that expert testimony should accompany video recorded interrogations in court. This is an important question of relevance to policy and practice that still needs to be tested.

## 2. Require Evidence-Based Suspicion to Conduct Interrogation

In the most recent SRP on eyewitness identifications, Wells et al. (2020) recommended that there be *evidence-based* grounds to believe that an individual is guilty of the crime before that individual is inserted in an identification procedure—that "conducting lineups in the absence of an evidence basis for suspicion is a risk factor for mistaken identification" (p. 11). For reasons similar to those articulated in that report, police should have evidence-based grounds for suspicion before subjecting an individual to an interrogation and hence risking a false confession.

As noted earlier, many investigators are trained to detect deception by observing a suspect's verbal and nonverbal behavior. Demeanor is not evidence. Indeed, research previously described indicates that such means of assessment do not offer a reliable basis for inferring deception. Rather, such approaches are more likely to yield a presumption of guilt that can trigger the use of more pressure-filled tactics and an increased risk of false confessions. Applying an evidence-based suspicion standard before initiating a pre-interrogation interview would thus diminish the likelihood that an innocent person is misclassified for an accusatory interrogation.

As illustrated by numerous wrongful convictions, conducting an interrogation in the absence of an evidence-based suspicion increases the risks associated with the process. Determinations of a suspect's likelihood of guilt should thus be based on the strength of available evidence. Importantly, Moody et al. (2023) demonstrated that as the prior probability of guilt increases (i.e., the strength of evidence suggesting guilt prior to interrogation), the risk of false confession diminishes (because fewer innocent subjects are interrogated) and the posterior probability of a true (guilty) confession increases (similarly, an increase in prior evidence strength is associated with a reduction in the probability of a false guilty plea; see Wilford et al., 2024). Addressing racial disparities in mistaken eyewitness identifications, research also suggests that when police have hard evidence as a basis for inserting a suspect into a lineup, the differential in the posterior probability of guilt between Black and White suspect identifications is diminished

(Katzman & Kovera, 2023). In short, although perceptions of evidence strength can be subjective, it follows that a sufficiently strong case should be used to determine whether a suspect should be subjected to interrogation.

When evidence-based suspicion is assessed, it is important that investigators base their evaluations on evidence that directly and independently incriminates the suspect in the alleged crime—and that the reliability of such evidence be considered. Indirect or circumstantial evidence offers an insufficient basis for diagnostic inferences of guilt; rather, investigators should develop direct evidential links between the suspect and the alleged criminal act. It is also important that investigators consider the extent to which evidential links are independent in their corroboration of guilt—not tainted, as when police form and communicate a suspicion to a medical examiner seeking to determine the cause of an injury or death. Finally, different items of evidence can vary in their inherent reliability and the strength of a causal inference that might be drawn. Hence, it is critical that investigators assess the inherent limitations associated with each piece of evidence when assessing its reliability and potential incriminating value.

Police will often identify a person of interest or investigative lead who they believe is central to the case with respect to knowledge, motive, access, and opportunity. We agree that it is important to speak with such individuals in a manner that allows them to address relevant investigative questions. In this regard, the rapport-based, information-gathering approaches described earlier serve as the most appropriate way to elicit the knowledge they might have (Meissner et al., 2023).

## 3. Impose Limits on the Confrontational Approach

In light of recent events, the time is ripe to evaluate current methods of interrogation used in the United States. All parties would agree that the surgical objective is to secure confessions from perpetrators but not from innocent suspects. Hence, the process should be structured to produce outcomes that are diagnostic, as measured by the observed ratio of true to false confessions. Yet except for physical brutality or deprivation, threats of harm or punishment, explicit promises of leniency, and flagrant Miranda violations, there are no clear criteria by which to regulate the process. Instead, American courts historically have taken a "totality of circumstances" approach that does not adequately account for psychological forms of manipulation.

As Miranda does not protect the innocent, it is necessary to revisit the deployment of psychological tactics that rely heavily on trickery and deceit. For those who adhere to this approach rather than transition to evidence-based forms of interviewing, certain limits should be imposed to minimize the risks. For experts participating in cases involving disputed confessions, it would be useful to measure and "quantify" the amount of coercion present in a particular interrogation. Kaplan et al. (2023) have thus sought to create a standardized instrument for this purpose. On the basis of the research reviewed earlier, we propose the following three limitations that should be placed on the process of interrogation.

### *Custody and Interrogation Time*

Prolonged isolation from significant others constitutes a form of deprivation that can heighten a suspect's distress and increase the incentive to escape. Excessive time in detention may also be accompanied by fatigue, despair, and the deprivation of sleep, food, and other biological needs. As noted earlier, most interrogations last from 30 minutes to 2 hours, whereas an analysis of proven false confession cases indicates that these sessions, from start to finish—whether questioning was continuous or noncontinuous—lasted from 6 to 24 hours (Drizin & Leo, 2004).

In keeping with normative law enforcement practices, and in an effort to minimize the risk to innocent suspects, policy discussions should begin with a proposal to impose time limits, or at least flexible guidelines, when it comes to detention and interrogation. At a minimum, police departments should consider placing internal time limits on the process that can be exceeded—initially and at regular intervals thereafter, if necessary—only with authorization from a supervisor of detectives. The hours of detention that precede custodial interrogation, as well as breaks from questioning taken during the interrogation, should also be taken into account.

### *Presentations of False Evidence*

A particularly egregious problem concerns the presentation of false evidence, often depicted as incontrovertible, which takes the form of outright lying to suspects. In *Frazier v. Cupp* (1969), the United States Supreme Court sanctioned this type of deception and has not revisited this ruling despite all that has occurred. Yet the risks are substantial. This conclusion is derived from a convergence of sources, including actual cases; foundational psychology rooted in the studies of perception, memory, decision making, and social influence; and controlled experiments using an array of methodologies. Across the board, the false evidence effect is found in adults and is even greater in children.

One might argue that lying is a necessary evil, effective without risk to innocent suspects. Yet the combined real-world and scientific evidence is overwhelming. Hence, as noted earlier, a growing number of experienced law enforcement practitioners worldwide have come forward to articulate their concerns regarding the adverse effects on innocent suspects, the public's trust, and public safety (Kassin, 2022b). In light of these risks, we believe that the false evidence ploy should be banned outright, rendering any resulting confessions, per se, inadmissible. Such bans currently exist in England, Iceland, Germany, Spain, New Zealand, Australia, Japan, Taiwan, and all Nordic countries.

Currently, U.S. lawmakers in several states are stepping up to rectify the situation. In 2021, Illinois and Oregon passed laws that prohibit police from lying to minors brought in for interrogation. Similar bills were later passed in California, Colorado, Connecticut, Delaware, Indiana, Minnesota, Nevada, and Utah. These developments are significant, but they do not go far enough. Research shows that the false evidence effect also afflicts adults. Hopefully, remaining states and federal agencies will follow, prompting much-needed changes to interrogation training and practice nationwide. (Importantly, the effects of false evidence do not hinge on whether the investigator believed that evidence to be true at the time of interrogation; a suspect will be influenced by the presentation regardless of the investigator's beliefs and motives.)

### *Minimization Tactics That Imply Leniency*

A third area of concern involves the use of minimization themes that imply leniency. Although American federal constitutional law has long rejected confessions induced by explicit promises of

leniency, the courts have accepted those elicited through the use of minimization tactics, commonly used, that communicate leniency by pragmatic implication. As noted earlier, many innocent suspects who confessed in these situations went on to self-report the expectation that they would not be punished.

Research reviewed earlier indicates that minimization themes that offer sympathetic attributions and downplay the moral seriousness of the offense have two effects. First, they lead people, including adolescents, to infer that they would be treated with leniency in exchange for confession. Second, they elicit admissions from some innocent suspects. In light of these effects, we believe that techniques of minimization, as embodied in the "themes" that interrogators are trained to develop, should be carefully scrutinized. There are several possible approaches to be taken—ranging from a call for additional research that compares the inferences drawn from different minimization themes to an outright ban on this practice. Between these positions, it is clear that police should avoid characterizing a crime or the suspect's alleged actions in a way that implies leniency. Studies reviewed earlier do not indicate that false confessions are elicited merely by telling suspects that they will feel better after confession or that they are good people. However, minimization themes that imply a mitigation of legal responsibility (e.g., the crime was accidental, provoked, or an act of self-defense) should be treated as if the promises implied were actually made.

Finally, it is important to note that psychologically deceptive practices yield two profound secondary costs. The first cost concerns public safety. When a case is closed on an innocent confessor, the real perpetrator remains at large, poised to reoffend. As noted earlier, Norris et al. (2020) examined cases in which DNA was used both to exonerate the innocent and then to identify the actual perpetrator who had escaped prosecution. They found that the vast majority of those perpetrators went on to commit additional offenses—including homicides and sexual assaults. The second cost concerns the public's trust. When police resort to deception about evidence and/or the consequences of confession, they erode people's trust in law enforcement and diminish perceptions of procedural justice (Etienne & McAdams, 2021). In short, there is no scientific basis on which these accusatorial practices serve either the public good or the pursuit of justice.

## 4. Adopt Science-Based Investigative Interviewing Practices

From a macro perspective, we urge law enforcement agencies not only to impose limits on the use of deception but also to adopt science-based investigative interviewing practices as the alternative. These practices improve the diagnosticity of outcomes (Catlin et al., 2023; Meissner et al., 2014).

As noted earlier, research has substantiated the benefits of adopting an alternative science-based approach to interviewing. Rather than focusing exclusively on confession, such practices prioritize the development of cooperation with the subject and the elicitation of information that allows investigators to corroborate evidence already collected and identify additional leads. Effective techniques have been developed that support these objectives, while also substantially diminishing the likelihood of false confessions. This approach involves (a) the development of cooperation via rapport and trust, (b) the elicitation of information using productive questioning and mnemonic techniques that enhance a subject's recollection, (c) the use of strategic questioning and assessment of verbal or story-based cues to evaluate credibility, and (d) the strategic withholding of evidence to identify statement-evidence inconsistencies and resolve a subject's responses to discrepancies. Overall, this approach increases cooperation over resistance, increases the information elicited, improves assessments of veracity, and effectively challenges statement-evidence inconsistencies in a productive manner.

Substantial progress toward the implementation of these interviewing practices has been made in recent years. Research has evaluated science-based training programs with respect to the willingness of investigators to adopt such tactics and their effectiveness when deployed (Akca et al., 2021; Russano et al., 2024). Moreover, as PEACE has become the standard of practice in various countries—namely, the United Kingdom, Norway, Australia, and New Zealand—there is a growing consensus worldwide that these more ethical, science-based approaches should guide all law enforcement, military, and intelligence-gathering interviews (Méndez, 2021; Méndez & Drummond, 2021; Sivasubramaniam & Goodman-Delahunty, 2021).

Change in the United States and Canada has been slow, weighted down by a strong cultural preference for accusatorial practices (Miller et al., 2018). Nevertheless, the U.S. government's development of the High-Value Detainee Interrogation Group research and training programs oriented toward a science-based approach has begun to shift practices (Meissner et al., 2017). Most notably, the Federal Law Enforcement Training Center's Behavioral Science Division has revised its basic training to focus on science-based practices. The Federal Law Enforcement Training Center trains investigators from more than 100 federal agencies, offering courses to state, local, tribal, and international agencies. Major federal law enforcement agencies (e.g., Federal Bureau of Investigation, Homeland Security Investigations, Drug Enforcement Agency, Air Force Office of Special Investigations, Naval Criminal Investigative Services) have adopted science-based interview and interrogation training standards.

Many state and local police departments across the United States are also shifting to science-based alternatives. Recently, a leading interrogation training company, Wicklander-Zulawski and Associates, shifted to evidence-based practices (https://www.w-z.com/2022/12/30/investigative-interviewing-in-a-changing-world/). In addition, some major law enforcement agencies (e.g., Los Angeles Police Department) have done the same. Such transitions serve as important models for agencies seeking to adhere to best practice standards.

## 5. Protect Youthful and Other Vulnerable Suspect Populations

Psychologists, legal scholars, and law enforcement professionals agree that young people and those with mental health issues, or intellectual impairments, need additional supports in the interrogation room. The United Kingdom instituted parent/guardian notification procedures for young suspects almost four decades ago with the Police and Criminal Evidence Act 1984. In the United States, the American Bar Association (2010), American Academy of Child and Adolescent Psychiatry (2013), APA (2022), and IACP (2012) passed resolutions, policy statements, or guidelines for protecting young people.

Despite widespread recognition of the need, implementation of policy and practice reforms has been fragmented at best. Examples of suggested youth-focused reforms include specialized investigator training (APA, 2022; Kassin et al., 2010); using open-ended rather than leading questions (IACP, 2012); avoiding deception and promises of leniency (IACP, 2012); requiring police to involve parents, guardians, or other suitably qualified persons to support youths during interrogation (Medford et al., 2003); requiring the presence of defense attorneys (August & Henderson, 2021); and using simplified Miranda warnings (American Academy of Child & Adolescent Psychiatry, 2013).

Many individual jurisdictions have implemented elements of these reforms with success. However, some have proved challenging to operationalize or execute, and others have had unintended consequences. For example, some states require police to use simplified Miranda warnings or developmentally appropriate language, yet they fail to specify what constitutes "developmentally appropriate" (Goldstein et al., 2018). Attempts to make Miranda warnings "youth friendly" can also backfire, as juvenile-specific warnings are often longer and more complex than general warnings (Rogers, Hazelwood, Sewell, Shuman, & Blackwood, 2008). Particularly concerning is that policy efforts to codify parent involvement in juvenile interrogations can further disadvantage youths because parents often lack the knowledge to protect youths in this situation (Cleary & Warner, 2017; Warner & Cleary, 2022; for an overview of reasons, see Cleary, 2022). Importantly as well, operational definitions of "adolescence" should be consistent with developmental science.

We recommend mandatory assistance of qualified support persons before and during police interrogations to protect vulnerable suspects' rights and bolster their appreciation of legal decisions. In the United Kingdom, suspects younger than 18 years as well as adults with a mental health condition must be accompanied by a suitable "appropriate adult," one who is independent of police and whose role "is to safeguard the rights, entitlements and welfare of juveniles and vulnerable persons" (Home Office, 2023, p. 7). Importantly, the United Kingdom's National Appropriate Adult Network (2018) developed an evidence-based screening tool to help investigators identify people who meet the legal definition of a "vulnerable person" (see Gudjonsson, 2023).

In U.K. cases involving suspects deemed vulnerable, defense lawyers may not act as the suspect's appropriate adult; rather, they need to work collaboratively with an "appropriate adult" (Home Office, 2023, p. 11). In the United States, by contrast, some states now require that juvenile suspects consult with an attorney prior to waiving Miranda and/or require attorney presence during custodial interrogations (Jeffs & Brian, 2022). In light of recent wrongful convictions and the research reviewed in this article, we believe that mandating the presence of defense attorneys during interrogation, and a suitable appropriate adult where required, would serve as an effective way to protect youthful suspects and vulnerable adults. This practice should be adopted across states and nations to enhance the integrity of police interviews.

## 6. Shield Lay Witnesses and Forensic Examiners From Confessions

Consistent with decades of research on confirmation biases, it is now clear that confession evidence can taint eyewitnesses, informants, alibis, and forensic examiners and pathologists. This phenomenon can be seen in analyses of wrongful convictions, which show that most false confessions are accompanied by other evidence errors, thus creating the illusion that the confession was independently corroborated (Kassin, 2012). This phenomenon can also be seen in experiments noted earlier showing that confessions can lead initially uncertain mock witnesses to identify the confessor in a lineup, laypeople to detect a "match" between handwriting samples, polygraph examiners to see more deception in ambiguous charts, and fingerprint examiners to change judgments previously made. As seen in actual cases involving innocent confessors for whom exculpatory evidence was ignored or discredited, knowledge of a confession can also suppress exculpatory information by closing investigations or causing alibis to second-guess their recollections that the suspect was in their presence away from the crime (for an overview, see Kassin et al., 2013).

Research has suggested several ways to limit contextual biases in crime labs and the forensic sciences, more generally—including linear sequential unmasking (Quigley-McBride et al., 2022) and filler-control procedures that mimic eyewitness "lineups" (Quigley-McBride & Wells, 2018). For the more circumscribed objectives of this article, we believe that something akin to blind testing is the most feasible way to ensure the independence of judgment—and, hence, the corroborating value—of lay witnesses and forensic examiners. Simply put, and echoing recommendations for double-blind eyewitness lineups (Wells et al., 1998, 2020), police should not disclose a suspect's confession to prospective lay witnesses, crime scene analysts, forensic examiners tasked with matching fingerprints and other physical evidence, and medical examiners conducting autopsies to determine the cause and manner of death.

## 7. Abolish Contributory Clauses in Compensation Statutes

In 2002, Bladimil Arroyo was convicted of a murder in New York City. In 2019, a reinvestigation of his conviction raised serious concerns about the conduct of police and prosecutors (consistent with law enforcement's initial theory, Arroyo confessed to stabbing the victim; as it turned out, however, the victim was shot). Arroyo was released and exonerated. Yet the Court of Claims dismissed his claim seeking compensation. While conceding that his confession was factually incorrect, this court added,

> That conclusion, while undermining the confession, does not establish that Claimant was free from culpability. … Claimant, knowing the truth, may have believed that confessing to an act that would later be shown incorrect would ultimately lend credence to his assertion that he was not involved. (*Arroyo v. State of New York*, 2022, p. 6)

A powerful stigma attaches itself to individuals who confess. It is important to abolish the contributory clauses attached to some compensation statutes to prevent additional unjust effects after exoneration. Contributory clauses have been used to exclude exonerees from receiving state compensation if they were deemed to have contributed to their own wrongful conviction. Often this refers to individuals who had falsely confessed and/or pled guilty. Currently, 21 states include some form of a contributory clause; 10 states explicitly prohibit those who pled guilty (Madrigal & Norris, 2022).

Symptomatic of the fundamental attribution error and the myth that people would not confess or plead guilty to a crime they did not commit, these clauses indicate the degree to which people—including judges, attorneys, and lawmakers—do not understand this aspect of human behavior as a matter of common sense. The fact that false confessions and guilty pleas are found in so many wrongful convictions belies this notion. Moreover, the vast majority of these cases stem not from individuals who volunteered but rather from those who initially denied involvement but were then induced through interrogation and plea practices that were psychologically coercive and/or applied to suspects who were impaired. To deny these individuals compensation is a form of revictimization that should be stopped.

We urge legislators to follow the archives of cases and social science research reviewed in this article and eliminate contributory clauses. These statutes should be reformed in a manner that guarantees compensation to all exonerees—period (see Scherr et al., 2018; Scherr, Normile, et al., 2020; Shlosberg et al., 2014). Making these decisions discretionary allows the stigma of confession to exert its misguided effects. Moreover, these contributory clauses establish conflicts of interest that can impede subsequent civil suit claims. Indeed, the state has a vested interest in claiming that the wrongful conviction was "brought about" by the exoneree, not by the actions of police and prosecutors.

## Conclusion

Since the original SRP was published in 2010, the database on wrongful convictions has expanded, revealing more false confessions than previously anticipated. At the same time, the scientific literature has exploded, exposing risk factors that contribute to this phenomenon, the collateral consequences that follow, the failure of Miranda to serve as a safeguard, and the stigma that shadows false confessors, even after exoneration.

In light of these developments, the courts, state legislatures, attorneys, and law enforcement professionals are far more enlightened than in the past. Still, more work is needed. Hence, we propose the following remedies: (1) mandate the video recording of all suspect interviews and interrogations, from start to finish, from a neutral camera angle, and without exception; (2) require that police have an evidence-based suspicion, not a mere hunch, before commencing interrogation; (3) impose limits on confrontational interrogation tactics, namely, by banning the presentation of false evidence and minimization themes that imply leniency; (4) adopt a science-based model of investigative interviewing derived from recent cognitive-based research; (5) protect youthful and other vulnerable suspect populations by affording them the opportunity to consult with defense attorneys; (6) shield lay witnesses and forensic examiners from confessions to ensure the independence of their judgments; and (7) abolish contributory clauses from compensation statutes that revictimize innocent persons who were induced to confess. These recommendations should help to prevent confession-based wrongful convictions and improve the administration of justice for all concerned.

## References


Adam, L., & van Golde, C. (2020). Police practice and false confessions: A search for the implementation of investigative interviewing in Australia. *Alternative Law Journal*, *45*(1), 52–59. https://doi.org/10.1177/1037969X19874415

Akca, D., Larivière, C. D., & Eastwood, J. (2021). Assessing the efficacy of investigative interviewing training courses: A systematic review. *International Journal of Police Science & Management*, *23*(1), 73–84. https://doi.org/10.1177/14613557211008470

Alceste, F., Jones, K. A., & Kassin, S. M. (2020). Facts only the perpetrator could have known? A study of contamination in mock crime interrogations. *Law and Human Behavior*, *44*(2), 128–142. https://doi.org/10.1037/lhb0000367

Alceste, F., & Kassin, S. M. (2021). Perceptions of custody: Similarities and disparities among police, judges, social psychologists, and laypeople. *Law and Human Behavior*, *45*(3), 197–214. https://doi.org/10.1037/lhb0000448

Alceste, F., Luke, T. J., & Kassin, S. M. (2018). Holding yourself captive: Perceptions of custody during interviews and interrogations. *Journal of Applied Research in Memory and Cognition*, *7*(3), 387–397. https://doi.org/10.1016/j.jarmac.2018.03.001

Alceste, F., Luke, T. J., Redlich, A. D., Hellgren, J., Amrom, A., & Kassin, S. M. (2021). The psychology of confessions: A comparison of expert and lay opinions. *Applied Cognitive Psychology*, *35*(1), 39–51. https://doi.org/10.1002/acp.3735

Alceste, F., Sanchez, P. Y., Luke, T., Dalsklev, M., Rizzelli, L., & Kassin, S. M. (2024). Practice makes perfect: Effects of mere rehearsal on lay judgments of confessions. *Psychology, Crime & Law*, *30*(10), 1340–1357. https://doi.org/10.1080/1068316X.2023.2190118

Alison, L., Alison, E., Noone, G., Elntib, S., Waring, S., & Christiansen, P. (2014). The efficacy of rapport-based techniques for minimizing counter-interrogation tactics amongst a field sample of terrorists. *Psychology, Public Policy, and Law*, *20*(4), 421–430. https://doi.org/10.1037/law0000021

Alison, L. J., Alison, E., Noone, G., Elntib, S., & Christiansen, P. (2013). Why tough tactics fail and rapport gets results: Observing Rapport-Based Interpersonal Techniques (ORBIT) to generate useful information from terrorists. *Psychology, Public Policy, and Law*, *19*(4), 411–431. https://doi.org/10.1037/a0034564

Allport, G. W., & Postman, L. (1947). *The psychology of rumor*. Henry Holt.

Alschuler, A. (2016). A nearly perfect system for convicting the innocent. *Albany Law Review*, *79*(3), 919–940.

American Academy of Child and Adolescent Psychiatry. (2013). *Policy statement on interviewing and interrogating juvenile suspects*. https://www.aacap.org/aacap/Policy_Statements/2013/Interviewing_and_Interrogating_Juvenile_Suspects.aspx

American Bar Association. (2010). *ABA policy on simplified Miranda warnings for juveniles*. https://www.americanbar.org/groups/public_interest/child_law/resources/attorneys/simplified_mirandawarningsforjuveniles/

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

American Psychological Association. (2008). *Brief for amicus curiae. Wright v. Pennsylvania*. https://www.apa.org/about/offices/ogc/amicus/wright

American Psychological Association. (2010). *Amicus brief in Warney v. State of New York*. https://www.apa.org/about/offices/ogc/amicus/warney.aspx

American Psychological Association. (2014). *Resolution on interrogations of criminal suspects*. https://www.apa.org/about/policy/interrogations.aspx

American Psychological Association. (2018). *Amicus curiae brief in Brendan Dassey v. Michael A. Dittman*. https://www.apa.org/about/offices/ogc/amicus/dassey

American Psychological Association. (2022). *Resolution on interrogations of criminal suspects*. https://www.apa.org/about/policy/interrogations.aspx

Amnesty International. (2015). *China: Torture and forced confessions rampant amid systematic trampling of lawyers' rights*. https://www.amnesty.org/en/latest/press-release/2015/11/china-torture-forced-confession/

Amnesty International. (2022). *Amnesty international report 2021/22: The state of the world's human rights*. https://www.amnesty.org/en/documents/pol10/4870/2022/en/

Appleby, S. C., Hasel, L., & Kassin, S. M. (2013). Police-induced confessions: Empirical analysis of their content and impact. *Psychology, Crime & Law*, *19*(2), 111–128. https://doi.org/10.1080/1068316X.2011.613389

Appleby, S. C., & Kassin, S. M. (2016). When self-report trumps science: Effects of confessions, DNA, and prosecutorial theories on perceptions of guilt. *Psychology, Public Policy, and Law*, *22*(2), 127–140. https://doi.org/10.1037/law0000080

*Arizona v. Fulminante*, 499 U.S. 279 (1991).

*Arroyo v. State of New York* (2022). Claim No. 133136. https://iapps.courts.state.ny.us/nyscef/ViewDocument?docIndex=7KswHpIhl4BZMO8V2anMWg==

Asch, S. E. (1956). Studies of independence and conformity: A minority of one against a unanimous majority. *Psychological Monographs*, *70*(9), 1–70. https://doi.org/10.1037/h0093718

August, C. N., & Henderson, K. S. (2021). Juveniles in the interrogation room: Defense attorneys as protective factor. *Psychology, Public Policy, and Law*, *27*(2), 268–282. https://doi.org/10.1037/law0000294

Aviv, R. (2017, June 19). Memories of a murder. *The New Yorker*.

Baldwin, J. (1993). Police interview techniques: Establishing truth or proof? *British Journal of Criminology*, *33*(3), 325–352. https://doi.org/10.1093/oxfordjournals.bjc.a048329

Banaji, M. R., & Greenwald, A. G. (2013). *Blindspot: Hidden biases of good people*. Delacorte Press.

Barthel, J. (1976). *A death in Canaan*. Dutton.

Bauer, A. (2018). *Beyond the usual beating: The Jon Burge police torture scandal and social movements for police accountability in Chicago*. University of Chicago Press.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Bedau, H. A., & Radelet, M. L. (1987). Miscarriages of justice in potentially capital cases. *Stanford Law Review*, *40*(1), 21–179. https://doi.org/10.2307/1228828

Belkin, I. (2011). China's tortuous path toward ending torture in criminal investigations. *Columbia Journal of Asian Law*, *24*(2), 273–301. https://doi.org/10.7916/cjal.v24i2.3308

Bell, B. E., & Loftus, E. F. (1989). Trivial persuasion in the courtroom: The power of (a few) minor details. *Journal of Personality and Social Psychology*, *56*(5), 669–679. https://doi.org/10.1037/0022-3514.56.5.669

*Berghuis v. Thompkins*, 560 U.S. 370 (2010).

*Berkemer v. McCarty*, 468 U.S. 420 (1984).

Berk-Seligson, S. (2009). *Coerced confessions: The discourse of bilingual police interrogations*. Mouton de Gruyter. https://doi.org/10.1515/9783110213492

Bettens, T., Cleary, H. M. D., & Bull, R. (2024). Humane interrogation strategies are associated with confessions, cooperation, and disclosure: Evidence from a field study of detained individuals in the U.S. *Criminal Justice and Behavior*, *51*(6), 949–969. https://doi.org/10.1177/00938548241232068

Bibas, S. (2004). Plea bargaining outside the shadow of trial. *Harvard Law Review*, *117*(8), 2463–2547. https://doi.org/10.2307/4093404

Blagrove, M. (1996). Effects of length of sleep deprivation on interrogative suggestibility. *Journal of Experimental Psychology: Applied*, *2*(1), 48–59. https://doi.org/10.1037/1076-898X.2.1.48

Blass, T. (2004). *The man who shocked the world: The life and legacy of Stanley Milgram*. Basic Books.

Boivin, R., Gendron, A., Faubert, C., & Poulin, B. (2017). The body-worn camera perspective bias. *Journal of Experimental Criminology*, *13*(1), 125–142. https://doi.org/10.1007/s11292-016-9270-2

Bond, C. F., Jr., & DePaulo, B. M. (2006). Accuracy of deception judgments. *Personality and Social Psychology Review*, *10*(3), 214–234. https://doi.org/10.1207/s15327957pspr1003_2

Borchard, E. M. (1932). *Convicting the innocent: Sixty-five actual errors of criminal justice*. Yale University Press.

*Bram v. United States*, 168 U.S. 532 (1897).

Brants, C. (2013). Wrongful convictions and inquisitorial process: The case of the Netherlands. *University of Cincinnati Law Review*, *80*(4), 1069–1114.

Brimbal, L., Dianiska, R. E., Swanner, J. K., & Meissner, C. A. (2019). Enhancing cooperation and disclosure by manipulating affiliation and developing rapport in investigative interviews. *Psychology, Public Policy, and Law*, *25*(2), 107–115. https://doi.org/10.1037/law0000193

Brimbal, L., Meissner, C. A., Kleinman, S. M., Phillips, E. L., Atkinson, D. J., Dianiska, R. E., Rothweiler, J. N., Oleszkiewicz, S., & Jones, M. S. (2021). Evaluating the benefits of a rapport-based approach to investigative interviews: A training study with law enforcement investigators. *Law and Human Behavior*, *45*(1), 55–67. https://doi.org/10.1037/lhb0000437

Brimbal, L., Roche, S. P., & Martaindale, M. H. (2024). Interviewing and interrogation practices and beliefs, 20 years later: A national self-report survey of American police. *Law and Human Behavior*, *48*(4), 247–261. https://doi.org/10.1037/lhb0000570

Brown, J., Madore, E., Carter, M. N., Spiller, V., & Jozan, A. (2022). Fetal alcohol spectrum disorder (FASD) and suggestibility: A survey of United States federal case law. *International Journal of Law and Psychiatry*, *80*, Article 101763. https://doi.org/10.1016/j.ijlp.2021.101763

Brown-Schmidt, S., & Benjamin, A. S. (2018). How we remember conversation: Implications in legal settings. *Policy Insights from the Behavioral and Brain Sciences*, *5*(2), 187–194. https://doi.org/10.1177/2372732218786975

*Brown v. Mississippi*, 297 U.S. 278 (1936).

*Buffey v. Ballard*, No. 14-0642 (W. Va. 2015).

Burger, J. M. (2009). Replicating Milgram: Would people still obey today? *American Psychologist*, *64*(1), 1–11. https://doi.org/10.1037/a0010932

Burleigh, N. (2011). *Fatal gift of beauty: The trials of Amanda Knox*. Broadway Books.

Burns, S. (2011). *The central park five: A chronicle of a city wilding*. Knopf.

Bushway, S. D., & Redlich, A. D. (2012). Is plea bargaining in the "shadow of the trial" a mirage? *Journal of Quantitative Criminology*, *28*(3), 437–454. https://doi.org/10.1007/s10940-011-9147-5

Bushway, S. D., Redlich, A. D., & Norris, R. J. (2014). An explicit test of plea bargaining in the "shadow of the trial." *Criminology*, *52*(4), 723–754. https://doi.org/10.1111/1745-9125.12054

*California v. Beheler*, 463 U.S. 1121 (1983).

Camp, N. P., Voigt, R., Jurafsky, D., & Eberhardt, J. L. (2021). The thin blue waveform: Racial disparities in officer prosody undermine institutional trust in the police. *Journal of Personality and Social Psychology*, *121*(6), 1157–1171. https://doi.org/10.1037/pspa0000270

Campbell, K. M. (2018). *Miscarriages of justice in Canada: Causes, responses, remedies*. University of Toronto Press. https://doi.org/10.3138/9781487514563

Candel, I., Merckelbach, H., Loyen, S., & Reyskens, H. (2005). "I hit the shift-key and then the computer crashed": Children and false admissions. *Personality and Individual Differences*, *38*(6), 1381–1387. https://doi.org/10.1016/j.paid.2004.09.005

Cardenas, S. A. (2023). Charged up and anchored down: A test of two pathways to judgmental and decisional anchoring biases in plea negotiations. *Psychology, Public Policy, and Law*, *29*(4), 435–456. https://doi.org/10.1037/law0000390

Casey, B. J. (2015). Beyond simple models of self-control to circuit-based accounts of adolescent behavior. *Annual Review of Psychology*, *66*(1), 295–319. https://doi.org/10.1146/annurev-psych-010814-015156

Casey, B. J., Simmons, C., Somerville, L. H., & Baskin-Sommers, A. (2022). Making the sentencing case: Psychological and neuroscientific evidence

for expanding the age of youthful offenders. *Annual Review of Criminology*, *5*(1), 321–343. https://doi.org/10.1146/annurev-criminol-030920-113250

Catlin, M., & Redlich, A. D. (2023). Innocence mortality tax: The impact of wrongful conviction on lifespan. *The Wrongful Conviction Law Review*, *4*(1), 1–15. https://doi.org/10.29173/wclawr98

Catlin, M., Wilson, D. B., Redlich, A. D., Bettens, T., Meissner, C. A., Bhatt, S., & Brandon, S. (2023). PROTOCOL: Interview and interrogation methods and their effects on true and false confessions: An update and extension. *Campbell Systematic Reviews*, *19*(1), Article e1314. https://doi.org/10.1002/cl2.1314

Cauffman, E., Shulman, E. P., Steinberg, L., Claus, E., Banich, M. T., Graham, S., & Woolard, J. (2010). Age differences in affective decision making as indexed by performance on the Iowa Gambling Task. *Developmental Psychology*, *46*(1), 193–207. https://doi.org/10.1037/a0016128

Center for Law, Brain & Behavior. (2022). *White paper on the science of late adolescence: A guide for judges, attorneys, and policy makers*. https://clbb.mgh.harvard.edu/white-paper-on-the-science-of-late-adolescence/

Chan, J. C. K., & McDermott, K. B. (2006). Remembering pragmatic inferences. *Applied Cognitive Psychology*, *20*(5), 633–639. https://doi.org/10.1002/acp.1215

Charman, S. D., Gregory, A. H., & Carlucci, M. (2009). Exploring the diagnostic utility of facial composites: Beliefs of guilt can bias perceived similarity between composite and suspect. *Journal of Experimental Psychology: Applied*, *15*(1), 76–90. https://doi.org/10.1037/a0014682

Chaulk, S. J., Eastwood, J., & Snook, B. (2014). Measuring and predicting police caution comprehension in adult offenders. *Canadian Journal of Criminology and Criminal Justice*, *56*(3), 323–340. https://doi.org/10.3138/CJCCJ.2013.E02

Childs, S., Given-Wilson, Z., Butler, S., Memon, A., & Gudjonsson, G. (2021). Vulnerability to interrogative suggestibility from negative events. A comparison of separated asylum-seeking youth and age-matched peers. *Personality and Individual Differences*, *173*, Article 110600. https://doi.org/10.1016/j.paid.2020.110600

Cialdini, R. B. (2009). *Influence: Science and practice* (5th ed.). Pearson.

Clare, I. C. H., & Gudjonsson, G. H. (1995). The vulnerability of suspects with intellectual disabilities during police interviews: A review and experimental study of decision-making. *Mental Handicap Research*, *8*(2), 110–128. https://doi.org/10.1111/j.1468-3148.1995.tb00149.x

Clare, I. C. H., Gudjonsson, G. H., & Harari, P. M. (1998). Understanding of the current police caution (England and Wales). *Journal of Community & Applied Social Psychology*, *8*(5), 323–329. https://doi.org/10.1002/(SICI)1099-1298(1998090)8:5<323::AID-CASP448>3.0.CO;2-2

Clarke, C., & Milne, R. (2001). *National evaluation of the PEACE investigative interviewing course: Police research award scheme*. Home Office.

Cleary, H. M. D. (2014). Police interviewing and interrogation of juvenile suspects: A descriptive examination of actual cases. *Law and Human Behavior*, *38*(3), 271–282. https://doi.org/10.1037/lhb0000070

Cleary, H. M. D. (2017). Applying the lessons of developmental psychology to the study of juvenile interrogations: New directions for research, policy, and practice. *Psychology, Public Policy, and Law*, *23*(1), 118–130. https://doi.org/10.1037/law0000120

Cleary, H. M. D. (2022). Ten reasons why parents aren't adequate protectors of youth in police interrogations. *The Champion*, *46*(10), 20–32.

Cleary, H. M. D., & Bull, R. (2019). Jail inmates' perspectives on police interrogation. *Psychology, Crime & Law*, *25*(2), 157–170. https://doi.org/10.1080/1068316X.2018.1503667

Cleary, H. M. D., & Bull, R. (2021). Contextual factors predict self-reported confession decision-making: A field study of suspects' actual police interrogation experiences. *Law and Human Behavior*, *45*(4), 310–323. https://doi.org/10.1037/lhb0000459

Cleary, H. M. D., Guarnera, L. A., Aaron, J., & Crane, M. (2021). How trauma may magnify the risk of involuntary and false confessions among adolescents. *Wrongful Conviction Law Review*, *2*(3), 173–204. https://doi.org/10.29173/wclawr53

Cleary, H. M. D., & Vidal, S. (2016). Miranda in actual juvenile interrogations: Delivery, waiver, and readability. *Criminal Justice Review*, *41*(1), 98–115. https://doi.org/10.1177/0734016814538650

Cleary, H. M. D., & Warner, T. C. (2016). Police training in interviewing and interrogation methods: A comparison of techniques used with adult and juvenile suspects. *Law and Human Behavior*, *40*(3), 270–284. https://doi.org/10.1037/lhb0000175

Cleary, H. M. D., & Warner, T. C. (2017). Parents' knowledge and attitudes about youths' interrogation rights. *Psychology, Crime & Law*, *23*(8), 777–793. https://doi.org/10.1080/1068316X.2017.1324030

Clow, K. A., & Leach, A. (2015a). After innocence: Perceptions of individuals who were wrongfully convicted. *Legal and Criminological Psychology*, *20*(1), 147–164. https://doi.org/10.1111/lcrp.12018

Clow, K. A., & Leach, A. (2015b). Stigma and wrongful conviction: All exonerees are not perceived equal. *Psychology, Crime & Law*, *21*(2), 172–185. https://doi.org/10.1080/1068316X.2014.951645

Cohen, A. O., Breiner, K., Steinberg, L., Bonnie, R. J., Scott, E. S., Taylor-Thompson, K. A., Rudolph, M. D., Chein, J., Richeson, J. A., Heller, A. S., Silverman, M. R., Dellarco, D. V., Fair, D. A., Galván, A., & Casey, B. J. (2016). When is an adolescent an adult? Assessing cognitive control in emotional and nonemotional contexts. *Psychological Science*, *27*(4), 549–562. https://doi.org/10.1177/0956797615627625

Colomb, C., Ginet, M., Wright, D., Demarchi, S., & Sadler, C. (2013). Back to the real: Efficacy and perception of a modified cognitive interview in the field. *Applied Cognitive Psychology*, *27*(5), 574–583. https://doi.org/10.1002/acp.2942

*Commonwealth v. Godschalk*, 679 A.2d 1295, 1297 (1996).

Connery, D. S. (1977). *Guilty until proven innocent*. Putnam.

Cooke, D. J., & Philip, L. (1998). Comprehending the Scottish caution: Do offenders understand their right to remain silent? *Legal and Criminological Psychology*, *3*(1), 13–27. https://doi.org/10.1111/j.2044-8333.1998.tb00349.x

Cooper, G. S., Meterko, V., & Gadtaula, P. (2019). Innocents who plead guilty: An analysis of patterns in DNA exoneration cases. *Federal Sentencing Reporter*, *31*(4–5), 234–238. https://doi.org/10.1525/fsr.2019.31.4-5.234

Cooper, V. G., & Zapf, P. A. (2008). Psychiatric patients' comprehension of *Miranda* rights. *Law and Human Behavior*, *32*(5), 390–405. https://doi.org/10.1007/s10979-007-9099-3

Correll, J., Hudson, S., Guillermo, S., & Ma, D. S. (2014). The police officer's dilemma: A decade of research on racial bias in the decision to shoot. *Social and Personality Psychology Compass*, *8*(5), 201–213. https://doi.org/10.1111/spc3.12099

Costanzo, M., Blandón-Gitlin, I., & Davis, D. (2016). The purpose, content, and effects of expert testimony on interrogations and confessions. In B. Bornstein & M. Miller (Eds.), *Advances in psychology and law* (pp. 141–178). Springer. https://doi.org/10.1007/978-3-319-43083-6_5

Cox, S. (2018). *The Reykjavik confessions*. BBC Books.

Dando, C., Wilcock, R., & Milne, R. (2009). The cognitive interview: The efficacy of a modified mental reinstatement of context procedure for frontline police investigators. *Applied Cognitive Psychology*, *23*(1), 138–147. https://doi.org/10.1002/acp.1451

Dando, C. J., & Bull, R. (2011). Maximising opportunities to detect verbal deception: Training police officers to interview tactically. *Journal of Investigative Psychology and Offender Profiling*, *8*(2), 189–202. https://doi.org/10.1002/jip.145

Dando, C. J., Bull, R., Ormerod, T. C., & Sandham, A. L. (2015). Helping to sort the liars from the truth-tellers: The gradual revelation of information during investigative interviews. *Legal and Criminological Psychology*, *20*(1), 114–128. https://doi.org/10.1111/lcrp.12016

Daniel Lassiter, G., Diamond, S. S., Schmidt, H. C., & Elek, J. K. (2007). Evaluating videotaped confessions: Expertise provides no defense against

the camera-perspective effect. *Psychological Science*, *18*(3), 224–226. https://doi.org/10.1111/j.1467-9280.2007.01879.x

Davis, D., Blandon-Gitlin, I., Cleary, H., Costanzo, M., Leo, R. A., & Margolis, S. (2023). Interrogation by proxy: The growing role of lay and undercover interrogators in eliciting criminal confessions. *Criminal Law Bulletin*, *59*, 395–479m.

Davis, D., & Leo, R. A. (2012). Interrogation-related regulatory decline: Ego depletion, failures of self-regulation, and the decision to confess. *Psychology, Public Policy, and Law*, *18*(4), 673–704. https://doi.org/10.1037/a0027367

Demos, M. (Director), & Ricciardi, L. (Writer). (2015). *Making a murderer* [Netflix series]. Synthesis Films.

Denault, V., Talwar, V., Plusquellec, P., & Larivière, V. (2022). On deception and lying: An overview of over 100 years of social science research. *Applied Cognitive Psychology*, *36*(4), 805–819. https://doi.org/10.1002/acp.3971

DePaulo, B. M., Lindsay, J. J., Malone, B. E., Muhlenbruck, L., Charlton, K., & Cooper, H. (2003). Cues to deception. *Psychological Bulletin*, *129*(1), 74–118. https://doi.org/10.1037/0033-2909.129.1.74

Dianiska, R. E., Swanner, J. K., Brimbal, L., & Meissner, C. A. (2019). Conceptual priming and context reinstatement: A test of direct and indirect interview techniques. *Law and Human Behavior*, *43*(2), 131–143. https://doi.org/10.1037/lhb0000323

Dianiska, R. E., Swanner, J. K., Brimbal, L., & Meissner, C. A. (2021). Using disclosure, common ground, and verification to develop rapport and elicit information. *Psychology, Public Policy, and Law*, *27*(3), 341–353. https://doi.org/10.1037/law0000313

DiFava, R., Bettens, T., Wilford, M., & Redlich, A. D. (2024). Confession evidence results in more guilty pleas than eyewitness evidence. *Journal of Experimental Criminology*, *20*(4), 1253–1267. https://doi.org/10.1007/s11292-023-09577-7

Doris, J. M., Niemi, L., & Machery, E. (2024). True believers: The incredulity hypothesis and the enduring legacy of the obedience experiments. *Philosophy of Science*, *28*(2), 53–89. https://doi.org/10.4000/11pu1

Drake, K. E. (2010). Interrogative suggestibility: Life adversity, neuroticism, and compliance. *Personality and Individual Differences*, *48*(4), 493–498. https://doi.org/10.1016/j.paid.2009.11.030

Drake, K. E. (2014). The role of trait anxiety in the association between the reporting of negative life events and interrogative suggestibility. *Personality and Individual Differences*, *60*, 54–59. https://doi.org/10.1016/j.paid.2013.12.018

Drake, K. E., Sigfusdottir, I. D., Sigurdsson, J. F., & Gudjonsson, G. H. (2016). Investigating the interplay between the reported witnessing and experiencing of physical violence within the home, the death of a parent or sibling, stress-sensitivity, and reported false confessions in males. *Personality and Individual Differences*, *88*, 114–119. https://doi.org/10.1016/j.paid.2015.08.047

Driver, E. D. (1968). Confessions and the social psychology of coercion. *Harvard Law Review*, *82*(1), 42–61. https://doi.org/10.2307/1339294

Drizin, S. A., & Colgan, B. (2004). Tales from the juvenile confession front: A guide to how standard police interrogation tactics can produce coerced and false confessions from juvenile suspects. In G. D. Lassiter (Ed.), *Interrogations, confessions, and entrapment* (pp. 127–162). Kluwer Academic/Plenum. https://doi.org/10.1007/978-0-387-38598-3_6

Drizin, S. A., & Leo, R. A. (2004). The problem of false confessions in the post-DNA world. *North Carolina Law Review*, *82*(3), 891–1007. https://scholarship.law.unc.edu/nclr/vol82/iss3/3

Drizin, S. A., & Reich, M. J. (2004). Heeding the lessons of history: The need for mandatory recording of police interrogations to accurately assess the reliability and voluntariness of confessions. *Drake Law Review*, *52*(4), 619–646.

Dror, I., Melinek, J., Arden, J. L., Kukucka, J., Hawkins, S., Carter, J., & Atherton, D. S. (2021). Cognitive bias in forensic pathology decisions. *Journal of Forensic Sciences*, *66*(5), 1751–1757. https://doi.org/10.1111/1556-4029.14697

Dror, I. E., & Charlton, D. (2006). Why experts make errors. *Journal of Forensic Identification*, *56*(4), 600–616.

Dror, I. E., & Hampikian, G. (2011). Subjectivity and bias in forensic DNA mixture interpretation. *Science & Justice*, *51*(4), 204–208. https://doi.org/10.1016/j.scijus.2011.08.004

Dror, I. E., Wolf, D. A., Phillips, G., Gao, S., Yang, Y., & Drake, S. A. (2022). Contextual information in medicolegal death investigation decision-making: Manner of death determination for cases of a single gunshot wound. *Forensic Science International: Synergy*, *5*, Article 100285. https://doi.org/10.1016/j.fsisyn.2022.100285

Duke, M. C., Wood, J. M., Bollin, B., Scullin, M., & LaBianca, J. (2018). Development of the Rapport Scales for investigative interviews and interrogations (RS3i), interviewee version. *Psychology, Public Policy, and Law*, *24*(1), 64–79. https://doi.org/10.1037/law0000147

Eades, D. (2012). Communication with aboriginal speakers of English in the legal process. *Australian Journal of Linguistics*, *32*(4), 473–489. https://doi.org/10.1080/07268602.2012.744268

Eastwood, J., & Snook, B. (2010). Comprehending Canadian police cautions: Are the rights to silence and legal counsel understandable? *Behavioral Sciences & the Law*, *28*(3), 366–377. https://doi.org/10.1002/bsl.898

Eastwood, J., Snook, B., & Luther, K. (2018). Measuring the effectiveness of the sketch procedure for recalling details of a live interactive event. *Applied Cognitive Psychology*, *32*(6), 747–754. https://doi.org/10.1002/acp.3454

Eberhardt, J. L. (2019). *Biased: Uncovering the hidden prejudice that shapes what we see, think, and do*. Viking.

Eberhardt, J. L., Goff, P. A., Purdie, V. J., & Davies, P. G. (2004). Seeing black: Race, crime, and visual processing. *Journal of Personality and Social Psychology*, *87*(6), 876–893. https://doi.org/10.1037/0022-3514.87.6.876

Edkins, V. A., & Dervan, L. E. (2018). Freedom now or a future later: Pitting the lasting implications of collateral consequences against pretrial detention in decisions to plead guilty. *Psychology, Public Policy, and Law*, *24*(2), 204–215. https://doi.org/10.1037/law0000159

Edkins, V. A., & Redlich, A. D. (2019). *A system of pleas: Social science's contributions to the real legal system*. Oxford University Press. https://doi.org/10.1093/oso/9780190689247.001.0001

Elaad, E., Ginton, A., & Shakhar, G. (1994). The effects of prior expectations and outcome knowledge on polygraph examiners' decisions. *Journal of Behavioral Decision Making*, *7*(4), 279–292. https://doi.org/10.1002/bdm.3960070405

Elliott, E., & Leach, A.-M. (2016). You must be lying because I don't understand you: Language proficiency and lie detection. *Journal of Experimental Psychology: Applied*, *22*(4), 488–499. https://doi.org/10.1037/xap0000102

Elliott, E., & Leach, A.-M. (2024). False impressions? The effect of language proficiency on cues, perceptions and lie detection. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement*, *56*(1), 31–40. https://doi.org/10.1037/cbs0000337

English, T. J. (2011). *The savage city: Race, murder, and a generation on the edge*. Harper Collins.

Erickson, S. L., Salekin, K. L., Johnson, L. N., & Doran, S. C. (2020). The predictive power of intelligence: Miranda abilities of individuals with intellectual disability. *Law and Human Behavior*, *44*(1), 60–70. https://doi.org/10.1037/lhb0000356

Etienne, M., & McAdams, R. (2021). Police deception in interrogation as a problem of procedural legitimacy. *Texas Tech Law Review*, *54*(1), 21–38. https://heinonline.org/HOL/P?h=hein.journals/text54&i=41

Evans, J. R., Meissner, C. A., Ross, A. B., Houston, K. A., Russano, M. B., & Horgan, A. J. (2013). Obtaining guilty knowledge in human intelligence interrogations: Comparing accusatorial and information-gathering

approaches with a novel experimental paradigm. *Journal of Applied Research in Memory and Cognition*, *2*(2), 83–88. https://doi.org/10.1016/j.jarmac.2013.03.002

Evans, J. R., Michael, S. W., Meissner, C. A., & Brandon, S. E. (2013). Validating a new assessment method for deception detection: Introducing a psychologically based credibility assessment tool. *Journal of Applied Research in Memory and Cognition*, *2*(1), 33–41. https://doi.org/10.1016/j.jarmac.2013.02.002

Fair Trials. (2021). *Efficiency over justice: Insights into trial waiver systems in Europe*. https://www.fairtrials.org/app/uploads/2022/01/TWSE-report.pdf

Fallon, L., & Snook, B. (2021). Minimization, the Trojan horse of interviewing? Measuring perceptions of witness interviewing strategies. *Criminal Justice and Behavior*, *48*(12), 1805–1826. https://doi.org/10.1177/00938548211025062

Fein, R. A., Lehner, P., & Vossekuil, B. (2006). *Educing information—Interrogation: Science and art*. National Defense Intelligence College. https://permanent.access.gpo.gov/lps81044/educing.pdf

Feld, B. C. (2013). *Kids, cops, and confessions: Inside the interrogation room*. New York University Press.

Fenner, S., Gudjonsson, G. H., & Clare, I. C. H. (2002). Understanding of the current police caution (England and Wales) among suspects in police detention. *Journal of Community & Applied Social Psychology*, *12*(2), 83–93. https://doi.org/10.1002/casp.658

Filipović, L. (2021). Confession to make: Inadvertent confessions and admissions in United Kingdom and United States police contexts. *Frontiers in Psychology*, *12*, Article 769659. https://doi.org/10.3389/fpsyg.2021.769659

Findley, K. A. (2009). Innocence protection in the appellate process. *Marquette Law Review*, *93*(2), 591–638.

Findley, K. A., & Scott, M. S. (2006). The multiple dimensions of tunnel vision in criminal cases. *Wisconsin Law Review*, *2*, 291–397.

Findley, K. A., & Strang, D. A. (2022). Ending manner-of-death testimony and other opinion determinations of crime. *Duquesne Law Review*, *60*(2), 302–339.

Firstman, R., & Salpeter, J. (2008). *A criminal injustice: A true crime, a false confession, and the fight to free Marty Tankleff*. Ballantine Books.

Fisher, R. P., & Geiselman, R. E. (1992). *Memory enhancing techniques for investigative interviewing: The cognitive interview*. Thomas.

Fisher, R. P., & Geiselman, R. E. (2018). Investigative interviewing. In V. B. Van Hasselt & M. L. Bourke (Eds.), *Handbook of behavioral criminology* (pp. 451–466). Springer.

Fisher, R. P., Geiselman, R. E., & Amador, M. (1989). Field test of the cognitive interview: Enhancing the recollection of actual victims and witnesses of crime. *Journal of Applied Psychology*, *74*(5), 722–727. https://doi.org/10.1037/0021-9010.74.5.722

Fisher, R. P., Geiselman, R. E., & Raymond, D. S. (1987). Critical analysis of police interview techniques. *Journal of Police Science and Administration*, *15*, 177–185.

Fisher Inquiry. (1977). *Report of an inquiry by the Hon. Sir Henry Fisher into the circumstances leading to the trial of three persons on charges arising out of the death of Maxwell Confait and the fire at 27 Doggett Road, London SE6*. Her Majesty's Stationery Office.

Frank, J., & Frank, B. (1957). *Not guilty*. Doubleday.

*Frazier v. Cupp*, 394 U.S. 731 (1969).

Freedman, S., Eastwood, J., Snook, B., & Luther, K. (2014). Safeguarding youth interrogation rights: The effect of grade level and reading complexity of youth waiver forms on the comprehension of legal rights. *Applied Cognitive Psychology*, *28*(3), 427–431. https://doi.org/10.1002/acp.3001

Frenda, S. J., Berkowitz, S. R., Loftus, E. F., & Fenn, K. M. (2016). Sleep deprivation and false confessions. *Proceedings of the National Academy of Sciences of the United States of America*, *113*(8), 2047–2050. https://doi.org/10.1073/pnas.1521518113

Frenda, S. J., Patihis, L., Loftus, E. F., Lewis, H. C., & Fenn, K. M. (2014). Sleep deprivation and false memories. *Psychological Science*, *25*(9), 1674–1681. https://doi.org/10.1177/0956797614534694

Frumkin, I. B., Lally, S. J., & Sexton, J. E. (2012). A United States forensic sample for the Gudjonsson Suggestibility Scales. *Behavioral Sciences & the Law*, *30*(6), 749–763. https://doi.org/10.1002/bsl.2032

Gabbert, F., Hope, L., Luther, K., Wright, G., Ng, M., & Oxburgh, G. (2021). Exploring the use of rapport in professional information-gathering contexts by systematically mapping the evidence base. *Applied Cognitive Psychology*, *35*(2), 329–341. https://doi.org/10.1002/acp.3762

Garrett, B. L. (2010). The substance of false confessions. *Stanford Law Review*, *62*(4), 1051–1119.

Garrett, B. L. (2011). *Convicting the innocent: Where criminal prosecutions go wrong*. Harvard University Press. https://doi.org/10.4159/harvard.9780674060982

Garrett, B. L. (2015). Contaminated confessions revisited. *Virginia Law Review*, *101*(2), 395–454. https://virginialawreview.org/articles/contaminated-confessions-revisited/

Garrett, B. L. (2024). *Jurisdictions that record police interrogations*. Wilson Center for Science and Justice. https://wcsj.law.duke.edu/wp-content/uploads/2024/08/Jurisdictions-that-Record-Police-Interrogations.pdf

Gauger, G., & von Bergen, J. (2008). *In spite of the system: A personal story of wrongful conviction & exoneration*. Fourcatfarm Press.

Geiselman, R. E. (2012). The cognitive interview for suspects (CIS). *American Journal of Forensic Psychology*, *30*(3), 5–20.

Geiselman, R. E., & Callot, R. (1990). Reverse versus forward recall of script-based texts. *Applied Cognitive Psychology*, *4*(2), 141–144. https://doi.org/10.1002/acp.2350040206

Geven, L. M., Ben-Shakhar, G., Kindt, M., & Verschuere, B. (2020). Memory-based deception detection: Extending the cognitive signature of lying from instructed to self-initiated cheating. *Topics in Cognitive Science*, *12*(2), 608–631. https://doi.org/10.1111/tops.12353

Gilbert, D. T., & Malone, P. S. (1995). The correspondence bias. *Psychological Bulletin*, *117*(1), 21–38. https://doi.org/10.1037/0033-2909.117.1.21

Gilbert, J. A., & Fisher, R. P. (2006). The effects of varied retrieval cues on reminiscence in eyewitness memory. *Applied Cognitive Psychology*, *20*(6), 723–739. https://doi.org/10.1002/acp.1232

Gillard, N. D., Rogers, R., Kelsey, K. R., & Robinson, E. V. (2014). An investigation of implied Miranda waivers and Powell wording in a mock-crime study. *Law and Human Behavior*, *38*(5), 501–508. https://doi.org/10.1037/lhb0000093

Gilovich, T., Savitsky, K., & Medvec, V. H. (1998). The illusion of transparency: Biased assessments of others' ability to read one's emotional states. *Journal of Personality and Social Psychology*, *75*(2), 332–346. https://doi.org/10.1037/0022-3514.75.2.332

Goff, P. A., Jackson, M. C., Di Leone, B. A. L., Culotta, C. M., & DiTomasso, N. A. (2014). The essence of innocence: Consequences of dehumanizing Black children. *Journal of Personality and Social Psychology*, *106*(4), 526–545. https://doi.org/10.1037/a0035663

Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity*. Prentice Hall.

Goldstein, N. E. S., Haney-Caron, E., Levick, M., & Whiteman, D. (2018). Waving good-bye to waiver: A developmental argument against youths' waiver of Miranda rights. *New York University Journal of Legislation and Public Policy*, *21*.

Goldstein, N. E. S., Zelle, H., & Grisso, T. (2012). *The Miranda rights comprehension instruments*. Professional Resource Press.

Goodman-Delahunty, J., Granhag, P. A., Hartwig, M., & Loftus, E. (2010). Insightful or wishful: Lawyers' ability to predict case outcomes. *Psychology, Public Policy, and Law*, *16*(2), 133–157. https://doi.org/10.1037/a0019060

Granhag, P. A., & Hartwig, M. (2008). A new theoretical perspective on deception detection: On the psychology of instrumental mind-reading. *Psychology, Crime & Law*, *14*(3), 189–200. https://doi.org/10.1080/10683160701645181

Granhag, P. A., & Hartwig, M. (2015). The strategic use of evidence technique: A conceptual overview. In P. A. Granhag, A. Vrij, & B. Verschuere (Eds.), *Detecting deception: Current challenges and cognitive approaches* (pp. 231–251). Wiley-Blackwell.

Grano, J. D. (1994). *Confessions, truth, and the law*. University of Michigan Press.

Grisso, T. (1981). *Juveniles' waiver of rights: Legal and psychological competence*. Plenum. https://doi.org/10.1007/978-1-4684-3815-4

Grisso, T. (1998). *Instruments for assessing understanding & appreciation of Miranda rights*. Professional Resource Press.

Grisso, T., Steinberg, L., Woolard, J., Cauffman, E., Scott, E., Graham, S., Lexcen, F., Reppucci, N. D., & Schwartz, R. (2003). Juveniles' competence to stand trial: A comparison of adolescents' and adults' capacities as trial defendants. *Law and Human Behavior*, *27*(4), 333–363. https://doi.org/10.1023/A:1024065015717

Gross, S., & Possley, M. (2016). *For 50 years, you've had the "right to remain silent": So why do so many suspects confess to crimes they didn't commit?* The Marshall Project.

Gross, S. R., Possley, M. J., Otterbourg, K., Stephens, K. H., Paredes, J. W., & O'Brien, B. (2022, September 23). *Race and wrongful convictions in the United States 2022* (University of Michigan Public Law Research Paper No. 22-051, University of Michigan Law & Economics Research Paper No. 22-051). https://doi.org/10.2139/ssrn.4245863

Gross, S. R., & Shaffer, M. (2012). *Exonerations in the United States, 1989–2012*. The University of Michigan Law School & Northwestern University Law School, The National Registry of Exonerations. https://doi.org/10.2139/ssrn.2092195

Gudjonsson, G. H. (2017). Memory distrust syndrome, confabulation and false confession. *Cortex*, *87*, 156–165. https://doi.org/10.1016/j.cortex.2016.06.013

Gudjonsson, G. H., Vagni, M., Maiorano, T., & Pajardi, D. (2020). The relationship between trauma symptoms and immediate and delayed suggestibility in children who have been sexually abused. *Journal of Investigative Psychology and Offender Profiling*, *17*(3), 250–263. https://doi.org/10.1002/jip.1554

Gudjonsson, G. H. (1984). A new scale of interrogative suggestibility. *Personality and Individual Differences*, *5*(3), 303–314. https://doi.org/10.1016/0191-8869(84)90069-2

Gudjonsson, G. H. (1987). A parallel form of the Gudjonsson Suggestibility Scale. *British Journal of Clinical Psychology*, *26*(3), 215–221. https://doi.org/10.1111/j.2044-8260.1987.tb01348.x

Gudjonsson, G. H. (1992). *The psychology of interrogations, confessions, and testimony*. Wiley.

Gudjonsson, G. H. (1997). *The Gudjonsson Suggestibility Scales manual*. Psychology Press.

Gudjonsson, G. H. (2003). *The psychology of interrogations and confessions: A handbook*. John Wiley & Sons.

Gudjonsson, G. H. (2010). Psychological vulnerabilities during police interviews. Why are they important? *Legal and Criminological Psychology*, *15*(2), 161–175. https://doi.org/10.1348/135532510X500064

Gudjonsson, G. H. (2018). *The psychology of false confessions. Forty years of science and practice*. Wiley-Blackwell. https://doi.org/10.1002/9781119315636

Gudjonsson, G. H. (2021). Science-based pathways to understanding false confessions and wrongful convictions. *Frontiers in Psychology*, *12*, Article 633936. https://doi.org/10.3389/fpsyg.2021.633936

Gudjonsson, G. H. (2023). Background to interviewing vulnerable persons. In G. E. Oxburgh, T. Myklebust, M. Fallon, & M. Hartwig (Eds.), *Interviewing and interrogation: A review of research and practice since World War II* (pp. 71–101). Torkel Opsahl Academic EPublisher.

Gudjonsson, G. H., & Clark, N. K. (1986). Suggestibility in police interrogation: A social psychological model. *Social Behaviour*, *1*(2), 83–104.

Gudjonsson, G. H., Gonzalez, R. A., & Young, S. (2021). The risk of making false confessions: The role of developmental disorders, conduct disorder, psychiatric symptoms, and compliance. *Journal of Attention Disorders*, *25*(5), 715–723. https://doi.org/10.1177/1087054719833169

Gudjonsson, G. H., Heaton-Armstrong, A., Griffiths, T., Justice, L., Rumbold, J., & Wolchover, D. (2021). The impact of confabulation on testimonial reliability. *Criminal Law Review*, *10*, 828–850. https://irep.ntu.ac.uk/id/eprint/44397

Gudjonsson, G. H., & MacKeith, J. A. C. (1982). False confessions: Psychological effects of interrogation. In A. Trankell (Ed.), *Reconstructing the past: The role of psychologists in criminal trials* (pp. 253–269). Kluwer.

Gudjonsson, G. H., Sigurdsson, J. F., Asgeirsdottir, B. B., & Sigfusdottir, I. D. (2006). Custodial interrogation, false confession and individual differences: A national study among Icelandic youth. *Personality and Individual Differences*, *41*(1), 49–59. https://doi.org/10.1016/j.paid.2005.12.012

Gudjonsson, G. H., Sigurdsson, J. F., & Sigfusdottir, I. D. (2009). Interrogation and false confession among adolescents in seven European countries: What background and psychological variables best discriminate between false confessors and non-false confessors? *Psychology, Crime & Law*, *15*(8), 711–728. https://doi.org/10.1080/10683160802516257

Gudjonsson, G. H., Sigurdsson, J. F., Sigfusdottir, I. D., & Young, S. (2012). False confessions to police and their relationship with conduct disorder, ADHD, and life adversity. *Personality and Individual Differences*, *52*(6), 696–701. https://doi.org/10.1016/j.paid.2011.12.025

Gudjonsson, G. H., Sigurdsson, J. F., Sigurdardottir, A. S., Steinthorsson, H., & Sigurdardottir, V. M. (2014). The role of memory distrust in cases of internalised false confession. *Applied Cognitive Psychology*, *28*(3), 336–348. https://doi.org/10.1002/acp.3002

Gudjonsson, G. H., Sigurdsson, J. F., & Tryggvadottir, H. B. (2011). The relationship of compliance with a background of childhood neglect and physical and sexual abuse. *Journal of Forensic Psychiatry & Psychology*, *22*(1), 87–98. https://doi.org/10.1080/14789949.2010.524707

Guyll, M., Madon, S., Yang, Y., Lannin, D. G., Scherr, K., & Greathouse, S. (2013). Innocence and resisting confession during interrogation: Effects on physiologic activity. *Law and Human Behavior*, *37*(5), 366–375. https://doi.org/10.1037/lhb0000044

Guyll, M., Yang, Y., Madon, S., Smalarz, L., & Lannin, D. G. (2019). Mobilization and resistance in response to interrogation threat. *Law and Human Behavior*, *43*(4), 307–318. https://doi.org/10.1037/lhb0000337

Haney-Caron, E., Goldstein, N. E. S., & Mesiarik, C. (2018). Self-perceived likelihood of false confession: A comparison of justice-involved juveniles and adults. *Criminal Justice and Behavior*, *45*(12), 1955–1976. https://doi.org/10.1177/0093854818799806

Harris, R. J., & Monaco, G. E. (1978). Psychology of pragmatic implication: Information processing between the lines. *Journal of Experimental Psychology: General*, *107*(1), 1–22. https://doi.org/10.1037/0096-3445.107.1.1

Harrison, Y., & Horne, J. A. (2000). The impact of sleep deprivation on decision making: A review. *Journal of Experimental Psychology: Applied*, *6*(3), 236–249. https://doi.org/10.1037/1076-898X.6.3.236

*Harris v. New York*, 401 U.S. 222 (1971).

Hartwig, M., Anders Granhag, P., & Strömwall, L. A. (2007). Guilty and innocent suspects' strategies during police interrogations. *Psychology, Crime & Law*, *13*(2), 213–227. https://doi.org/10.1080/10683160600750264

Hartwig, M., & Bond, C. F., Jr. (2011). Why do lie-catchers fail? A lens model meta-analysis of human lie judgments. *Psychological Bulletin*, *137*(4), 643–659. https://doi.org/10.1037/a0023589

Hartwig, M., Granhag, P. A., Strömwall, L. A., & Kronkvist, O. (2006). Strategic use of evidence during police interviews: When training to detect deception works. *Law and Human Behavior*, *30*(5), 603–619. https://doi.org/10.1007/s10979-006-9053-9

Hartwig, M., Granhag, P. A., Strömwall, L. A., & Vrij, A. (2005). Detecting deception via strategic disclosure of evidence. *Law and Human Behavior*, *29*(4), 469–484. https://doi.org/10.1007/s10979-005-5521-x

Harvey, A. C., Vrij, A., Leal, S., Hope, L., & Mann, S. (2017). Deception and decay: Verbal lie detection as a function of delay and encoding quality. *Journal of Applied Research in Memory and Cognition*, *6*(3), 306–318. https://doi.org/10.1037/h0101812

Hasel, L. E., & Kassin, S. M. (2009). On the presumption of evidentiary independence: Can confessions corrupt eyewitness identifications? *Psychological Science*, *20*(1), 122–126. https://doi.org/10.1111/j.1467-9280.2008.02262.x

Hauch, V., Sporer, S. L., Michael, S. W., & Meissner, C. A. (2016). Does training improve the detection of deception? A meta-analysis. *Communication Research*, *43*(3), 283–343. https://doi.org/10.1177/0093650214534974

Hellgren, J., & Kassin, S. M. (2022). The defense lawyer's plea recommendation: Disentangling the influences of perceived guilt and probability of conviction. *Psychology, Public Policy, and Law*, *28*(4), 546–559. https://doi.org/10.1037/law0000365

Helm, R. K. (2022). Cognition and incentives in plea decisions: Categorical differences in outcomes as the tipping point for innocent defendants. *Psychology, Public Policy, and Law*, *28*(3), 344–355. https://doi.org/10.1037/law0000321

Helm, R. K., Reyna, V. F., Franz, A. A., Novick, R. Z., Dincin, S., & Cort, A. E. (2018). Limitations on the ability to negotiate justice: Attorney perspectives on guilt, innocence, and legal advice in the current plea system. *Psychology, Crime & Law*, *24*(9), 915–934. https://doi.org/10.1080/1068316X.2018.1457672

Henderson, K. S., & Levett, L. M. (2016). Can expert testimony sensitize jurors to variations in confession evidence? *Law and Human Behavior*, *40*(6), 638–649. https://doi.org/10.1037/lhb0000204

Henkel, L. A., Coffman, K. A., & Dailey, E. M. (2008). A survey of people's attitudes and beliefs about false confessions. *Behavioral Sciences & the Law*, *26*(5), 555–584. https://doi.org/10.1002/bsl.826

Herrnstein, R. J. (1970). On the law of effect. *Journal of the Experimental Analysis of Behavior*, *13*(2), 243–266. https://doi.org/10.1901/jeab.1970.13-243

Herrnstein, R. J., Rachlin, H., & Laibson, D. I. (Eds.). (1997). *The matching law: Papers in psychology and economics*. Russell Sage Foundation.

Hill, C., Memon, A., & McGeorge, P. (2008). The role of confirmation bias in suspect interviews: A systematic evaluation. *Legal and Criminological Psychology*, *13*(2), 357–371. https://doi.org/10.1348/135532507X238682

Hilton, D. J. (1995). The social context of reasoning: Conversational inference and rational judgment. *Psychological Bulletin*, *118*(2), 248–271. https://doi.org/10.1037/0033-2909.118.2.248

Hollien, H., Harnsberger, J. D., Martin, C. A., & Hollien, K. A. (2008). Evaluation of the NITV CVSA. *Journal of Forensic Sciences*, *53*(1), 183–193. https://doi.org/10.1111/j.1556-4029.2007.00596.x

Home Office. (1985). *Police and criminal evidence act 1984*. Her Majesty's Stationery Office.

Home Office. (2003). *Police and criminal evidence act 1984. Codes of practice A-E* (Revised ed.). Her Majesty's Stationery Office.

Home Office. (2023). *Police and criminal evidence act 1984 (PACE)—Code C: Revised code of practice for the detention, treatment and questioning of persons by police officers*. His Majesty's Stationery Office. https://www.gov.uk/official-documents

Honts, C. R. (2024). The innocent at risk: The dark side of certain polygraph practices. *Polygraph and Forensic Credibility Assessment: A Journal of Science and Field Practice*, *53*(1), 1–15.

Honts, C. R., Forrest, K., & Stepamescu, A. (2019). Polygraph examiners unable to discriminate true-false juvenile confessions. *Polygraph & Forensic Credibility Assessment: A Journal of Science and Field Practice*, *48*, 1–9.

Honts, C. R., Kassin, S. M., & Craig, R. (2014). "I'd know a false confession if I saw one": A constructive replication with juveniles. *Psychology, Crime & Law*, *20*(7), 695–704. https://doi.org/10.1080/1068316X.2013.854792

Honts, C. R., Thurber, S., & Handler, M. (2021). A comprehensive meta-analysis of the comparison question polygraph test. *Applied Cognitive Psychology*, *35*(2), 411–427. https://doi.org/10.1002/acp.3779

Hope, L., Gabbert, F., Kinninger, M., Kontogianni, F., Bracey, A., & Hanger, A. (2019). Who said what and when? A timeline approach to eliciting information and intelligence about conversations, plots, and plans. *Law and Human Behavior*, *43*(3), 263–277. https://doi.org/10.1037/lhb0000329

Hope, L., Mullis, R., & Gabbert, F. (2013). Who? What? When? Using a timeline technique to facilitate recall of a complex event. *Journal of Applied Research in Memory and Cognition*, *2*(1), 20–24. https://doi.org/10.1016/j.jarmac.2013.01.002

Horgan, A. J., Russano, M. B., Meissner, C. A., & Evans, J. R. (2012). Minimization and maximization techniques: Assessing the perceived consequences of confessing and confession diagnosticity. *Psychology, Crime & Law*, *18*(1), 65–78. https://doi.org/10.1080/1068316X.2011.561801

Horselenberg, R., Merckelbach, H., Smeets, T., Franssens, D., Ygram Peters, G.-J., & Zeles, G. (2006). False confessions in the lab: Do plausibility and consequences matter? *Psychology, Crime & Law*, *12*(1), 61–75. https://doi.org/10.1080/1068310042000303076

Horvath, F., Jayne, B., & Buckley, J. (1994). Differentiation of truthful and deceptive criminal suspects in behavior analysis interviews. *Journal of Forensic Sciences*, *39*(3), 793–807. https://doi.org/10.1520/JFS13657J

Howard, S. (2019). Exonerees in Black and White: The influence of race on perceptions of those who falsely confessed to a crime. *Psychology, Crime & Law*, *25*(9), 911–924. https://doi.org/10.1080/1068316X.2019.1597091

Huang, K.-J., & Teoh, Y.-S. (2019). Rapport building in suspect interviewing: A comparison of relationship- and procedure-based approaches in a laboratory setting. *Psychology, Public Policy, and Law*, *25*(4), 253–265. https://doi.org/10.1037/law0000209

Huff, C. R., Rattner, A., & Sagarin, E. (1996). *Convicted but innocent: Wrongful conviction and public policy*. Sage Publication. https://doi.org/10.4135/9781452220543

Iacono, W. G., & Ben-Shakhar, G. (2019). Current status of forensic lie detection with the comparison question technique: An update of the 2003 National Academy of Sciences report on polygraph testing. *Law and Human Behavior*, *43*(1), 86–98. https://doi.org/10.1037/lhb0000307

Icenogle, G., & Cauffman, E. (2021). Adolescent decision making: A decade in review. *Journal of Research on Adolescence*, *31*(4), 1006–1022. https://doi.org/10.1111/jora.12608

Icenogle, G., Steinberg, L., Duell, N., Chein, J., Chang, L., Chaudhary, N., Di Giunta, L., Dodge, K. A., Fanti, K. A., Lansford, J. E., Oburu, P., Pastorelli, C., Skinner, A. T., Sorbring, E., Tapanya, S., Uribe Tirado, L. M., Alampay, L. P., Al-Hassan, S. M., Takash, H. M. S., & Bacchini, D. (2019). Adolescents' cognitive capacity reaches adult levels prior to their psychosocial maturity: Evidence for a "maturity gap" in a multinational, cross-sectional sample. *Law and Human Behavior*, *43*(1), 69–85. https://doi.org/10.1037/lhb0000315

*Illinois v. Perkins*, 496 U.S. 292 (1990).

Inbau, F. E., & Reid, J. E. (1962). *Criminal interrogation and confessions*. Williams & Wilkins.

Inbau, F. E., Reid, J. E., Buckley, J. P., & Jayne, B. C. (2013). *Criminal interrogation and confessions* (5th ed.). Jones & Bartlett Learning.

Inglis, T. (2004). *Truth, power and lies: Irish society and the case of the Kerry babies*. University College Dublin Press.

International Association of Chiefs of Police. (2012). *Reducing risks: An executive's guide to effective juvenile interview and interrogation*.

*J.D.B. v. North Carolina*, 564 U.S. 261 (2011).

Jeffs, M., & Brian, S. (2022). *Parental presence or totality of circumstances? Assessment of Utah's Juvenile Miranda Law & 50 State Survey*. SSRN. https://doi.org/10.2139/ssrn.4047054

Jenkins, B. D., Le Grand, A. M., Neuschatz, J. S., Golding, J. M., Wetmore, S. A., & Price, J. L. (2021). Testing the forensic confirmation bias: How jailhouse informants violate evidentiary independence. *Journal of Police and Criminal Psychology*, *38*, 93–104. https://doi.org/10.1007/s11896-020-09422-x

Johnson, M. K. (2006). Memory and reality. *American Psychologist*, *61*(8), 760–771. https://doi.org/10.1037/0003-066X.61.8.760

Johnson, M. K., Hashtroudi, S., & Lindsay, D. S. (1993). Source monitoring. *Psychological Bulletin*, *114*(1), 3–28. https://doi.org/10.1037/0033-2909.114.1.3

Jones, E. E., & Davis, K. E. (1965). From acts to dispositions: The attribution process in person perception. *Advances in Experimental Social Psychology*, *2*, 219–266. https://doi.org/10.1016/S0065-2601(08)60107-0

Josefsson, D. (2015). *The strange case of Thomas Quick: The Swedish serial killer and the psychoanalyst who created him*. Portobello Books.

Kaplan, J., & Cutler, B. L. (2022). Co-occurrences among interrogation tactics in actual criminal investigations. *Psychology, Crime & Law*, *28*(1), 1–19. https://doi.org/10.1080/1068316X.2021.1876051

Kaplan, J., Cutler, B. L., Leach, A.-M., & Eastwood, J. (2023). Development of the interview and interrogation assessment instrument. *Psychology, Public Policy, and Law*, *29*(1), 46–61. https://doi.org/10.1037/law0000366

Kaplan, J., Cutler, B. L., Leach, A.-M., Marion, S., & Eastwood, J. (2020). Perceptions of coercion in interrogation: Comparing expert and lay opinions. *Psychology, Crime & Law*, *26*(4), 384–401. https://doi.org/10.1080/1068316X.2019.1669597

Kassin, S. (2022a, August 2). The "money train" murder: Anatomy of three false confessions. *New York Law Journal*. https://www.law.com/newyorklawjournal/2022/08/02/the-money-train-murder-anatomy-of-three-false-confessions/

Kassin, S. (2022b, December 16). Law enforcement experts on why police shouldn't be allowed to lie to suspects. *TIME*. https://time.com/6241531/police-deception-tactics-suspects-consequences/

Kassin, S. M. (1997). The psychology of confession evidence. *American Psychologist*, *52*(3), 221–233. https://doi.org/10.1037/0003-066X.52.3.221

Kassin, S. M. (2005). On the psychology of confessions: Does *innocence* put *innocents* at risk? *American Psychologist*, *60*(3), 215–228. https://doi.org/10.1037/0003-066X.60.3.215

Kassin, S. M. (2007). Internalized false confessions. In M. P. Toglia, J. D. Read, D. F. Ross, & R. C. L. Lindsay (Eds.), *The handbook of eyewitness psychology, Vol. 1. Memory for events* (pp. 175–192). Erlbaum Associates Publishers.

Kassin, S. M. (2012). Why confessions trump innocence. *American Psychologist*, *67*(6), 431–445. https://doi.org/10.1037/a0028212

Kassin, S. M. (2015). The social psychology of false confessions. *Social Issues and Policy Review*, *9*(1), 25–49. https://doi.org/10.1111/sipr.12009

Kassin, S. M. (2017a). False confessions: How can psychology so basic be so counterintuitive? *American Psychologist*, *72*(9), 951–964. https://doi.org/10.1037/amp0000195

Kassin, S. M. (2017b). The killing of Kitty Genovese: What *else* does this case tell us? *Perspectives on Psychological Science*, *12*(3), 374–381. https://doi.org/10.1177/1745691616679465

Kassin, S. M. (2022c). *Duped: Why innocent people confess—And why we believe their confessions*. Prometheus Books.

Kassin, S. M., Bogart, D., & Kerner, J. (2012). Confessions that corrupt: Evidence from the DNA exoneration case files. *Psychological Science*, *23*(1), 41–45. https://doi.org/10.1177/0956797611422918

Kassin, S. M., Drizin, S. A., Grisso, T., Gudjonsson, G. H., Leo, R. A., & Redlich, A. D. (2010). Police-induced confessions: Risk factors and recommendations. *Law and Human Behavior*, *34*(1), 3–38. https://doi.org/10.1007/s10979-009-9188-6

Kassin, S. M., Dror, I., & Kukucka, J. (2013). The forensic confirmation bias: Problems, perspectives, and proposed solutions. *Journal of Applied Research in Memory and Cognition*, *2*(1), 42–52. https://doi.org/10.1016/j.jarmac.2013.01.001

Kassin, S. M., & Fong, C. T. (1999). "I'm innocent!" Effects of training on judgments of truth and deception in the interrogation room. *Law and Human Behavior*, *23*(5), 499–516. https://doi.org/10.1023/A:1022330011811

Kassin, S. M., Goldstein, C. C., & Savitsky, K. (2003). Behavioral confirmation in the interrogation room: On the dangers of presuming guilt. *Law and Human Behavior*, *27*(2), 187–203. https://doi.org/10.1023/A:1022599230598

Kassin, S. M., & Kiechel, K. L. (1996). The social psychology of false confessions: Compliance, internalization, and confabulation. *Psychological Science*, *7*(3), 125–128. https://doi.org/10.1111/j.1467-9280.1996.tb00344.x

Kassin, S. M., Kukucka, J., Lawson, V. Z., & DeCarlo, J. (2014). Does video recording alter the behavior of police during interrogation? A mock crime-and-investigation study. *Law and Human Behavior*, *38*(1), 73–83. https://doi.org/10.1037/lhb0000047

Kassin, S. M., Kukucka, J., Lawson, V. Z., & DeCarlo, J. (2017). Police reports of mock suspect interrogations: A test of accuracy and perception. *Law and Human Behavior*, *41*(3), 230–243. https://doi.org/10.1037/lhb0000225

Kassin, S. M., Leo, R. A., Meissner, C. A., Richman, K. D., Colwell, L. H., Leach, A.-M., & La Fon, D. (2007). Police interviewing and interrogation: A self-report survey of police practices and beliefs. *Law and Human Behavior*, *31*(4), 381–400. https://doi.org/10.1007/s10979-006-9073-5

Kassin, S. M., & McNall, K. (1991). Police interrogations and confessions: Communicating promises and threats by pragmatic implication. *Law and Human Behavior*, *15*(3), 233–251. https://doi.org/10.1007/BF01061711

Kassin, S. M., Meissner, C. A., & Norwick, R. J. (2005). "I'd know a false confession if I saw one": A comparative study of college students and police investigators. *Law and Human Behavior*, *29*(2), 211–227. https://doi.org/10.1007/s10979-005-2416-9

Kassin, S. M., & Neumann, K. (1997). On the power of confession evidence: An experimental test of the fundamental difference hypothesis. *Law and Human Behavior*, *21*(5), 469–484. https://doi.org/10.1023/A:1024871622490

Kassin, S. M., & Norwick, R. J. (2004). Why people waive their Miranda rights: The power of innocence. *Law and Human Behavior*, *28*(2), 211–221. https://doi.org/10.1023/B:LAHU.0000022323.74584.f5

Kassin, S. M., Redlich, A. D., Alceste, F., & Luke, T. J. (2018). On the general acceptance of confessions research: Opinions of the scientific community. *American Psychologist*, *73*(1), 63–80. https://doi.org/10.1037/amp0000141

Kassin, S. M., Russano, M. B., Amrom, A. D., Hellgren, J., Kukucka, J., & Lawson, V. Z. (2019). Does video recording inhibit crime suspects? Evidence from a fully randomized field experiment. *Law and Human Behavior*, *43*(1), 45–55. https://doi.org/10.1037/lhb0000319

Kassin, S. M., & Sukel, H. (1997). Coerced confessions and the jury: An experimental test of the "harmless error" rule. *Law and Human Behavior*, *21*(1), 27–46. https://doi.org/10.1023/A:1024814009769

Kassin, S. M., & Wrightsman, L. S. (1980). Prior confessions and mock juror verdicts. *Journal of Applied Social Psychology*, *10*(2), 133–146. https://doi.org/10.1111/j.1559-1816.1980.tb00698.x

Kassin, S. M., & Wrightsman, L. S. (1985). Confession evidence. In S. M. Kassin & L. S. Wrightsman (Eds.), *The psychology of evidence and trial procedure* (pp. 67–94). Sage Publication.

Katzman, J., & Kovera, M. B. (2023). Potential causes of racial disparities in wrongful convictions based on mistaken identifications: Own-race bias and differences in evidence-based suspicion. *Law and Human Behavior*, *47*(1), 23–35. https://doi.org/10.1037/lhb0000503

Kaur, G. (2022, November 4). Conviction cannot be based solely on extra judicial confession if not duly proved—SC while acquitting five murder convicts. *Verdictum*. https://www.verdictum.in/court-updates/supreme-court/extra-judicial-confession-not-duly-proved-1446593

Kelly, C. E., Miller, J. C., & Redlich, A. D. (2016). The dynamic nature of interrogation. *Law and Human Behavior*, *40*(3), 295–309. https://doi.org/10.1037/lhb0000172

Kelly, C. E., Miller, J. C., Redlich, A. D., & Kleinman, S. M. (2013). A taxonomy of interrogation methods. *Psychology, Public Policy, and Law*, *19*(2), 165–178. https://doi.org/10.1037/a0030310

Kelly, C. E., Russano, M. B., Miller, J. C., & Redlich, A. D. (2019). On the road (to admission): Engaging suspects with minimization. *Psychology, Public Policy, and Law*, *25*(3), 166–180. https://doi.org/10.1037/law0000199

Kieckhaefer, J., & Luna, S. (2024). Can you put a price on 14 years of life? Examining predictors of monetary compensation for exonerees. *Psychology, Crime & Law*, *30*(4), 338–357. https://doi.org/10.1080/1068316X.2022.2093871

Kienzle, M. R., & Levett, L. M. (2018). A novel paradigm for examining alibi corroboration and evidence interaction: Does a confession affect the likelihood of alibi corroboration for friends and strangers? *Psychology, Public Policy, and Law*, *24*(3), 353–364. https://doi.org/10.1037/law0000173

King, L., & Snook, B. (2009). Peering inside a Canadian interrogation room: An examination of the Reid model of interrogation, influence tactics, and coercive strategies. *Criminal Justice and Behavior*, *36*(7), 674–694. https://doi.org/10.1177/0093854809335142

Klaver, J., Lee, Z., & Rose, V. G. (2008). Effects of personality, interrogation techniques and plausibility in an experimental false confession paradigm. *Legal and Criminological Psychology*, *13*(1), 71–88. https://doi.org/10.1348/135532507X193051

Kostelnik, J. O., & Reppucci, N. D. (2009). Reid training and sensitivity to developmental maturity in interrogation: Results from a national survey of police. *Behavioral Sciences & the Law*, *27*(3), 361–379. https://doi.org/10.1002/bsl.871

Kramer, G. M., Wolbransky, M., & Heilbrun, K. (2007). Plea bargaining recommendations by criminal defense attorneys: Evidence strength, potential sentence, and defendant preference. *Behavioral Sciences & the Law*, *25*(4), 573–585. https://doi.org/10.1002/bsl.759

Krapohl, D. J., & Dutton, D. W. (2018). Believing is seeing: The influence of expectations on blind scoring of polygraph data. *Polygraph*, *47*(2), 91–107.

Kukucka, J., Applegarth, H. K., & Mello, A. L. (2020). Do exonerees face employment discrimination similar to actual offenders? *Legal and Criminological Psychology*, *25*(1), 17–32. https://doi.org/10.1111/lcrp.12159

Kukucka, J., Clow, K. A., Horodyski, A. M., Deegan, K., & Gayleard, N. M. (2021). Do exonerees face housing discrimination? An email-based field experiment and content analysis. *Psychology, Public Policy, and Law*, *27*(4), 570–580. https://doi.org/10.1037/law0000323

Kukucka, J., & Evelo, A. J. (2019). Stigma against false confessors impacts post-exoneration financial compensation. *Behavioral Sciences & the Law*, *37*(4), 372–387. https://doi.org/10.1002/bsl.2403

Kukucka, J., & Kassin, S. M. (2014). Do confessions taint perceptions of handwriting evidence? An empirical test of the forensic confirmation bias. *Law and Human Behavior*, *38*(3), 256–270. https://doi.org/10.1037/lhb0000066

Kukucka, J., Kassin, S. M., Zapf, P. A., & Dror, I. E. (2017). Cognitive bias and blindness: A global survey of forensic science examiners. *Journal of Applied Research in Memory and Cognition*, *6*(4), 452–459. https://doi.org/10.1016/j.jarmac.2017.09.001

*Lafler v. Cooper*, 566 U.S. 156 (2012).

Lamb, M. E., Orbach, Y., Sternberg, K. J., Hershkowitz, I., & Horowitz, D. (2000). Accuracy of investigators' verbatim notes of their forensic interviews with alleged child abuse victims. *Law and Human Behavior*, *24*(6), 699–708. https://doi.org/10.1023/A:1005556404636

Lancaster, G. L., Vrij, A., Hope, L., & Waller, B. (2013). Sorting the liars from the truth tellers: The benefits of asking unanticipated questions on lie detection. *Applied Cognitive Psychology*, *27*(1), 107–114. https://doi.org/10.1002/acp.2879

Lange, N. D., Thomas, R. P., Dana, J., & Dawes, R. M. (2011). Contextual biases in the interpretation of auditory evidence. *Law and Human Behavior*, *35*(3), 178–187. https://doi.org/10.1007/s10979-010-9226-4

Lassiter, G. D., Geers, A. L., Munhall, P. J., Handley, I. M., & Beers, M. J. (2001). Videotaped confessions: Is guilt in the eye of the camera? In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 33, pp. 189–254). Academic Press. https://doi.org/10.1016/S0065-2601(01)80006-X

Lassiter, G. D., & Irvine, A. A. (1986). Videotaped confessions: The impact of camera point of view on judgments of coercion. *Journal of Applied Social Psychology*, *16*(3), 268–276. https://doi.org/10.1111/j.1559-1816.1986.tb01139.x

Latané, B. (1981). The psychology of social impact. *American Psychologist*, *36*(4), 343–356. https://doi.org/10.1037/0003-066X.36.4.343

Leo, R. A. (1996a). Inside the interrogation room. *The Journal of Criminal Law & Criminology*, *86*(2), 266–303. https://doi.org/10.2307/1144028

Leo, R. A. (1996b). Miranda's revenge: Police interrogation as a confidence game. *Law & Society Review*, *30*(2), 259–288. https://doi.org/10.2307/3053960

Leo, R. A. (2005). Rethinking the study of miscarriages of justice: Developing a criminology of wrongful conviction. *Journal of Contemporary Criminal Justice*, *21*(3), 201–223. https://doi.org/10.1177/1043986205277477

Leo, R. A. (2008). *Police interrogation and American justice*. Harvard University Press. https://doi.org/10.4159/9780674033702

Leo, R. A., & Drizin, S. A. (2010). The three errors: Pathways to false confession and wrongful conviction. In G. D. Lassiter & C. A. Meissner (Eds.), *Police interrogations and false confessions: Current research, practice, and policy recommendations* (pp. 9–30). American Psychological Association. https://doi.org/10.1037/12085-001

Lerner, M. J. (1980). *The belief in a just world*. Plenum. https://doi.org/10.1007/978-1-4899-0448-5

Levine, T. R., Kim, R. K., & Blair, J. P. (2010). (In)accuracy at detecting true and false confessions and denials: An initial test of a projected motive model of veracity judgments. *Human Communication Research*, *36*(1), 82–102. https://doi.org/10.1111/j.1468-2958.2009.01369.x

Levy, A. (2015, April 6). The price of a life: What's the right way to compensate someone for decades of lost freedom? *The New Yorker*. https://www.newyorker.com/magazine/2015/04/13/the-price-of-a-life

Lidén, M., Gräns, M., & Juslin, P. (2018). The presumption of guilt in suspect interrogations: Apprehension as a trigger of confirmation bias and debiasing techniques. *Law and Human Behavior*, *42*(4), 336–354. https://doi.org/10.1037/lhb0000287

Lieser, A. M., Van der Voort, D., & Spaulding, T. J. (2019). You have the right to remain silent: The ability of adolescents with developmental language disorder to understand their legal rights. *Journal of Communication Disorders*, *82*, Article 105920. https://doi.org/10.1016/j.jcomdis.2019.105920

Lin, T.-W. (2021). A review of Hsieh Chih-Hung's verdict of innocence from the perspective of a campaigner for his exoneration. *Criminal Policies and Crime Prevention*, *27*, 179–221.

Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27*(1), 363–385. https://doi.org/10.1146/annurev.soc.27.1.363

Loftus, E. F. (2005). Planting misinformation in the human mind: A 30-year investigation of the malleability of memory. *Learning & Memory*, *12*(4), 361–366. https://doi.org/10.1101/lm.94705

Loftus, E. F. (2017). Eavesdropping on memory. *Annual Review of Psychology*, *68*(1), 1–18. https://doi.org/10.1146/annurev-psych-010416-044138

Loftus, E. F., & Klemfuss, J. Z. (2024). Misinformation—Past, present, and future. *Psychology, Crime & Law*, *30*(4), 312–318. https://doi.org/10.1080/1068316X.2023.2219813

Loftus, E. F., Miller, D. G., & Burns, H. J. (1978). Semantic integration of verbal information into a visual memory. *Journal of Experimental Psychology: Human Learning and Memory*, *4*(1), 19–31. https://doi.org/10.1037/0278-7393.4.1.19

Logue, M., Book, A. S., Frosina, P., Huizinga, T., & Amos, S. (2015). Using reality monitoring to improve deception detection in the context of the cognitive interview for suspects. *Law and Human Behavior*, *39*(4), 360–367. https://doi.org/10.1037/lhb0000127

Luke, T. J. (2019). Lessons from Pinocchio: Cues to deception may be highly exaggerated. *Perspectives on Psychological Science*, *14*(4), 646–671. https://doi.org/10.1177/1745691619838258

Luke, T. J., & Alceste, F. (2020). The mechanisms of minimization: How interrogation tactics suggest lenient sentencing through pragmatic implication. *Law and Human Behavior*, *44*(4), 266–285. https://doi.org/10.1037/lhb0000410

Luke, T. J., Dawson, E., Hartwig, M., & Granhag, P. A. (2014). How awareness of possible evidence induces forthcoming counter-interrogation strategies. *Applied Cognitive Psychology*, *28*(6), 876–882. https://doi.org/10.1002/acp.3019

Luke, T. J., & Granhag, P. A. (2023). The shift-of-strategy (SoS) approach: Using evidence strategically to influence suspects' counter-interrogation strategies. *Psychology, Crime & Law*, *29*(7), 696–721. https://doi.org/10.1080/1068316X.2022.2030738

Lupária, L. (Ed.). (2015). *Understanding wrongful conviction. The protection of the innocent across Europe and America*. Kluwer.

Lupária, L., & Greco, C. (2020). Unveiling wrongful convictions between the U.S. and Italy: Cross-learning from each other's mistakes. *Wrongful Conviction Law Review*, *1*(1), 101–123. https://doi.org/10.29173/wclawr12

Lykken, D. T. (1998). *A tremor in the blood: Uses and abuses of the lie detector*. Perseus Books.

Mac Giolla, E., & Luke, T. J. (2021). Does the cognitive approach to lie detection improve the accuracy of human observers? *Applied Cognitive Psychology*, *35*(2), 385–392. https://doi.org/10.1002/acp.3777

Madon, S., Yang, Y., Smalarz, L., Guyll, M., & Scherr, K. C. (2013). How factors present during the immediate interrogation situation produce short-sighted confession decisions. *Law and Human Behavior*, *37*(1), 60–74. https://doi.org/10.1037/lhb0000011

Madrigal, A. J., & Norris, R. J. (2022). The good, the bad, and the uncertain: State harm, the aftermath of exoneration, and compensation for the wrongly convicted. *Critical Criminology*, *30*(4), 895–913. https://doi.org/10.1007/s10612-022-09656-7

Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Review of Psychology*, *56*(1), 393–421. https://doi.org/10.1146/annurev.psych.56.091103.070137

Malloy, L. C., Shulman, E. P., & Cauffman, E. (2014). Interrogations, confessions, and guilty pleas among serious adolescent offenders. *Law and Human Behavior*, *38*(2), 181–193. https://doi.org/10.1037/lhb0000065

Mann, S., Vrij, A., & Bull, R. (2004). Detecting true lies: Police officers' ability to detect suspects' lies. *Journal of Applied Psychology*, *89*(1), 137–149. https://doi.org/10.1037/0021-9010.89.1.137

Marion, S. B., Kukucka, J., Collins, C., Kassin, S. M., & Burke, T. M. (2016). Lost proof of innocence: The impact of confessions on alibi witnesses. *Law and Human Behavior*, *40*(1), 65–71. https://doi.org/10.1037/lhb0000156

Martin, A. (2011, November 27). The prosecution's case against DNA. *The New York Times Magazine*. https://www.nytimes.com/2011/11/27/magazine/dna-evidence-lake-county.html

Masip, J., Alonso, H., Garrido, E., & Antón, C. (2005). Generalized communicative suspicion (GCS) among police officers: Accounting for the investigator bias effect. *Journal of Applied Social Psychology*, *35*(5), 1046–1066. https://doi.org/10.1111/j.1559-1816.2005.tb02159.x

Masip, J., Barba, A., & Herrero, C. (2012). Behaviour analysis interview and common sense: A study with novice and experienced officers. *Psychiatry, Psychology, and Law*, *19*(1), 21–34. https://doi.org/10.1080/13218719.2010.543402

Masip, J., & Herrero, C. (2013). "What would you say if you were guilty?" Suspects' strategies during a hypothetical behavior analysis interview concerning a serious crime. *Applied Cognitive Psychology*, *27*(1), 60–70. https://doi.org/10.1002/acp.2872

Masip, J., Herrero, C., Garrido, E., & Barba, A. (2011). Is the behaviour analysis interview just common sense? *Applied Cognitive Psychology*, *25*(4), 593–604. https://doi.org/10.1002/acp.1728

Mastroberardino, S., & Marucci, F. S. (2013). Interrogative suggestibility: Was it just compliance or a genuinely false memory? *Legal and Criminological Psychology*, *18*(2), 274–286. https://doi.org/10.1111/j.2044-8333.2012.02048.x

May, L., Granhag, P. A., & Tekin, S. (2017). Interviewing suspects in denial: On how different evidence disclosure modes affect the elicitation of new critical information. *Frontiers in Psychology*, *8*, Article 1154. https://doi.org/10.3389/fpsyg.2017.01154

McCann, J. T. (1998). Broadening the typology of false confessions. *American Psychologist*, *53*(3), 319–320. https://doi.org/10.1037/h0092165

McCormick, C. T. (1972). *Handbook of the law of evidence* (2nd ed.). West.

McLachlan, K., Roesch, R., & Douglas, K. S. (2011). Examining the role of interrogative suggestibility in Miranda rights comprehension in adolescents. *Law and Human Behavior*, *35*(3), 165–177. https://doi.org/10.1007/s10979-009-9198-4

Medford, S., Gudjonsson, G. H., & Pearse, J. (2003). The efficacy of the appropriate adult safeguard during police interviewing. *Legal and Criminological Psychology*, *8*(2), 253–266. https://doi.org/10.1348/135532503322363022

Meissner, C. A. (2021). "What works?" Systematic reviews and meta-analyses of the investigative interviewing research literature. *Applied Cognitive Psychology*, *35*(2), 322–328. https://doi.org/10.1002/acp.3808

Meissner, C. A., & Kassin, S. M. (2002). "He's guilty!": Investigator bias in judgments of truth and deception. *Law and Human Behavior*, *26*(5), 469–480. https://doi.org/10.1023/A:1020278620751

Meissner, C. A., Kelly, C. E., & Woestehoff, S. A. (2015). Improving the effectiveness of suspect interrogations. *Annual Review of Law and Social Science*, *11*(1), 211–233. https://doi.org/10.1146/annurev-lawsocsci-120814-121657

Meissner, C. A., Kleinman, S. M., Mindthoff, A., Phillips, E. P., & Rothweiler, J. (2023). Investigative interviewing: A review of the literature and a model of science-based practice. In D. DeMatteo & K. C. Scherr (Eds.), *The Oxford handbook of psychology and law* (pp. 582–603). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780197649138.013.34

Meissner, C. A., Redlich, A. D., Michael, S. W., Evans, J. R., Camilletti, C. R., Bhatt, S., & Brandon, S. (2014). Accusatorial and information-gathering interrogation methods and their effects on true and false confessions: A meta-analytic review. *Journal of Experimental Criminology*, *10*(4), 459–486. https://doi.org/10.1007/s11292-014-9207-6

Meissner, C. A., Surmon-Böhr, F., Oleszkiewicz, S., & Alison, L. J. (2017). Developing an evidence-based perspective on interrogation: A review of the U.S. government's High-Value Detainee Interrogation Group research program. *Psychology, Public Policy, and Law*, *23*(4), 438–457. https://doi.org/10.1037/law0000136

Memon, A., Meissner, C. A., & Fraser, J. (2010). The cognitive interview: A meta-analytic review and study space analysis of the past 25 years. *Psychology, Public Policy, and Law*, *16*(4), 340–372. https://doi.org/10.1037/a0020518

Méndez, J. E. (2021). *Principles on effective interviewing for investigations and information gathering*. Anti-Torture Initiative, Association for the Prevention of Torture, and Norwegian Centre for Human Rights. https://doi.org/10.7146/torture.v32i3.128719

Méndez, J. E., & Drummond, V. (2021). *The Méndez principles: A new standard for effective interviewing by police and others, while respecting human rights*. Just Security.

Meyer, J. R., & Reppucci, N. D. (2007). Police practices and perceptions regarding juvenile interrogation and interrogative suggestibility. *Behavioral Sciences & the Law*, *25*(6), 757–780. https://doi.org/10.1002/bsl.774

Milgram, S. (1963). Behavioral study of obedience. *The Journal of Abnormal Psychology*, *67*(4), 371–378. https://doi.org/10.1037/h0040525

Milgram, S. (1974). *Obedience to authority: An experimental view*. Harper & Row.

Miller, A. G. (1986). *The obedience experiments: A case study of controversy in social science*. Praeger.

Miller, J. C., Redlich, A. D., & Kelly, C. E. (2018). Accusatorial and information-gathering interview and interrogation methods: A multi-country comparison. *Psychology, Crime & Law*, *24*(9), 935–956. https://doi.org/10.1080/1068316X.2018.1467909

Milne, R., & Bull, R. (1999). *Investigative interviewing: Psychology and practice*. Wiley.

Mindthoff, A., Evans, J. R., Perez, G., Woestehoff, S. A., Olaguez, A. P., Klemfuss, J. Z., Normile, C. J., Scherr, K. C., Carlucci, M. E., Carol, R. N., Meissner, C. A., Michael, S. W., Russano, M. B., Stocks, E. L., Vallano, J. P., & Woody, W. D. (2018). A survey of potential jurors' perceptions of interrogations and confessions. *Psychology, Public Policy, and Law*, *24*(4), 430–448. https://doi.org/10.1037/law0000182

Mindthoff, A., Evans, J. R., Wolfs, A. C. F., Polanco, K., Goldstein, N. E. S., & Schreiber Compo, N. (2022). The detrimental impact of alcohol intoxication on facets of Miranda comprehension. *Law and Human Behavior*, *46*(4), 264–276. https://doi.org/10.1037/lhb0000490

Mindthoff, A., Ferreira, P. A., & Meissner, C. A. (2024). The effect of confession evidence on jurors' verdict decisions: A systematic review and meta-analysis. *Law and Human Behavior*, *48*(3), 163–181. https://doi.org/10.1037/lhb0000563

*Miranda v. Arizona*, 384 U.S. 436 (1966).

Mogavero, M. C. (2020). An exploratory examination of intellectual disability and mental illness associated with alleged false confessions. *Behavioral Sciences & the Law*, *38*(4), 299–316. https://doi.org/10.1002/bsl.2463

Moody, S. A., Cabell, J. J., Livingston, T. N., & Yang, Y. (2023). Evidence-based suspicion and the prior probability of guilt in police interrogations. *Law and Human Behavior*, *47*(2), 307–319. https://doi.org/10.1037/lhb0000513

Moore, T. E., & Gagnier, K. (2008). "You can talk if you want to": Is the police caution on the "right to silence" understandable? *Criminal Reports*, *51*, 233–249.

Munsterberg, H. (1908). *On the witness stand*. Doubleday.

Nahari, G., Vrij, A., & Fisher, R. P. (2014a). Exploiting liars' verbal strategies by examining the verifiability of details. *Legal and Criminological Psychology*, *19*(2), 227–239. https://doi.org/10.1111/j.2044-8333.2012.02069.x

Nahari, G., Vrij, A., & Fisher, R. P. (2014b). The verifiability approach: Countermeasures facilitate its ability to discriminate between truths and lies. *Applied Cognitive Psychology*, *28*(1), 122–128. https://doi.org/10.1002/acp.2974

Najdowski, C. J. (2011). Stereotype threat in criminal interrogations: Why innocent Black suspects are at risk for confessing falsely. *Psychology, Public Policy, and Law*, *17*(4), 562–591. https://doi.org/10.1037/a0023741

Najdowski, C. J. (2023). How the "Black criminal" stereotype shapes Black people's psychological experience of policing: Evidence of stereotype threat and remaining questions. *American Psychologist*, *78*(5), 695–713. https://doi.org/10.1037/amp0001159

Najdowski, C. J., Bottoms, B. L., & Goff, P. A. (2015). Stereotype threat and racial differences in citizens' experiences of police encounters. *Law and Human Behavior*, *39*(5), 463–477. https://doi.org/10.1037/lhb0000140

Najdowski, C. J., & Stevenson, M. C. (2022). A call to dismantle systemic racism in criminal legal systems. *Law and Human Behavior*, *46*(6), 398–414. https://doi.org/10.1037/lhb0000510

Nakhaeizadeh, S., Dror, I. E., & Morgan, R. M. (2014). Cognitive bias in forensic anthropology: Visual assessment of skeletal remains is susceptible to confirmation bias. *Science & Justice*, *54*(3), 208–214. https://doi.org/10.1016/j.scijus.2013.11.003

Narchet, F. M., Meissner, C. A., & Russano, M. B. (2011). Modeling the influence of investigator bias on the elicitation of true and false confessions. *Law and Human Behavior*, *35*(6), 452–465. https://doi.org/10.1007/s10979-010-9257-x

Nash, R. A., & Wade, K. A. (2009). Innocent but proven guilty: Using false video evidence to elicit false confessions and create false beliefs. *Applied Cognitive Psychology*, *23*(5), 624–637. https://doi.org/10.1002/acp.1500

National Academies of Sciences, Engineering, and Medicine. (2019). *The promise of adolescence: Realizing opportunity for all youth* (R. J. Bonnie & E. P. Backes, Eds.). National Academies Press. https://doi.org/10.17226/25388

National Academies of Sciences, Engineering, and Medicine. (2024). *Advancing the field of forensic pathology: Lessons learned from death in custody investigations*. https://www.nationalacademies.org/our-work/advancing-the-field-of-forensic-pathology-lesson-learned-from-death-in-custody-investigations

National Academy of Sciences. (2009). *Strengthening forensic science in the United States: A path forward*. National Academies Press. https://doi.org/10.17226/12589

National Appropriate Adult Network. (2018). *National standards for the development and provision of appropriate adult schemes in England and Wales*. https://www.appropriateadult.org.uk/downloads/national-standards

National Registry of Exonerations. (2015). *Guilty pleas and false confessions*. https://www.law.umich.edu/special/exoneration/Documents/NRE.Guilty.Plea.Article4.pdf

National Registry of Exonerations. (2020). *Government misconduct and convicting the innocent: The role of prosecutors, police and other law enforcement*. https://www.law.umich.edu/special/exoneration/Documents/Government_Misconduct_and_Convicting_the_Innocent.pdf

National Research Council. (2003). *The polygraph and lie detection*. National Academies Press.

Neequaye, D. A., & Mac Giolla, E. (2022). The use of the term rapport in the investigative interviewing literature: A critical examination of definitions. *Meta-Psychology*, *6*, Article 2808. https://doi.org/10.15626/MP.2021.2808

Neuschatz, J. S., & Golding, J. M. (2022). *Jailhouse informants: Psychological and legal perspectives*. New York University Press.

Neuschatz, J. S., Lawson, D. S., Swanner, J. K., Meissner, C. A., & Neuschatz, J. S. (2008). The effects of accomplice witnesses and jailhouse informants on jury decision making. *Law and Human Behavior*, *32*(2), 137–149. https://doi.org/10.1007/s10979-007-9100-1

Newbury, C. R., Crowley, R., Rastle, K., & Tamminen, J. (2021). Sleep deprivation and memory: Meta-analytic reviews of studies on sleep deprivation before and after learning. *Psychological Bulletin*, *147*(11), 1215–1240. https://doi.org/10.1037/bul0000348

*New York v. Quarles*, 467 U.S. 649 (1984).

Nickerson, R. S. (1998). Confirmation bias: A ubiquitous phenomenon in many guises. *Review of General Psychology*, *2*(2), 175–220. https://doi.org/10.1037/1089-2680.2.2.175

Noc, M., Ginet, M., & Deslauriers-Varin, N. (2023). False confession in innocent suspects: A look at the cognitive interview for suspects. *Journal of Police and Criminal Psychology*, *38*(1), 186–198. https://doi.org/10.1007/s11896-022-09543-5

Normile, C. J., & Scherr, K. C. (2018). Police tactics and guilt status uniquely influence suspects' physiologic reactivity and resistance to confess. *Law and Human Behavior*, *42*(6), 497–506. https://doi.org/10.1037/lhb0000306

Norris, R. J., Weintraub, J. N., Acker, J. R., Redlich, A. D., & Bonventre, C. L. (2020). The criminal costs of wrongful convictions: Can we reduce crime by protecting the innocent? *Criminology & Public Policy*, *19*(2), 367–388. https://doi.org/10.1111/1745-9133.12463

*North Carolina v. Butler*, 441 U.S. 369 (1979).

Nunan, J., Stanier, I., Milne, R., Shawyer, A., & Walsh, D. (2020). Source handler telephone interactions with covert human intelligence sources: An exploration of question types and intelligence yield. *Applied Cognitive Psychology*, *34*(6), 1473–1484. https://doi.org/10.1002/acp.3726

Oberlader, V. A., Quinten, L., Banse, R., Volbert, R., Schmidt, A. F., & Schönbrodt, F. D. (2021). Validity of content-based techniques for credibility assessment—How telling is an extended meta-analysis taking research bias into account? *Applied Cognitive Psychology*, *35*(2), 393–410. https://doi.org/10.1002/acp.3776

O'Connell, M. J., Garmoe, W., & Goldstein, N. E. S. (2005). Miranda comprehension in adults with mental retardation and the effects of feedback style on suggestibility. *Law and Human Behavior*, *29*(3), 359–369. https://doi.org/10.1007/s10979-005-2965-y

Ofshe, R. J., & Leo, R. A. (1997). The decision to confess falsely: Rational choice and irrational action. *Denver University Law Review*, *74*(4), 979–1122.

Oleszkiewicz, S., Atkinson, D. J., Kleinman, S. M., & Meissner, C. A. (2024). Building trust to enhance elicitation. *International Journal of Intelligence and Counter Intelligence*, *37*(2), 666–687. https://doi.org/10.1080/08850607.2023.2255507

Oleszkiewicz, S., & Watson, S. J. (2021). A meta-analytic review of the timing for disclosing evidence when interviewing suspects. *Applied Cognitive Psychology*, *35*(2), 342–359. https://doi.org/10.1002/acp.3767

Olson, E. A., & Charman, S. D. (2012). "But can you prove it?" Examining the quality of innocent suspects' alibis. *Psychology, Crime & Law*, *18*(5), 453–471. https://doi.org/10.1080/1068316X.2010.505567

Onishi, N. (2007, May 11). Pressed by police, even innocent confess in Japan. *The New York Times*. https://www.nytimes.com/2007/05/11/world/asia/11japan.html

*Oregon v. Elstad*, 470 U.S. 298 (1985).

Ormerod, T. C., & Dando, C. J. (2015). Finding a needle in a haystack: Toward a psychologically informed method for aviation security screening. *Journal of Experimental Psychology: General*, *144*(1), 76–84. https://doi.org/10.1037/xge0000030

Otgaar, H., Schell-Leugers, J. M., Howe, M. L., Vilar, A. D. L. F., Houben, S. T. L., & Merckelbach, H. (2021). The link between suggestibility, compliance, and false confessions: A review using experimental and field studies. *Applied Cognitive Psychology*, *35*(2), 445–455. https://doi.org/10.1002/acp.3788

Owen-Kostelnik, J., Reppucci, N. D., & Meyer, J. R. (2006). Testimony and interrogation of minors: Assumptions about maturity and morality. *American Psychologist*, *61*(4), 286–304. https://doi.org/10.1037/0003-066X.61.4.286

Oxburgh, G., Myklebust, T., Fallon, M., & Hartwig, M. (Eds.). (2022). *Interviewing and interrogation: A review of research and practice since World War II*. Torkel Opsahl Academic EPublisher.

Oxburgh, G., Ost, J., Morris, P., & Cherryman, J. (2014). The impact of question type and empathy on police interviews with suspects of homicide, filicide and child sexual abuse. *Psychiatry, Psychology, and Law*, *21*(6), 903–917. https://doi.org/10.1080/13218719.2014.918078

Palena, N., Caso, L., Vrij, A., & Nahari, G. (2021). The verifiability approach: A meta-analysis. *Journal of Applied Research in Memory and Cognition*, *10*(1), 155–166. https://doi.org/10.1037/h0101785

Panzavolta, M., de Vocht, D., van Oosterhout, M., & Vanderhallen, M. (Eds.). (2015). *Interrogating young suspects: Procedural safeguards from a legal perspective*. Intersentia.

Pearse, J., & Gudjonsson, G. H. (1999). Measuring influential police interviewing tactics: A factor analytic approach. *Legal and Criminological Psychology*, *4*(2), 221–238. https://doi.org/10.1348/135532599167860

Penney, S. (1998). Theories of confession admissibility: A historical view. *American Journal of Criminal Law*, *25*, 309–383.

*Pennsylvania v. Muniz*, 496 U.S. 582 (1990).

Perfect, T. J., Wagstaff, G. F., Moore, D., Andrews, B., Cleveland, V., Newcombe, S., Brisbane, K.-A., & Brown, L. (2008). How can we help witnesses to remember more? It's an (eyes) open and shut case. *Law and Human Behavior*, *32*(4), 314–324. https://doi.org/10.1007/s10979-007-9109-5

Perillo, J. T., & Kassin, S. M. (2011). Inside interrogation: The lie, the bluff, and false confessions. *Law and Human Behavior*, *35*(4), 327–337. https://doi.org/10.1007/s10979-010-9244-2

Perillo, J. T., Sykes, R. B., Bennett, S. A., & Reardon, M. C. (2023). Examining the consequences of dehumanization and adultification in justification of police use of force against Black girls and boys. *Law and Human Behavior*, *47*(1), 36–52. https://doi.org/10.1037/lhb0000521

Perske, R. (2008). False confessions from 53 persons with intellectual disabilities: The list keeps growing. *Intellectual and Developmental Disabilities*, *46*(6), 468–479. https://doi.org/10.1352/2008.46:468-479

Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. Springer-Verlag. https://doi.org/10.1007/978-1-4612-4964-1

Pezdek, K., & O'Brien, M. (2014). Plea bargaining and appraisals of eyewitness evidence by prosecutors and defense attorneys. *Psychology, Crime & Law*, *20*(3), 222–241. https://doi.org/10.1080/1068316X.2013.770855

Pilcher, J. J., & Huffcutt, A. I. (1996). Effects of sleep deprivation on performance: A meta-analysis. *Sleep*, *19*(4), 318–326. https://doi.org/10.1093/sleep/19.4.318

Pimentel, P. S., Arndorfer, A., & Malloy, L. C. (2015). Taking the blame for someone else's wrongdoing: The effects of age and reciprocity. *Law and Human Behavior*, *39*(3), 219–231. https://doi.org/10.1037/lhb0000132

Poirier, B., Collin-Santerre, J., & Boivin, R. (2022). Body-worn camera footage in the news: An experimental study of the impact of perspective and framing on viewer perception. *Canadian Journal of Criminology and Criminal Justice*, *64*(1), 82–98. https://doi.org/10.3138/cjccj.2021-0023

Quigley-McBride, A., Dror, I. E., Roy, T., Garrett, B. L., & Kukucka, J. (2022). A practical tool for information management in forensic decisions: Using Linear Sequential Unmasking-Expanded (LSU-E) in casework. *Forensic Science International: Synergy*, *4*, Article 100216. https://doi.org/10.1016/j.fsisyn.2022.100216

Quigley-McBride, A., & Wells, G. L. (2018). Fillers can help control for contextual bias in forensic comparison tasks. *Law and Human Behavior*, *42*(4), 295–305. https://doi.org/10.1037/lhb0000295

Rachlin, H. (2000). *The science of self-control*. Harvard University Press.

Radelet, M., Bedau, H., & Putnam, C. (1992). *In spite of innocence*. Northeastern University Press.

Råstam, H. (2013). *Thomas quick: The making of a serial killer*. W. F. Howes.

Redlich, A. D., Bibas, S., Edkins, V. A., & Madon, S. (2017). The psychology of defendant plea decision making. *American Psychologist*, *72*(4), 339–352. https://doi.org/10.1037/a0040436

Redlich, A. D., & Bonventre, C. L. (2015). Content and comprehensibility of juvenile and adult tender-of-plea forms: Implications for knowing, intelligent, and voluntary guilty pleas. *Law and Human Behavior*, *39*(2), 162–176. https://doi.org/10.1037/lhb0000118

Redlich, A. D., Bushway, S. D., & Norris, R. J. (2016). Plea decision-making by attorneys and judges. *Journal of Experimental Criminology*, *12*(4), 537–561. https://doi.org/10.1007/s11292-016-9264-0

Redlich, A. D., Ghetti, S., & Quas, J. A. (2008). Perceptions of children during a police interview: A comparison of alleged victims and suspects. *Journal of Applied Social Psychology*, *38*(3), 705–735. https://doi.org/10.1111/j.1559-1816.2007.00323.x

Redlich, A. D., & Goodman, G. S. (2003). Taking responsibility for an act not committed: The influence of age and suggestibility. *Law and Human Behavior*, *27*(2), 141–156. https://doi.org/10.1023/A:1022543012851

Redlich, A. D., Shteynberg, R. V., & Nirider, L. H. (2020). Pragmatic implication in the interrogation room: Comparison of juveniles and adults. *Journal of Experimental Criminology*, *16*(4), 555–564. https://doi.org/10.1007/s11292-019-09377-y

Redlich, A. D., Silverman, M., & Steiner, H. (2003). Pre-adjudicative and adjudicative competence in juveniles and young adults. *Behavioral Sciences & the Law*, *21*(3), 393–410. https://doi.org/10.1002/bsl.543

Redlich, A. D., Summers, A., & Hoover, S. (2010). Self-reported false confessions and false guilty pleas among offenders with mental illness. *Law and Human Behavior*, *34*(1), 79–90. https://doi.org/10.1007/s10979-009-9194-8

Redlich, A. D., Wilford, M. M., DiPano, M., & Berger, N. (2025). Commonalities in false guilty plea cases. *Psychology, Crime & Law*, *31*(1), 64–82. https://doi.org/10.1080/1068316X.2023.2213381

Redlich, A. D., Yan, S., Norris, R. J., & Bushway, S. D. (2018). The influence of false confessions on guilty pleas and plea discounts. *Psychology, Public Policy, and Law*, *24*(2), 147–157. https://doi.org/10.1037/law0000144

Redlich, A. D., Zottoli, T., Dezember, A., Schneider, R., Catlin, M., & Shammi, S. (2022). Emerging issues in the psycho-legal study of guilty pleas. In D. DeMatteo & K. Scherr (Eds.), *The Oxford handbook of psychology and law* (pp. 677–691). Oxford University Press.

Reid, J. E., & Arther, R. O. (1953). Behavior symptoms of lie-detector subjects. *Journal of Criminal Law & Criminology*, *44*, 104–108.

Rejali, D. (2009). *Torture and democracy*. Princeton University Press.

Rho, E. H., Harrington, M., Zhong, Y., Pryzant, R., Camp, N. P., Jurafsky, D., & Eberhardt, J. L. (2023). Escalated police stops of Black men are linguistically and psychologically distinct in their earliest moments. *Proceedings of the National Academy of Sciences of the United States of America*, *120*(23), Article e2216162120. https://doi.org/10.1073/pnas.2216162120

Ridley, A. M., & Gudjonsson, G. H. (2013). Suggestibility and individual differences: Psychosocial and memory measures. In A. M. Ridley, F. Gabbert, & D. J. La Rooy (Eds.), *Suggestibility in legal contexts* (pp. 85–106). Wiley-Blackwell. https://doi.org/10.1002/9781118432907.ch5

Rimer, S. (2002, February 26). Convict's DNA sways labs, not a determined prosecutor. *The New York Times*. https://www.nytimes.com/2002/02/06/us/convict-s-dna-sways-labs-not-a-determined-prosecutor.html

Rivard, J. R., Fisher, R. P., Robertson, B., & Hirn Mueller, D. (2014). Testing the cognitive interview with professional interviewers: Enhancing recall of specific details of recurring events. *Applied Cognitive Psychology*, *28*(6), 917–925. https://doi.org/10.1002/acp.3026

Roberts, M. H., Klatzkin, R. R., & Mechlin, B. (2015). Social support attenuates physiological stress responses and experimental pain sensitivity to cold pressor pain. *Annals of Behavioral Medicine*, *49*(4), 557–569. https://doi.org/10.1007/s12160-015-9686-3

Rofé, Y. (1984). Stress and affiliation: A utility theory. *Psychological Review*, *91*(2), 235–250. https://doi.org/10.1037/0033-295X.91.2.235

Rogers, R., Blackwood, H. L., Fiduccia, C. E., Steadham, J. A., Drogin, E. Y., & Rogstad, J. E. (2012). Juvenile Miranda warnings: Perfunctory rituals or procedural safeguards? *Criminal Justice and Behavior*, *39*(3), 229–249. https://doi.org/10.1177/0093854811431934

Rogers, R., Correa, A. A., Donnelly, J. W., II, & Drogin, E. Y. (2021). Protecting the rights of the accused: Use of Spanish-language Miranda warnings in central Florida. *Journal of Forensic Psychiatry & Psychology*, *32*(1), 119–130. https://doi.org/10.1080/14789949.2020.1833072

Rogers, R., Fiduccia, C. E., Drogin, E. Y., Steadham, J. A., Clark, J. W., III, & Cramer, R. J. (2013). General knowledge and mis-knowledge of Miranda rights: Are effective Miranda advisements still necessary? *Psychology, Public Policy, and Law*, *19*(4), 432–442. https://doi.org/10.1037/a0033964

Rogers, R., Gillard, N. D., Wooley, C. N., & Fiduccia, C. E. (2011). Decrements in Miranda abilities: An investigation of situational effects via a mock-crime paradigm. *Law and Human Behavior*, *35*(5), 392–401. https://doi.org/10.1007/s10979-010-9248-y

Rogers, R., Harrison, K. S., Shuman, D. W., Sewell, K. W., & Hazelwood, L. L. (2007). An analysis of Miranda warnings and waivers: Comprehension and coverage. *Law and Human Behavior*, *31*(2), 177–192. https://doi.org/10.1007/s10979-006-9054-8

Rogers, R., Hazelwood, L. L., Sewell, K. W., Harrison, K. S., & Shuman, D. W. (2008). The language of Miranda warnings in American jurisdictions: A replication and vocabulary analysis. *Law and Human Behavior*, *32*(2), 124–136. https://doi.org/10.1007/s10979-007-9091-y

Rogers, R., Hazelwood, L. L., Sewell, K. W., Shuman, D. W., & Blackwood, H. L. (2008). The comprehensibility and content of juvenile Miranda warnings. *Psychology, Public Policy, and Law*, *14*(1), 63–87. https://doi.org/10.1037/a0013102

Rogers, R., Rogstad, J. E., Gillard, N. D., Drogin, E. Y., Blackwood, H. L., & Shuman, D. W. (2010). "Everyone knows their Miranda rights": Implicit assumptions and countervailing evidence. *Psychology, Public Policy, and Law*, *16*(3), 300–318. https://doi.org/10.1037/a0019316

Rogers, R., Steadham, J. A., Carter, R. M., Henry, S. A., Drogin, E. Y., & Robinson, E. V. (2016). An examination of juveniles' Miranda abilities: Investigating differences in Miranda recall and reasoning. *Behavioral Sciences & the Law*, *34*(4), 515–538. https://doi.org/10.1002/bsl.2243

Rogers, R., Steadham, J. A., Fiduccia, C. E., Drogin, E. Y., & Robinson, E. V. (2014). Mired in Miranda misconceptions: A study of legally involved juveniles at different levels of psychosocial maturity. *Behavioral Sciences & the Law*, *32*(1), 104–120. https://doi.org/10.1002/bsl.2099

*Roper v. Simmons*, 543 U.S. 551 (2005).

Rosenthal, B. (2009). *Records of the Salem Witch Hunt*. Cambridge University Press. https://doi.org/10.1017/9781107589766

Rosenthal, R. (2003). Covert communication in laboratories, classrooms, and the truly real world. *Current Directions in Psychological Science*, *12*(5), 151–154. https://doi.org/10.1111/1467-8721.t01-1-01250

Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process. *Advances in Experimental Social Psychology*, *10*, 173–220. https://doi.org/10.1016/S0065-2601(08)60357-3

*Royal Commission on Criminal Justice*. (1993). HMSO. https://www.gov.uk/government/publications/report-of-the-royal-commission-on-criminal-justice

Russano, M. B., Meissner, C. A., Atkinson, D. J., Brandon, S. E., Wells, S., Kleinman, S. M., Ray, D. G., & Jones, M. S. (2024). Evaluating the effectiveness of a 5-day training on science-based methods of interrogation with U.S. federal, state, and local law enforcement investigators. *Psychology, Public Policy, and Law*, *30*(2), 105–120. https://doi.org/10.1037/law0000422

Russano, M. B., Meissner, C. A., Narchet, F. M., & Kassin, S. M. (2005). Investigating true and false confessions within a novel experimental

paradigm. *Psychological Science*, *16*(6), 481–486. https://doi.org/10.1111/j.0956-7976.2005.01560.x

Russano, M. B., Narchet, F. M., Kleinman, S. M., & Meissner, C. A. (2014). Structured interviews of experienced HUMINT interrogators. *Applied Cognitive Psychology*, *28*(6), 847–859. https://doi.org/10.1002/acp.3069

Saks, M. J., Risinger, D. M., Rosenthal, R., & Thompson, W. C. (2003). Context effects in forensic science: A review and application of the science of science to crime laboratory practice in the United States. *Science & Justice*, *43*(2), 77–90. https://doi.org/10.1016/S1355-0306(03)71747-X

Salseda, L. M., Dixon, D. R., Fass, T., Miora, D., & Leark, R. A. (2011). An evaluation of Miranda rights and interrogation in autism spectrum disorders. *Research in Autism Spectrum Disorders*, *5*(1), 79–85. https://doi.org/10.1016/j.rasd.2010.06.014

Sandham, A., Dando, C. J., Bull, R., & Ormerod, T. (2022). Improving professional observers' veracity judgements by tactical interviewing. *Journal of Police and Criminal Psychology*, *37*(2), 279–287. https://doi.org/10.1007/s11896-020-09391-1

Sangero, B. (2014). *Convicting the innocents in Israel and around the world—Causes and solutions*. Resling.

Santos, F. (2006, September 21). DNA evidence frees a man imprisoned for half his life. *The New York Times*. https://www.nytimes.com/2006/09/21/nyregion/21dna.html

Santtila, P., Alkiora, P., Ekholm, M., & Niemi, P. (1999). False confessions to robbery: The role of suggestibility, anxiety, memory disturbance and withdrawal symptoms. *Journal of Forensic Psychiatry*, *10*(2), 399–415. https://doi.org/10.1080/09585189908403692

Savage, M. E., Clow, K. A., Schuller, R. A., & Ricciardelli, R. (2018). After exoneration: Attributions of responsibility impact perceptions. *Canadian Journal of Law and Society*, *33*(1), 85–103. https://doi.org/10.1017/cls.2018.6

Schacter, D. L. (2001). *The seven sins of memory: How the mind forgets and remembers*. Houghton Mifflin.

Schacter, D. L. (2022). Memory sins in applied settings: What kind of progress? *Journal of Applied Research in Memory and Cognition*, *11*(4), 445–460. https://doi.org/10.1037/mac0000078

Schaeffer, R., Hinestroza, V., & Tait, S. (2023). The Méndez principles. In G. E. Oxburgh, T. Myklebust, & M. Fallon (Eds.), *Interviewing and interrogation: A review of research and practice since World War II* (pp. 139–152). Torkel Opsahl Academic EPublisher.

Schatz, S. J. (2018). Interrogated with intellectual disabilities: The risks of false confession. *Stanford Law Review*, *70*(2), 643–690.

Scheck, B., Neufeld, P., & Dwyer, J. (2000). *Actual innocence*. Doubleday.

Schell-Leugers, J. M., Schneider, T., Gyenis, R., Leuker, C., & Sauerland, M. (2021). Will you confess to what I did? Close relationships and in-group membership facilitate voluntary blame-taking. *Journal of Applied Social Psychology*, *51*(10), 987–998. https://doi.org/10.1111/jasp.12815

Scherr, K. C., Alberts, K. M., Franks, A. S., & Hawkins, I. (2016). Overcoming innocents' naiveté: Pre-interrogation decision-making among innocent suspects. *Behavioral Sciences & the Law*, *34*(4), 564–579. https://doi.org/10.1002/bsl.2247

Scherr, K. C., & Franks, A. S. (2015). The world is not fair: An examination of innocent and guilty suspects' waiver decisions. *Law and Human Behavior*, *39*(2), 142–151. https://doi.org/10.1037/lhb0000121

Scherr, K. C., & Madon, S. (2012). You have the right to understand: Deleterious effect of stress on Miranda comprehension. *Law and Human Behavior*, *36*(4), 275–282. https://doi.org/10.1037/h0093972

Scherr, K. C., & Madon, S. (2013). "Go ahead and sign": An experimental examination of Miranda waivers and comprehension. *Law and Human Behavior*, *37*(3), 208–218. https://doi.org/10.1037/lhb0000026

Scherr, K. C., & Normile, C. J. (2022). False confessions predict a delay between release from incarceration and official exoneration. *Law and Human Behavior*, *46*(1), 67–80. https://doi.org/10.1037/lhb0000479

Scherr, K. C., Normile, C. J., Luna, S., Redlich, A. D., Lawrence, M., & Catlin, M. (2020). False admissions of guilt associated with wrongful convictions undermine people's perceptions of exonerees. *Psychology, Public Policy, and Law*, *26*(3), 233–244. https://doi.org/10.1037/law0000238

Scherr, K. C., Normile, C. J., & Putney, H. (2018). Perpetually stigmatized: False confessions prompt underlying mechanisms that motivate negative perceptions of exonerees. *Psychology, Public Policy, and Law*, *24*(3), 341–352. https://doi.org/10.1037/law0000163

Scherr, K. C., Redlich, A. D., & Kassin, S. M. (2020). Cumulative disadvantage: A psychological framework for understanding how innocence can lead to confession, wrongful conviction, and beyond. *Perspectives on Psychological Science*, *15*(2), 353–383. https://doi.org/10.1177/1745691619896608

Schiff, S. (2015). *Witches: Suspicion, betrayal, and hysteria in 1692 Salem*. Little, Brown.

Schneider, T., & May, L. (2022). How do false confessions occur during interrogation? A psychological overview of known risk factors using the case of Uliv K. *Marburg Law Review*, *2*(1), 12–22.

Schreiber Compo, N., Hyman Gregory, A., & Fisher, R. (2012). Interviewing behaviors in police investigators: A field study of a current US sample. *Psychology, Crime & Law*, *18*(4), 359–375. https://doi.org/10.1080/1068316X.2010.494604

Schweizer, S., Gotlib, I. H., & Blakemore, S.-J. (2020). The role of affective control in emotion regulation during adolescence. *Emotion*, *20*(1), 80–86. https://doi.org/10.1037/emo0000695

Scoboria, A., Wade, K. A., Lindsay, D. S., Azad, T., Strange, D., Ost, J., & Hyman, I. E. (2017). A mega-analysis of memory reports from eight peer-reviewed false memory implantation studies. *Memory*, *25*(2), 146–163. https://doi.org/10.1080/09658211.2016.1260747

Senate Select Committee on Intelligence. (2015). *The official senate report on CIA torture*. Skyhorse Publishing.

Senese, L. C. (2016). *Anatomy of interrogation themes: The Reid technique of interviewing and interrogation* (2nd ed.). John E. Reid and Associates.

Shapiro, F. C. (1969). *Whitmore*. Bobbs Merrill.

Shaw, J., & Porter, S. (2015). Constructing rich false memories of committing crime. *Psychological Science*, *26*(3), 291–301. https://doi.org/10.1177/0956797614562862

Shepherd, E., & Griffiths, A. (2013). *Investigative interviewing: The conversation management approach* (2nd ed.). Oxford University Press.

Sherif, M. (1936). *The psychology of social norms*. Harper.

Sherrer, H. (2008). Exonerated of two murders, Fritz Moen posthumously awarded $4 million. *Justice Denied*, *40*, 17–20.

Shifton, J. J. (2019). How confession characteristics impact juror perceptions of evidence in criminal trials. *Behavioral Sciences & the Law*, *37*(1), 90–108. https://doi.org/10.1002/bsl.2398

Shlosberg, A., Mandery, E., West, V., & Callaghan, B. (2014). Expungement and post-exoneration offending. *The Journal of Criminal Law & Criminology*, *104*(2), 353–388. https://www.jstor.org/stable/44113392

Sigurdsson, J. F., Gudjonsson, G. H., Einarsson, E., & Gudjonsson, G. (2006). Differences in personality and mental state between suspects and witnesses immediately after being interviewed by the police. *Psychology, Crime & Law*, *12*(6), 619–628. https://doi.org/10.1080/10683160500337808

Sim, M. P. Y., & Lamb, M. E. (2018). An analysis of how the police "caution" is presented to juvenile suspects in England. *Psychology, Crime & Law*, *24*(8), 851–872. https://doi.org/10.1080/1068316X.2018.1442449

Simon, D. (2019). Minimizing error and bias in death investigations. *Seton Hall Law Review*, *49*(2), 255–277.

Sivasubramaniam, D., & Goodman-Delahunty, J. (2021). International consensus on effective and ineffective interviewing strategies: A survey of experienced practitioners. *Police Practice and Research*, *22*(1), 921–937. https://doi.org/10.1080/15614263.2019.1628756

Skinner, B. F. (1938). *The behavior of organisms*. Appleton-Century-Crofts.

Smalarz, L., Scherr, K., & Kassin, S. M. (2016). Miranda at 50: A psychological analysis. *Current Directions in Psychological Science*, *25*(6), 455–460. https://doi.org/10.1177/0963721416665097

Smith, S. M., & Vela, E. (2001). Environmental context-dependent memory: A review and meta-analysis. *Psychonomic Bulletin & Review*, *8*(2), 203–220. https://doi.org/10.3758/BF03196157

Snook, B., Barron, T., Fallon, L., Kassin, S. M., Kleinman, S., Leo, R. A., Meissner, C. A., Morello, L., Nirider, L. H., Redlich, A. D., & Trainum, J. L. (2021). Urgent issues and prospects in reforming interrogation practice in the United States and Canada. *Legal and Criminological Psychology*, *26*(1), 1–24. https://doi.org/10.1111/lcrp.12178

Snow, M. D., Malloy, L. C., & Goldstein, N. E. S. (2021). Information gathering in school contexts: A national survey of school resource officers. *Law and Human Behavior*, *45*(4), 356–369. https://doi.org/10.1037/lhb0000451

Snyder, M., & Swann, W. B., Jr. (1978). Behavioral confirmation in social interaction: From social perception to social reality. *Journal of Experimental Social Psychology*, *14*(2), 148–162. https://doi.org/10.1016/0022-1031(78)90021-5

Soukara, S., Bull, R., Vrij, A., Turner, M., & Cherryman, J. (2009). What really happens in police interviews of suspects? Tactics and confessions. *Psychology, Crime & Law*, *15*(6), 493–506. https://doi.org/10.1080/10683160802201827

Starr, D. (2013, December 9). The interview. *The New Yorker*. https://www.newyorker.com/magazine/2013/12/09/the-interview-7

Starr, M., & Silkoff, S. (2023, March 30). 16 years on: Roman Zadorov acquitted of Tair Rada's murder. *The Jerusalem Post*. https://www.jpost.com/israel-news/article-735889

Steele, C. M. (1997). A threat in the air. How stereotypes shape intellectual identity and performance. *American Psychologist*, *52*(6), 613–629. https://doi.org/10.1037/0003-066X.52.6.613

Steinberg, L. (2014). *Age of opportunity: Lessons from the new science of adolescence*. First Mariner Books.

Steinberg, L. (2017). Adolescent brain science and juvenile justice policymaking. *Psychology, Public Policy, and Law*, *23*(4), 410–420. https://doi.org/10.1037/law0000128

Steinberg, L., Cauffman, E., Woolard, J., Graham, S., & Banich, M. (2009). Are adolescents less mature than adults?: Minors' access to abortion, the juvenile death penalty, and the alleged APA "flip-flop.". *American Psychologist*, *64*(7), 583–594. https://doi.org/10.1037/a0014763

Steinberg, L., & Scott, E. S. (2003). Less guilty by reason of adolescence: Developmental immaturity, diminished responsibility, and the juvenile death penalty. *American Psychologist*, *58*(12), 1009–1018. https://doi.org/10.1037/0003-066X.58.12.1009

Stephens, K. (2019). Misconduct and bad practices in false confessions: Interrogations in the context of exonerations. *Northwestern University Law Review*, *11*(2), 593–623.

Stewart, J. M., Woody, W. D., & Pulos, S. (2018). The prevalence of false confessions in experimental laboratory simulations: A meta-analysis. *Behavioral Sciences & the Law*, *36*(1), 12–31. https://doi.org/10.1002/bsl.2327

Stridbeck, U. (2020). Coerced-reactive confessions: The case of Thomas Quick. *Journal of Forensic Psychology Research and Practice*, *20*(4), 305–322. https://doi.org/10.1080/24732850.2020.1732758

Suchotzki, K., Verschuere, B., Van Bockstaele, B., Ben-Shakhar, G., & Crombez, G. (2017). Lying takes time: A meta-analysis on reaction time measures of deception. *Psychological Bulletin*, *143*(4), 428–453. https://doi.org/10.1037/bul0000087

Suedfeld, P. (Ed.). (1990). *Psychology and torture*. Hemisphere.

Sullivan, T. P. (2019). Current report on recording custodial interrogations in the United States. *The Champion*. https://www.nacdl.org/Article/April2019-CurrentReportRecordingCustodialInterroga

Sullivan, T. P., Vail, A. W., & Anderson, H. W. (2008). The case for recording police interrogation. *Litigation*, *34*(3), 1–8.

Tazi, K. Y., & Rogers, R. (2023). Falling through the cracks: Failing to identify compromised Miranda abilities for defendants with limited cognitive capacities. *Behavioral Sciences & the Law*, *41*(5), 326–342. https://doi.org/10.1002/bsl.2610

Tekin, S., Granhag, P. A., Strömwall, L., Giolla, E. M., Vrij, A., & Hartwig, M. (2015). Interviewing strategically to elicit admissions from guilty suspects. *Law and Human Behavior*, *39*(3), 244–252. https://doi.org/10.1037/lhb0000131

Tekin, S., Granhag, P. A., Strömwall, L. A., & Vrij, A. (2016). How to make perpetrators in denial disclose more information about their crimes. *Psychology, Crime & Law*, *22*(6), 561–580. https://doi.org/10.1080/1068316X.2016.1168425

The Law Library of Congress. (2016). *Miranda warning equivalents abroad*. Global Research Center.

Thielgen, M. M., Schade, S., & Niegisch, P. (2022). Police officers' interrogation expertise and major objectives in police service and training: A comprehensive overview of the literature. *Frontiers in Psychology*, *13*, Article 823179. https://doi.org/10.3389/fpsyg.2022.823179

Thomas, G. C., & Leo, R. A. (2002). The effects of *Miranda v. Arizona*: "Embedded" in our national culture? *Crime and Justice: A Review of Research*, *29*, 203–271.

Thompson, W. C. (2010). An American Psychology-Law Society scientific review paper on police interrogation and confession. *Law and Human Behavior*, *34*(1), 1–2. https://doi.org/10.1007/s10979-009-9213-9

Thorndike, E. L. (1911). *Animal intelligence: Experimental studies*. MacMillan.

Timor, M. (Producer), Giladi, B. (Producer), & Guendelman, Y. (Director). (2017). *Shadow of truth* [Film]. EGG Films.

Trainum, J. L. (2014). "I did it"—Confession contamination and evaluation. *The Police Chief*. https://www.policechiefmagazine.org/i-did-it-confession-contamination-and-evaluation/?ref=b9596112d34f3a0ac10c7ec20a8aa69a

Trainum, J. L. (2016). *How the police generate false confessions: An inside look at the interrogation room*. Rowman Littlefield.

Uchino, B. N., Cacioppo, J. T., & Kiecolt-Glaser, J. K. (1996). The relationship between social support and physiological processes: A review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin*, *119*(3), 488–531. https://doi.org/10.1037/0033-2909.119.3.488

Vagni, M., Maiorano, T., Pajardi, D., & Gudjonsson, G. H. (2015). Immediate and delayed suggestibility among suspected child victims of sexual abuse. *Personality and Individual Differences*, *79*, 129–133. https://doi.org/10.1016/j.paid.2015.02.007

Valente, M. (2016, October 11). Joseph Buffey enters Alford plea, walks free. *WDTV*. https://www.wdtv.com/content/news/Charges-dismissed-against-Joseph-Buffey--396651991.html

Vallano, J. P., & Compo, N. S. (2011). A comfortable witness is a good witness: Rapport-building and susceptibility to misinformation in an investigative mock-crime interview. *Applied Cognitive Psychology*, *25*(6), 960–970. https://doi.org/10.1002/acp.1789

Vallano, J. P., Evans, J. R., Schreiber Compo, N., & Kieckhaefer, J. M. (2015). Rapport-building during witness and suspect interviews: Survey of law enforcement. *Applied Cognitive Psychology*, *29*(3), 369–380. https://doi.org/10.1002/acp.3115

Vallano, J. P., Guyll, M., Ditchfield, R., & Slapinski, K. (2022). An experimental manipulation of rapport and moral minimization within a criminal interview. *Psychology, Public Policy, and Law*, *28*(4), 515–531. https://doi.org/10.1037/law0000370

Vallano, J. P., & Schreiber Compo, N. (2015). Rapport-building with cooperative witnesses and criminal suspects: A theoretical and empirical review. *Psychology, Public Policy, and Law*, *21*(1), 85–99. https://doi.org/10.1037/law0000035

van den Eeden, C. A. J., de Poot, C. J., & van Koppen, P. J. (2016). Forensic expectations: Investigating a crime scene with prior information. *Science & Justice*, *56*(6), 475–481. https://doi.org/10.1016/j.scijus.2016.08.003

Vaughan, M., Milne, R., Dalton, G., & Retford, S. (2022). Managing interviews in high-stake crime cases: Practice guidance for suspect interview strategies using a LOST WEBSITES framework. *Journal of Forensic Practice*, *24*(4), 420–435. https://doi.org/10.1108/JFP-05-2022-0022

Verschuere, B., Bogaard, G., & Meijer, E. (2021). Discriminating deceptive from truthful statements using the verifiability approach: A meta-analysis. *Applied Cognitive Psychology*, *35*(2), 374–384. https://doi.org/10.1002/acp.3775

Viljoen, J. L., Klaver, J., & Roesch, R. (2005). Legal decisions of preadolescent and adolescent defendants: Predictors of confessions, pleas, communication with attorneys, and appeals. *Law and Human Behavior*, *29*(3), 253–277. https://doi.org/10.1007/s10979-005-3613-2

Viljoen, J. L., & Roesch, R. (2005). Competence to waive interrogation rights and adjudicative competence in adolescent defendants: Cognitive development, attorney contact, and psychological symptoms. *Law and Human Behavior*, *29*(6), 723–742. https://doi.org/10.1007/s10979-005-7978-y

Voigt, R., Camp, N. P., Prabhakaran, V., Hamilton, W. L., Hetey, R. C., Griffiths, C. M., Jurgens, D., Jurafsky, D., & Eberhardt, J. L. (2017). Language from police body camera footage shows racial disparities in officer respect. *Proceedings of the National Academy of Sciences of the United States of America*, *114*(25), 6521–6526. https://doi.org/10.1073/pnas.1702413114

Vredeveldt, A., & Penrod, S. D. (2013). Eye-closure improves memory for a witnessed event under naturalistic conditions. *Psychology, Crime & Law*, *19*(10), 893–905. https://doi.org/10.1080/1068316X.2012.700313

Vrij, A., Fisher, R. P., & Blank, H. (2017). A cognitive approach to lie detection: A meta-analysis. *Legal and Criminological Psychology*, *22*(1), 1–21. https://doi.org/10.1111/lcrp.12088

Vrij, A., Hartwig, M., & Granhag, P. A. (2019). Reading lies: Nonverbal communication and deception. *Annual Review of Psychology*, *70*(1), 295–317. https://doi.org/10.1146/annurev-psych-010418-103135

Vrij, A., Leal, S., Granhag, P. A., Mann, S., Fisher, R. P., Hillman, J., & Sperry, K. (2009). Outsmarting the liars: The benefit of asking unanticipated questions. *Law and Human Behavior*, *33*(2), 159–166. https://doi.org/10.1007/s10979-008-9143-y

Vrij, A., Leal, S., Mann, S., Vernham, Z., & Brankaert, F. (2015). Translating theory into practice: Evaluating a cognitive lie detection training workshop. *Journal of Applied Research in Memory and Cognition*, *4*(2), 110–120. https://doi.org/10.1016/j.jarmac.2015.02.002

Vrij, A., Mann, S., & Fisher, R. P. (2006). An empirical test of the behaviour analysis interview. *Law and Human Behavior*, *30*(3), 329–345. https://doi.org/10.1007/s10979-006-9014-3

Vrij, A., Mann, S., Leal, S., Vernham, Z., & Vaughan, M. (2016). Train the trainers: A first step towards a science-based cognitive lie detection training workshop delivered by a practitioner. *Journal of Investigative Psychology and Offender Profiling*, *13*(2), 110–130. https://doi.org/10.1002/jip.1443

Vrij, A., Mann, S. A., Fisher, R. P., Leal, S., Milne, R., & Bull, R. (2008). Increasing cognitive load to facilitate lie detection: The benefit of recalling an event in reverse order. *Law and Human Behavior*, *32*(3), 253–265. https://doi.org/10.1007/s10979-007-9103-y

Vrij, A., Meissner, C. A., Fisher, R. P., Kassin, S. M., Morgan, C. A., III, & Kleinman, S. M. (2017). Psychological perspectives on interrogation. *Perspectives on Psychological Science*, *12*(6), 927–955. https://doi.org/10.1177/1745691617706515

Wachi, T., Kuraishi, H., Watanabe, K., Otsuka, Y., Yokota, K., & Lamb, M. E. (2018). Effects of rapport building on confessions in an experimental paradigm. *Psychology, Public Policy, and Law*, *24*(1), 36–47. https://doi.org/10.1037/law0000152

Wade, K. A., Garry, M., & Pezdek, K. (2018). Deconstructing rich false memories of committing crime: Commentary on Shaw and Porter (2015). *Psychological Science*, *29*(3), 471–476. https://doi.org/10.1177/0956797617703667

Wagenaar, W. A. (2002). False confessions after repeated interrogation: The Putten murder case. *European Review*, *10*(4), 519–537. https://doi.org/10.1017/S106279870200042X

Wald, M., Ayres, R., Hess, D. W., Schantz, M., & Whitebread, C. (1967). Interrogations in New Haven: The impact of Miranda. *The Yale Law Journal*, *76*(8), 1519–1648. https://doi.org/10.2307/795054

Walkley, J. (1987). *Police interrogation. A handbook for investigators*. Police Review Publishing.

Wallace, D. B., & Kassin, S. M. (2012). Harmless error analysis: How do judges respond to confession errors? *Law and Human Behavior*, *36*(2), 151–157. https://doi.org/10.1037/h0093975

Walsh, D., Oxburgh, G., Redlich, A., & Myklebust, T. (Eds.). (2016). *International developments in investigative interviewing and interrogations*. Routledge.

Warden, R. (2005). *Wilkie Collins's the dead alive: The novel, the case, and wrongful convictions*. Northwestern University Press.

Warner, T. C., & Cleary, H. M. D. (2022). Parents' interrogation knowledge and situational decision-making in hypothetical juvenile interrogations. *Psychology, Public Policy, and Law*, *28*(1), 78–91. https://doi.org/10.1037/law0000241

*Warney v. State of New York*, 16 N.Y.3d 428 (N.Y. 2011).

Webster, E. (2020). The prosecutor as a final safeguard against false convictions: How prosecutors assist with exoneration. *Journal of Law & Criminology*, *110*, 245–305. https://scholarlycommons.law.northwestern.edu/jclc

Weisselberg, C. D. (2017). Exporting and importing Miranda. *Boston University Law Review*, *97*(3), 1235–1291. https://ssrn.com/abstract=3048054

Wells, G. L., Kovera, M. B., Douglass, A. B., Brewer, N., Meissner, C. A., & Wixted, J. T. (2020). Policy and procedure recommendations for the collection and preservation of eyewitness identification evidence. *Law and Human Behavior*, *44*(1), 3–36. https://doi.org/10.1037/lhb0000359

Wells, G. L., Small, M., Penrod, S., Malpass, R. S., Fulero, S. M., & Brimacombe, C. A. E. (1998). Eyewitness identification procedures: Recommendations for lineups and photospreads. *Law and Human Behavior*, *22*(6), 603–647. https://doi.org/10.1023/A:1025750605807

West, E., & Meterko, V. (2015). Innocence project: DNA exonerations, 1989–2014: Review of findings from the first 25 years. *Albany Law Review*, *79*(3), 717–796.

Westervelt, S., & Cook, K. (2012). *Life after death row*. Rutgers University Press.

Wetmore, S. A., Neuschatz, J. S., & Gronlund, S. D. (2014). On the power of secondary confession evidence. *Psychology, Crime & Law*, *20*(4), 339–357. https://doi.org/10.1080/1068316X.2013.777963

Wickersham Commission Report. (1931). *Report on lawlessness in law enforcement*. U.S. Government Printing Office.

Wigmore, J. H. (1940). *Evidence in trials at common law*. Little, Brown.

Wilford, M. M., Gonzales, J. E., & Khairalla, A. (2024). When pleas precede evidence: Using Bayesian analyses to establish the importance of a reasonable standard for evidence prior to plea offers. *Wrongful Conviction Law Review*, *5*(1), 126–145. https://doi.org/10.29173/wclawr114

Williamson, T. (Ed.). (2006). *Investigative interviewing: Rights, research, regulation*. Willan Publishing.

Woody, W. D., & Forrest, K. (2020). *Understanding police interrogation: Confessions and consequences*. New York University Press.

Woody, W. D., Stewart, J. M., Forrest, K. D., Camacho, L. J., Woestehoff, S. A., Provenza, K. R., Walker, A. T., & Powner, S. J. (2018). Effects of false-evidence ploys and expert testimony on jurors, juries, and judges. *Cogent Psychology*, *5*(1), Article 1528744. https://doi.org/10.1080/23311908.2018.1528744

Woolard, J. L., Cleary, H. M. D., Harvell, S. A. S., & Chen, R. (2008). Examining adolescents' and their parents' conceptual and practical knowledge of police interrogation: A family dyad approach. *Journal of*

*Youth and Adolescence*, *37*(6), 685–698. https://doi.org/10.1007/s10964-008-9288-5

Wright, D. S., Wade, K. A., & Watson, D. G. (2013). Delay and déjà vu: Timing and repetition increase the power of false evidence. *Psychonomic Bulletin & Review*, *20*(4), 812–818. https://doi.org/10.3758/s13423-013-0398-z

Wrightsman, L. S., & Kassin, S. M. (1993). *Confessions in the courtroom*. Sage Publication.

Yan, S., & Bushway, S. D. (2018). Plea discounts or trial penalties? Making sense of the trial-plea sentence disparities. *Justice Quarterly*, *35*(7), 1226–1249. https://doi.org/10.1080/07418825.2018.1552715

Yan, S., Wilford, M. M., & Ferreira, P. (2024). Terms and conditions apply: The effect of probation length and obligation disclosure on true and false guilty pleas. *Journal of Experimental Criminology*, *20*(2), 457–483. https://doi.org/10.1007/s11292-022-09543-9

Yang, Y., Guyll, M., & Madon, S. (2017). The interrogation decision-making model: A general theoretical framework for confessions. *Law and Human Behavior*, *41*(1), 80–92. https://doi.org/10.1037/lhb0000220

Yang, Y., Madon, S., Cabell, J. J., Kruger, S. A., & Guyll, M. (2023). The effect of a presumption of guilt on police guilt judgments. *Psychology, Crime & Law*. Advance online publication. https://doi.org/10.1080/1068316X.2023.2279337

Young, S., Hollingdale, J., Absoud, M., Bolton, P., Branney, P., Colley, W., Craze, E., Dave, M., Deeley, Q., Farrag, E., Gudjonsson, G., Hill, P., Liang, H. L., Murphy, C., Mackintosh, P., Murin, M., O'Regan, F., Ougrin, D., Rios, P., … Woodhouse, E. (2020). Guidance for identification and treatment of individuals with attention deficit/hyperactivity disorder and autism spectrum disorder based upon expert consensus. *BMC Medicine*, *18*(1), Article 146. https://doi.org/10.1186/s12916-020-01585-y

Zalman, M., & Smith, B. (2007). The attitudes of police executives towards Miranda and interrogation policies. *The Journal of Criminal Law & Criminology*, *97*(3), 873–942.

Zannella, L., Clow, K. A., Hall, V., & Ricciardelli, R. (2024). Shaping attitudes toward wrongfully convicted individuals: An examination of brief video interventions. *Psychology, Crime & Law*, *30*(5), 432–457. https://doi.org/10.1080/1068316X.2022.2096222

Zelle, H., Romaine, C. L. R., & Goldstein, N. E. S. (2015). Juveniles' Miranda comprehension: Understanding, appreciation, and totality of circumstances factors. *Law and Human Behavior*, *39*(3), 281–293. https://doi.org/10.1037/lhb0000116

Zimbardo, P. G. (1967). The psychology of police confessions. *Psychology Today*. https://www.psychologytoday.com/intl/blog/so-sue-me/202009/the-psychology-false-confessions

Zimring, F., & Frase, R. (1979). *The criminal justice system*. Little, Brown.

Zottoli, T. M., Daftary-Kapur, T., Edkins, V. A., Redlich, A. D., King, C. M., Dervan, L. E., & Tahan, E. (2019). State of the States: A survey of statutory law, regulations and court rules pertaining to guilty pleas across the United States. *Behavioral Sciences & the Law*, *37*(4), 388–434. https://doi.org/10.1002/bsl.2413

Zottoli, T. M., Daftary-Kapur, T., Winters, G. M., & Hogan, C. (2016). Plea discounts, time pressures, and false-guilty pleas in youth and adults who pleaded guilty to felonies in New York City. *Psychology, Public Policy, and Law*, *22*(3), 250–259. https://doi.org/10.1037/law0000095

Received May 23, 2024
Revision received October 1, 2024
Accepted November 19, 2024 ■