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The importance of a laboratory science for improving the diagnostic value of confession evidence

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7. THE IMPORTANCE OF A LABORATORY SCIENCE FOR IMPROVING THE DIAGNOSTIC VALUE OF CONFESSION EVIDENCE

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The False Confession Phenomenon and Its Consequences

In 1989, the brutal assault and rape of a young White female jogger shocked the city of New York. Five Hispanic and Black teenage boys eventually gave detailed confession statements indicating involvement in the crime. Despite the fact that all the teenagers later retracted their confessions and that no other physical evidence conclusively linked them to the crime, the five boys were ultimately convicted of committing the attack and served up to 12 years in prison, all the while maintaining their innocence. In January of 2002, a convicted serial rapist and murderer, Matias Reyes, came forward and confessed to attacking the jogger. He claimed to have acted alone, and DNA tests of semen and pubic hair found at the scene of the crime later confirmed that Reyes had, in fact, committed the attack (McFadden & Saulny, 2002). Their convictions were overturned, and the boys were officially exonerated in December of 2002.

Wrongful detainment and conviction of the innocent is likely the most egregious error that can occur in the criminal justice system—not only for the life-altering consequences it may have on an innocent person, but also for the potential harm caused by the actual perpetrator of the crime who remains at-large. Although it is generally believed that such instances of wrongful conviction are relatively rare, exonerations of the innocent through DNA testing are increasing at a rate that few in the criminal justice system might have speculated (Scheck, 2001; Scheck, Neufeld, & Dwyer, 2000). A variety of factors have been shown to be associated with such wrongful convictions, including false confessions. As a result of the growing realization of this

false confession phenomenon, social scientists have begun to examine factors that may lead a person to implicate themselves in a crime that s/he did not commit (Gudjonsson, 2003; Kassin, 2005; Kassin & Gudjonsson, 2004).

Reliable confession evidence is important not only to the criminal justice system, but also to U.S. security agencies (Evans, Meissner, Brandon, Russano, & Kleinman, in press; Redlich, 2007). With the dawn of increased security and intelligence activity following the 9/11 attacks, it would appear that the elicitation of *diagnostic* information (i.e., a greater likelihood of true versus false information) from interrogations would prove instrumental in preventing future terrorist activity. As the political debate surrounding the use of torture with terrorist suspects illustrates, there is a pressing need to identify non-coercive, evidence-based techniques that will yield diagnostic information (Evans et al., in press; Meissner & Albrechtsen, 2007). Similarly, techniques designed to elicit diagnostic confessions from criminal suspects would likely speed the conviction process for guilty persons and protect the innocent from wrongful conviction within the criminal justice system.

While there has been a notable surge in the frequency of false confessions discussed in the media, the actual rate of false confessions in practice is difficult to determine (Gudjonsson, this volume; Leo & Ofshe, 1998). According to data from the Innocence Project website (www.innocenceproject.org), between 20% and 25% of the more than 200 cases of wrongful conviction were due, at least in part, to a false admission or confession on the part of the defendant (see also Drizin & Leo, 2004). As discussed by Gudjonsson (this volume), survey data suggests that between 7% and 12% of individuals who have been interrogated by police report having provided a false confession. In a recent survey, police investigators in the U.S. who regularly conduct interrogations estimated that approximately 5% of "innocent" suspects provide

a false confession (Kassin, Leo, Meissner, Richman, Colwell, Leach, & La Fon, 2007). In what is likely the most powerful evidence that false confessions occur, Drizin and Leo (2004) recently documented 125 cases of "proven" false confession in the U.S. Their data suggest that significant consequences for the innocent are associated with providing a false confession. For example, 81% of those who went to trial having provided a false confession were convicted of the crime—a figure that speaks to the power of confession evidence in the courtroom (Kassin & Neumann, 1997)—while an additional 11% actually chose to accept a plea bargain such that they could avoid the death penalty (see Redlich, this volume). Furthermore, 61% of those convicted spent over five years in prison prior to exoneration.

Taken together, these data demonstrate that the false confession phenomenon occurs in our criminal justice system to a significant degree, and that it is associated with severe consequences for both the innocent suspect and for the community that remains at-risk. Several decades of research have now examined false confessions both from the field and, more recently, within the laboratory. While we appear to know much about the causes of this phenomenon (see Kassin & Gudjonsson, 2004; Leo & Drizin, this volume), further research that might assist in the development of techniques that would promote the elicitation of diagnostic information (i.e., a greater proportion of true confessions as compared to false confessions) in the interrogation room appears warranted. Furthermore, while several theoretical models have been proposed to account for the influence of psychologically coercive interrogation techniques, little research has provided a venue for the validation and development of such theories under controlled, laboratory conditions. This chapter begins by highlighting what is currently known regarding the false confession phenomenon, provides a review of current theoretical models of confession, and finally discusses research from our laboratory using a novel experimental paradigm that we

believe can effectively model the social and cognitive psychological processes involved in the interrogative process. In this context we describe a series of studies that we have conducted attempting to empirically assess the diagnostic value of certain interrogative approaches.

What Are the Likely Causes of the False Confession Phenomenon?

Social science researchers have begun to systematically examine the false confession phenomenon over the past several decades both from the field and within the laboratory (see Kassin & Gudjonsson, 2004). The overwhelming data from these studies suggest that two primary factors appear to be associated with the elicitation of false confessions—namely, the implementation of psychologically manipulative interrogation techniques, and individual differences that make some suspects more vulnerable to interrogation than others.

Interrogation Techniques

Throughout history investigators have resorted to a wide variety of techniques intended to breakdown a suspect's resistance and yield a confession. Interrogation techniques have evolved from overtly coercive, "third degree" tactics (e.g., beatings, sleep deprivation; see Leo, 2004) to modern-day practices that involve more subtle, yet effective, psychologically-based techniques. One of the most heralded and readily used interrogation procedures in the U.S. is known as the "Reid technique" of investigative interviewing. Now in its fourth edition, the Reid technique manual (Inbau, Reid, Bukley, & Jayne, 2001) serves as an important resource for police investigators. The Reid technique encourages investigators to initiate an interview by employing a non-accusatorial interview (known as the Behavioral Analysis Interview or BAI) to assess verbal and nonverbal indicators of deception prior to conducting the actual interrogation. A

growing body of research, however, suggests that the average individual and law enforcement officer performs only slightly better than chance when attempting to distinguish truth from deception (Bond & DePaulo, 2006; Vrij, 2008; Vrij, Fisher, Mann, & Leal, this volume). Furthermore, research in our laboratory suggests that police investigators demonstrate a *guilt bias* in their perception of suspects (Meissner & Kassin, 2002; 2004), including their perception of true versus false confession statements (Kassin, Meissner, & Norwick, 2005), indicating that they are more likely to view suspects as deceptive. Further, a recent study by Vrij, Mann, and Fisher (2006) found that the BAI technique, in particular, produced a pattern of behaviors counter to that predicted by Inbau et al.—a finding that could produce false presumptions of guilt being placed upon innocent suspects (see also Vrij et al., this volume).

Nevertheless, it is only following a finding of "deception" in the pre-interrogation interview that investigators are encouraged to apply the nine-step Reid technique of interrogation. As Kassin and Gudjonsson (2004) note, the nine-step Reid technique can be readily reducible to three general phases involving: *custody and isolation*, in which the suspect is detained in a small room and left to experience the anxiety, insecurity, and uncertainty associated with police interrogation; *confrontation*, in which the suspect is presumed guilty and told (often falsely) of the evidence against him/her, is warned of the consequences associated with his/her guilt, and is prevented from denying his/her involvement in the crime (i.e., a process of "maximization" consistent with that proposed by Kassin & McNall, 1991); and *minimization*, in which a now sympathetic interrogator attempts to gain the suspect's trust, offers the suspect face-saving excuses or justifications for the crime, and implies more lenient consequences should the suspect provide a confession.

The Reid technique is effective in eliciting confessions largely as a result of social influence processes that have been shown to produce powerful effects in psychological studies of conformity (Asch, 1956), obedience to authority (Milgram, 1974), and compliance to requests (Cialdini, 2001) – but could such a technique also yield false confessions? Inbau et al. (2001) argue that innocent suspects will not be compelled to confess with these methods, primarily because of the belief that such individuals will be excluded from interrogation based upon a successful pre-interview (Kassin & Gudjonsson, 2004). Unfortunately, Inbau et al. have yet to produce any scientific data supporting this claim, and numerous researchers have expressed concern that some of these techniques may, in fact, place innocent suspects in danger (Gudjonsson, 2003; Kassin, 2005; Kassin & Gudjonsson, 2004; Redlich & Meissner, 2009). For example, Kassin and Kiechel (1996) have shown that the presentation of false evidence can significantly increase the likelihood of false confession, while research in our laboratory (Russano, Meissner, Narchet, & Kassin, 2005) has demonstrated that minimization techniques can increase the likelihood of both true and false confessions.

Individual Difference Characteristics

Research has suggested that some individuals are more vulnerable than others in the interrogation room. Specifically, there appear to be certain characteristics that render an individual more susceptible to interrogation, including the age, mental capacity, suggestibility, and physical or psychological state of the suspect at the time of the interrogation (Frumkin, this volume; Gudjonsson, this volume). First, a number of field studies (Baldwin & McConville, 1980; Leiken, 1970; Phillips & Brown, 1998; Softley, 1980; for a review, see Drizin & Colgan, 2004) and laboratory studies (Billings, Taylor, Burns, Corey, Garven, & Wood, 2007; Redlich &

Goodman, 2003) have demonstrated that younger suspects, and in particular children, are more likely to confess during an interrogation than older persons or adults (see Reppucci, Meyer, & Kostelnik, this volume). Indeed, 32% of the false confessions discussed by Drizin and Leo (2004) involved juveniles under the age of 18.

Second, studies have suggested that police routinely interrogate persons of low intelligence or IQ (Gudjonsson, 1993), and that such individuals may be more suggestible and less able to cope with the pressures of the interrogation room (Frumkin, this volume; Gudjonsson, 2003). For example, Drizin and Leo (2004) found that 19% of their sample of false confessors could be classified as "mentally retarded." Third, interrogative suggestibility has been suggested to be associated with false confessions (Frumkin, this volume; Gudjonsson, 2003; Gudjonsson & Clark, 1986). The Gudjonsson Suggestibility Scale (GSS; Gudjonsson, 1984) has been used to assess suggestibility in a number of studies, with suggestibility often being associated with poor memory, low self-esteem, high levels of anxiety, and a greater likelihood of confession. Finally, the psychological state (e.g., due to mental illness or drug use) of a suspect at the time of interrogation may also be linked to the likelihood of false confession (Pearse, Gudjonsson, Clare, & Rutter, 1998; Redlich, 2004) – 10% of the Drizin and Leo (2004) sample of false confessors were described as "mentally ill."

Can We Reduce the Likelihood of False Confessions in Practice?

Identifying interrogation strategies that minimize the likelihood of obtaining false confessions without compromising the ability of interrogators to elicit true confessions is a challenge faced by law enforcement and researchers alike. Research identifying such strategies is sorely lacking. In examining what progress law enforcement has made in this area, it is

informative to examine the interrogation practices of other countries. Although interviewing practices in the U.S. and Great Britain were on par with one another through the 1980s, these two countries now differ greatly in their approaches (Bull & Milne, 2004). As detailed by Bull and Soukara (this volume), high profile wrongful conviction cases and subsequent research in Great Britain led to the development of the Police and Criminal Evidence Act of 1984 (Home Office, 1985), which prohibited the use of psychologically manipulative techniques and mandated the recording of custodial interrogations.

In 1993, the Royal Commission on Criminal Justice further reformed British interrogation methods by introducing the PEACE model. Contrary to the U.S. accusatorial style of interrogation, this interview has the goal of "fact finding" rather than that of obtaining a confession (with an emphasis on the use of open-ended questions), and investigators are expressly prohibited from deceiving suspects (Milne & Bull, 1999; Mortimer & Shepherd, 1999). Evaluation research conducted by Clarke and Milne (2001) suggests that the PEACE method has been effective in changing the culture of police interviewing without significantly reducing the likelihood of obtaining confessions in practice (see Bull & Soukara, this volume). Police in New Zealand have now also adopted the PEACE protocol following the successes of Great Britain.

Another related strategy that has been suggested for improving the *diagnosticity* of interrogative evidence is the use of the Cognitive Interview (CI) in an interrogation context. The CI was originally developed as a strategy for interviewing cooperative witnesses and has proven useful for increasing the amount of information recalled (see Fisher & Geiselman, 1992).

Recently, Fisher and Perez (2007) suggested that the principles of the CI may also be applied to suspect interviews. Unfortunately, and as noted by Hartwig, Granhag, and Vrij (2005), no

empirical laboratory research has examined the potential of either the inquisitorial or cognitive interview as an effective interrogative method. Below we discuss our initial attempts at validating such an interrogative approach.

What Theoretical Models Have Been Proposed to Understand Confessions?

As mentioned previously, psychologically based interrogation techniques are believed to elicit confessions largely as a result of social influence processes that have been shown to produce powerful effects in psychological studies of conformity (Asch, 1956), obedience to authority (Milgram, 1974), and compliance to requests (see Cialdini, 2001). However, several specific theories have been developed to account for the cognitive and social psychological processes leading to confession (Berggren, 1975; Gudjonsson, 1989; Hilgendorf & Irving, 1981; Moston, Stephanson, & Williamson, 1993; Ofshe & Leo, 1997; for a review, see Gudjonsson, 2003).

One of the most frequently cited theories involves the decision-making model put forth by Hilgendorf and Irving (1981). In essence, the authors apply a form of subjective expected utility theory (Ajzen & Fishbein, 1980; Malpass, 1990) to the confession phenomenon and take into consideration the role of certain environmental stressors that can influence decision-making performance. According to Hilgendorf and Irving, suspects undergo three phases when evaluating whether they should confess to a crime. In the first phase, suspects appraise their perceptions of the available courses of action by considering their options and weighing the likely consequences attached with those options. In the second phase, the suspect is said to assess the likelihood of the various consequences attached to the courses of action by estimating their subjective probabilities (or what they believe will happen), while in the final phase the suspect

evaluates the utility values or gains attached to the various courses of action. In the case of false confessors, the authors argue that a suspect may accept the immediate instrumental gain of ending the interrogation and mistakenly determine that the truth of their innocence will be revealed or that no jury would ultimately convict them. Hilgendorf and Irving further contend that various social and environmental factors associated with interrogations can impair a suspect's ability to make an informed decision, particularly as interrogators manipulate a suspect's perceptions regarding the likely outcome about a certain course of action (e.g., by minimizing the seriousness of the alleged offense) or their level of fear, anxiety, or ability to rationalize a decision through sleep deprivation and fatigue.

Gudjonsson (1989, 2003, this volume) has expanded upon the work of Hilgendorf and Irving (1981) in his Cognitive-Behavioral Model of confession, and has argued that five factors should be considered when understanding why suspects confess. First, *social* factors refer to the suspect's feelings of isolation and their need for approval or affiliation. Second, *emotional* factors refer to the suspect's feelings of distress or anxiety, whereas *cognitive* factors refer to the suspect's thoughts and interpretations of the interrogation situation (e.g., does the suspect perceive the evidence against them to be strong or weak). Fourth, *situational* factors refer to pre-existing circumstances associated with the suspect (e.g., does the suspect have experience with the legal system) or environmental factors (e.g., does the suspect have an attorney present during the interrogation). Finally, *physiological* factors refer to the suspect's aroused physical state (i.e., heart rate, blood pressure, perspiration, and respirations). Gudjonsson further proposed that certain "antecedents" may exacerbate the influence of any given factor. In addition, while it is possible that a suspect could evaluate both the immediate and long-term consequences associated with confessing, it would appear that focusing a suspect on *immediate consequences* (such as

feeling of approval or being permitted to visit with family or friends) would more likely yield a confession.

While the theoretical models proposed to-date have provided rather intuitive explanations of the social and cognitive psychological processes associated with confession, little empirical research has been conducted to examine their validity or to assess the extent to which such models might appropriately explain both true and false confessions. Below we describe recent research in our laboratory that has provided a foundation for assessing the validity of these models via a controlled, experimental paradigm.

Why Use a Laboratory Paradigm to Investigate True Versus False Confessions?

Two broad methods have been employed to study interrogations and confessions—
namely, field observations and laboratory research. Field research (e.g., observational studies of actual police interrogations or archival reviews of wrongful convictions) carries the distinct advantage of high external validity (i.e., the extent to which findings can be applied beyond those of the specific study) and generalizability. For example, in a seminal study of U.S. police interrogations, Leo (1996) observed more than 300 live and videotaped interviews in an effort to systematically document the techniques employed by investigators. Similar studies have been conducted in Great Britain (Baldwin, 1993; Irving; 1980; Irving & McKenzie, 1989; Moston, Stephenson, & Williamson, 1993; Softley, 1980). While archival and observational studies have certainly increased our understanding of police interrogations, like most field research methodologies these studies suffer from issues of internal validity (i.e., the extent to which a researcher is assessing a true causal relationship between two or more factors) in that they lack

the experimental controls necessary to eliminate all confounds that might enable researchers to draw causal conclusions.

Because of the limitations of field research methods, a number of researchers have begun to employ experimental laboratory research methods. While generally limited by issues of external validity, laboratory research benefits from a high degree of experimental control. This advantage of internal validity allows researchers to explore cause-and-effect relationships, and thereby to draw causal conclusions regarding the influence of certain interrogation techniques on the likelihood of true versus false confessions. Importantly, laboratory paradigms also permit researchers to validate proposed psychological models of confession in a controlled fashion – post-confession questionnaires and experimental manipulations that distinguish psychological processes of interest can be administered across a normative sample of individuals in the laboratory. To the extent that the psychological processes of interest are transposed to the laboratory paradigm, experimental methods provide an effective means for investigating the psychology of confessions and interrogation.

While each research type has inherent advantages and disadvantages, ultimately both field and laboratory research approaches are necessary to understand the process of interrogation and the psychology of confessions. As Behrman and Davey (2001) note regarding research on eyewitness identification, "A diversity of methods is needed if we are to provide the legal profession with practical advice regarding eyewitness memory. It is from a combination of methods, controlled experiments, field studies, and archival studies that conclusions should be drawn" (p. 489). The success of field and laboratory research on eyewitness memory, and its contribution to practice, are now well known (Wells, Malpass, Lindsay, Fisher, Turtle, & Fulero,

2000), and this multi-method approach would appear to provide an appropriate model for research on interrogations and confessions.

The interrogation room certainly presents a challenge to laboratory researchers who attempt to re-create the elements of police interrogation in a controlled environment. Ethical constraints will likely always preclude researchers from creating situations in which participants believe they are under suspicion and are being interrogated for an actual criminal act. As such, it is impossible to precisely replicate the circumstances that a criminal suspect faces during interrogation (e.g., the potential consequence of incarceration, the stigma of criminal behavior, etc.). The challenge for researchers, then, is to design research studies that maximize both internal and external validity, and to assure that the cognitive and social psychological processes under investigation are transposed to the laboratory in a context that preserves their natural elements and thereby substantiates their application to the real world of police interrogation. Below we briefly review the predominant laboratory paradigm that has been used over the past decade, discuss its benefits and limitations, and propose an alternative paradigm that we believe improves both the internal and external validity with which we can explore psychological theories of confession in the laboratory.

What Can Laboratory Research Tell Us about the Psychology of Confessions? The Kassin & Kiechel Paradigm

Kassin and Kiechel (1996) designed the first paradigm to demonstrate the false confession phenomenon in the laboratory. In this study, innocent participants were accused of accidentally hitting a forbidden key on a keyboard during a computer-based task, causing the computer to crash and important data to be lost. In their demonstration of this paradigm, the

authors manipulated the presentation of false evidence: In half of the conditions a confederate confirmed seeing the participant hit the Alt key (when, in reality, no participants actually hit the Alt key), while for others the confederate said she had not seen what happened. The pace of the typing task (fast versus slow) also served to manipulate participants' level of memory vulnerability: in the "fast-paced" condition, participants were less confident about whether they had hit the Alt key than participants in the "slow-paced" condition.

Kassin and Kiechel collected three dependent measures. In particular, they measured *compliance* by assessing whether participants would sign a handwritten "confession," *internalization* by determining whether participants actually came to believe that they had hit the Alt key, and *confabulation* by assessing whether participants began to generate false memories of the event. Although all participants initially denied hitting the Alt key, 69% eventually exhibited compliance, 28% internalized, and 9% confabulated. In the most intense interrogation condition (high memory vulnerability and presentation of false evidence), 100% exhibited compliance, 65% internalized, and 35% confabulated. Researchers have continued to employ the Kassin and Kiechel paradigm to investigate other possible influences, such as a preexisting state of stress (Forrest, Wadkins, & Miller, 2002), the gender of the interrogator or suspect (Abboud, Wadkins, Forrest, Lange, & Alavi, 2002), the suspect's age (Redlich & Goodman, 2003), individual difference variables such as locus of control and authoritarianism (Forrest, Wadkins, & Larson, 2006), the consequences of confession (Horselenberg, Merckelbach, & Josephs, 2003), and the use of minimization and maximization techniques (Klaver, Rose, & Lee, 2003).

Although false confession research conducted using Kassin and Kiechel's (1996) "Alt key" paradigm was an important first step into this research area, the paradigm fails to capture a number of important elements present in real-world interrogation situations that may limit the

ecological validity (i.e., the extent to which laboratory research on interrogations resembles realworld interrogations) and generalizability of the research findings. For example, participants in the paradigm were accused of accidentally committing a highly plausible "crime," leaving open the possibility that many participants were unsure whether they were innocent or guilty. In contrast, real-world suspects are typically accused of *intentionally* committing a criminal act and are certain of their own culpability. Second, in the real world, the accused may or may not have actually committed the crime; however, participants in the Kassin and Kiechel paradigm are always innocent. We believe it is important that researchers attempt to understand the influence of various techniques in eliciting both true and false confessions in order to assess the diagnostic value (i.e., the elicitation of true versus false confessions) of an interrogation and to validate proposed theoretical models of confession. Finally, the real-world consequences of confessing to a crime are usually severe for the suspect, although the interrogator may minimize the perceived consequences during the course of the interrogation. In the Kassin and Kiechel paradigm, the consequence for confessing has typically been relatively mild (e.g., a phone call from the primary investigator of the study or a small monetary loss in Horselenberg et al., 2003). The failure of researchers to move beyond this now classic paradigm has been due, in part, to the difficulty in creating a paradigm that might better approximate real-world conditions while treating participants in accordance with current ethical standards.

A Novel Laboratory Paradigm

In an effort to enhance both internal and external validity and to preserve the ethical treatment of research participants, we have recently developed a novel laboratory paradigm that can be used to assess the effects of interrogation techniques on the likelihood of both true and

false confessions (Russano et al., 2005). In our paradigm, participants are accused of breaking an experimental rule, an act that is later characterized as "cheating." Participants are recruited to participate in a study on team versus individual problem-solving in which they are asked to solve a series of logic problems, sometimes working individually and sometimes working with a confederate. In his instructions to the participant and confederate, the researcher makes clear that they are not to work together on designated "individual" problems—the critical rule of the experiment that is subsequently manipulated. In the "guilty" condition, the confederate asks for help on a target individual problem; participants who provide an answer violate the rule of the experiment and are thus considered guilty of "cheating" on the task. In the "innocent" condition, the confederate does not make this request and so participants remain innocent of violating the experimental rule. Later, all participants are accused of cheating (with the academic implications thereof), are interrogated by an experimenter who remains blind to the participants' actual guilt-innocence, and are ultimately asked to sign a confession statement.

We believe there are several strengths to this paradigm. First, the "crime" used may be considered by students as a fairly severe act, as it portrayed as a form of "cheating" within the context of an academic setting. In addition, as in the real world, committing the crime requires *intent* and participants clearly know whether they are guilty or innocent of the behavior. Finally, in this paradigm, as in the real world, some of the individuals being interrogated are *innocent* and some are *guilty*, enabling researchers to assess the effects of interrogation factors on the likelihood of both true and false confessions. Importantly, this allows us to examine not only those factors that might lead to false confession, but also those techniques that might *improve* the diagnostic value of police interrogations.

In our first demonstration of this paradigm (Russano et al., 2005) we varied the interrogation techniques used by our experimenters, including an explicit offer of leniency (or a "deal") and exposure to minimization tactics (i.e., the interrogator expressed sympathy, provided face-saving excuses, and emphasized the importance of cooperation). Our results indicated that guilty participants were significantly more likely to confess than innocent participants, and that both an explicit offer of leniency and minimization techniques independently increased both true and false confession rates. Moreover, diagnosticity (i.e., the ratio of true to false confessions) was significantly reduced when either the deal technique or minimization was employed, or when the two tactics were combined, when compared to that of the no-tactic control condition. Interestingly, the use of both the deal and minimization techniques increased participants' perceptions of the social "pressure" that the interrogator was placing upon them to provide a confession. Because of the ethically sensitive nature of the paradigm and the use of deception. we administered a follow-up questionnaire to a subset of participants from our original study to assess their reactions to the study. Participants reported that they felt moderately stressed during the interrogation, that they thought the use of deception was justified, and that, in the end, they had a somewhat positive and educational experience.

In a second study using the paradigm (Narchet, Meissner, & Russano, 2009), we examined the extent to which investigator knowledge or biases (Kassin, Goldstein, & Savitsky, 2003; Meissner & Kassin, 2002, 2004) might influence the process of interrogation leading to confession. Furthermore, we were interested in assessing whether Gudjonsson's (1989) "five factor" model might account for the psychological processes leading to confession in our paradigm. To examine these issues, we trained our interrogators in 15 different interrogation techniques (including aspects of maximization and minimization) and permitted them "freedom"

to apply these techniques within the context of a 15-minute interrogation. We also provided the experimenters with some "information" regarding participants' likely guilt or innocence prior to interrogation. Finally, following each interrogation, we provided participants with a questionnaire to assess the influence of Gudjonsson's cognitive, social, affective, physiological, and situational factors on confession. As expected, guilty persons were more likely to confess than innocent persons (consistent with Russano et al., 2005); however, investigator biases also influenced the nature of the interrogation, particularly for those participants who were factually "innocent." More specifically, experimenters who were led to believe that the participant was "guilty" were more likely to apply strong "accusatorial" interrogation methods, leading to an increase in both true and false confessions. In addition, the use of accusatorial methods (i.e., minimization and maximization approaches) produced confessions that were significantly less diagnostic when compared with interrogations involving non-coercive, investigative interviewing approaches. With regard to assessing theories of confession, our results suggested that participants' who perceived greater social "pressure" to confess from the experimenter (Gudjonsson's social factor) and for whom the consequences of not confessing led them to believe that there was "no way out" of the situation (Gudjonsson's cognitive factor) were more likely to confess. Finally, post-interrogation interviews of experimenters revealed that those led to believe that the participant was "guilty" were more likely to believe (post-interrogation) that the participant was, in fact, guilty—thereby demonstrating a process of behavioral confirmation (see Meissner & Kassin, 2004).

It should be noted that our ultimate goal in employing this paradigm has been to identify interrogative approaches that might provide a viable alternative to traditional methods of interrogation, and specifically to demonstrate that non-coercive methods can improve the

diagnostic value of interrogative information. The Narchet et al. (2009) study provided an important account of the potential benefit of a non-coercive ("inquisitorial") style of interrogation when compared with methods of minimization and maximization that are often used in modern interrogations. In an effort to confirm this trade-off in diagnosticity, we recently conducted two additional studies in which we exerted greater control over the tactics used by our interrogators and examined the specific benefits of an inquisitorial approach compared with that of maximization and minimization techniques (Meissner, Russano, Rigoni, & Horgan, 2009).

The inquisitorial approach used in these studies was modeled after the approach advocated in Great Britain (Bull & Soukara, this volume). It included developing rapport, explaining the allegation and the seriousness of the offense, emphasizing the importance of honesty and truth-gathering, and requesting the suspect's version of events. The suspect was permitted to explain the situation without interruption as the experimenter demonstrated active listening skills. Following the suspect's narrative, the experimenter was permitted to identify discrepancies or contradictions in the account, but was not permitted to falsify evidence or contradictions. Finally, the suspect was provided an opportunity to sign a confession statement. The results of both studies (Meissner et al., 2009) demonstrated a significant advantage in using inquisitorial methods over that of accusatorial approaches—in particular, the inquisitorial approach produced significantly fewer false confessions and, when combined with the cognitive interview in the second study, significantly increased true confessions. Thus, the inquisitorial approach was significantly more diagnostic in producing superior confession evidence! In addition, the inquisitorial approach distinguished itself from the other techniques such that innocent participants in this condition perceived significantly less social "pressure" to confess, whereas guilty participants showed elevated levels of social pressure consistent with that of an

accusatorial approach. Given that the perception of pressure is most often associated with interrogative confessions, this finding is important to our attempts at identifying techniques that target guilty suspects.

Conclusions

Laboratory research on confessions has yielded valuable information regarding the extent to which certain interrogation tactics can lead to false confessions and, most important, the identification of techniques (such as the inquisitorial method) that can increase the diagnostic value of confession evidence. Furthermore, the laboratory paradigm presented in this chapter has provided an opportunity to assess the role of psychological theory in the interrogation room, and as such has provided support for the influence of social pressure and cognitive decision-making processes as key factors leading to true versus false confessions.

In this chapter we have emphasized that the bulk of research on interrogations and confessions has focused on factors associated with the *false confession phenomenon*. Although this research has been important in highlighting cases of wrongful conviction that stem from the interrogation room, we believe that it is also important to explore the development of techniques that might *improve the diagnostic value of confession evidence*, and thereby also account for *true confessions*. Not only is this approach important for the development of theoretical models that might distinguish between true versus false confessions, but it will also enable the provision of alternative interrogation methods to law enforcement—approaches that have been empirically validated and supported by the broader scientific community. As noted by Redlich and Meissner (2009), interrogative methods currently available to law enforcement have no scientific foundation, but rather have been offered (or better "sold") by former investigators who purport

that the validity of those techniques is based upon their success in yielding confession statements—independent of veracity or "ground truth." As we further develop our scientific understanding of interrogations and confessions, we should be prepared to offer alternative methods of interrogation to law enforcement, as opposed to simply discouraging their use of various tactics that now have a foothold in everyday practice.

With these objectives in mind, we have begun a systematic research effort designed to lay the groundwork for identifying techniques that promote the elicitation of guilty knowledge and simultaneously reduce the likelihood of obtaining false confessions from innocent individuals. We recognize that once this laboratory research has been completed, further research employing field tests of the proposed techniques will be important for documenting the success of the proposed alternative approaches in everyday practice. It is to this end that we are currently working with law enforcement entities in an effort to take our findings beyond the laboratory and into the field (see Evans et al., in press). In our view, a scientific approach to understanding interrogations and confessions involves collaboration between both the laboratory and the field, and we hope that our current work might set the stage for further validation and implementation of approaches that promote the diagnostic elicitation of confession evidence.

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