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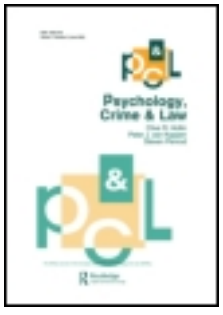

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Police-induced confessions: an empirical analysis of their content and impact

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Police-induced confessions: an empirical analysis of their content and impact

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Confessions have a greater impact on juries than other types of evidence, sometimes in the face of contradictory evidence. Twenty false confessions were content-analyzed to determine the substance of false confessions and perhaps help to explain why judges, juries, and others are prone to believe these statements. Our analysis indicated that most false confessions contained references to specific visual and auditory details concerning the crime and victim(s) as well as references to the confessor's thoughts, feelings, and motives during and after committing the crime. In a second study, mock jurors read confessions that were varied in terms of the presence of crime details, motive statements, and apologies, to determine the impact of these common aspects of confessions on a mock jury. Although a simple admission of guilt was often sufficient for conviction, more elaborate narrative confessions in which the defendant recounted how and why he committed the crime further increased confidence in these guilty verdicts.

Keywords: confession; false confession; juries; juror decision making; content analysis

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Introduction

In the criminal justice system, confessions are so powerful that once a suspect confesses, additional investigation often stops and the suspect is prosecuted and convicted. Although confessions from perpetrators help to solve crimes in an efficient manner, the false confessions of innocents are a known contributing factor in approximately 25% of all DNA exoneration cases (www.innocenceproject.org). Over the years, the courts have erected a number of procedural safeguards to ensure that confessions are voluntary, not coerced, and to establish guidelines for their admissibility at trial. Most notably, judges rule on voluntariness at a pretrial suppression hearing after which juries must determine the credibility of that confession in reaching a verdict (for comprehensive reviews of this research, see Kassin et al., 2010; Kassin & Gudjonsson, 2004; Gudjonsson, 2003). Still, the number of wrongful convictions attributable to false confessions shows that these safeguards can fail.

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Research on the impact of confessions in the criminal justice system is unequivocal. When false confessors have pled not guilty and proceeded to trial, the jury conviction rates have ranged from 73% (Leo & Ofshe, 1998) to 81% (Drizin & Leo, 2004). In addition, mock jury studies have shown that confessions have more impact on verdicts than other potent forms of evidence (Kassin & Neumann, 1997) and that people do not fully discount confessions – even when they are judged to be the result of coercion (Kassin & Sukel, 1997; Kassin & Wrightsman, 1980; Redlich, Ghetti, & Quas, 2008), even when jurors are told that the confessor suffered from psychological illness or interrogation-induced stress (Henkel, 2008), and even when the confessions are provided not by the defendant himself but by an informant who is incentivized to falsely implicate the defendant (Neuschatz, Lawson, Swanner, Meissner, & Neuschatz, 2008). Most people reasonably believe that they would never confess to a crime they did not commit, evaluate others accordingly, and have only rudimentary understanding of the dispositional and situational factors that would lead someone to do so (Blandon-Gitlin, Sperry, & Leo, 2010; Henkel, Coffman, & Dailey, 2008; Leo & Liu, 2009).

It is clear that confessions are powerful in part because they are trusted by juries as a matter of common sense. In fact, many US suspects who had falsely confessed were prosecuted and convicted even after DNA from the crime scene excluded them or other evidence contradicted their confession. In New York's infamous Central Park Jogger case of 1989, five boys confessed after lengthy and intense interrogations. Before trial, DNA testing on semen samples recovered from the victim excluded the boys. Yet they were still prosecuted and convicted on the theory that there was a sixth unidentified accomplice whom they had failed or refused to identify. Thirteen years later, the boys were officially exonerated when the real perpetrator – a serial rapist in prison – confessed, a confession that was supported by the DNA. This story is not an isolated one. In an analysis of 125 false confessions, Drizin and Leo (2004) found that most innocent confessors who went to trial were convicted – even when there was no corroboration and even when the confession was contradicted by other evidence. According to the Center on Wrongful Convictions (2010), 19 confessors are thus far known to have been convicted of rapes and murders despite exculpatory DNA results known at the time of their conviction.

There are three reasons for pessimism about whether juries can be expected to identify as false the confessions of innocent people. First, generalized common sense leads people to trust confessions the way we trust other behaviors that counter self-interest. Over the years, and across a wide range of contexts, social psychologists have observed that social perceivers commit the fundamental attribution error – that is, they tend to make dispositional attributions for other people's actions, while underestimating the role of situational factors (Gilbert & Malone, 1995; Jones, 1990; Ross, 1977). Both common sense and the law further compel the belief that people present themselves in self-serving fashion and that behaviors that counter self-interest are particularly diagnostic. The result is that people are far more likely to believe a suspect's confessions than his or her denials (Levine, Kim, & Blair, 2010).

A second reason for pessimism is that people are typically not adept at deception detection – even in forensic contexts of importance. Research shows that neither lay people nor trained and experienced professionals distinguish truths from lies at high levels of accuracy (for reviews of this extensive literature, see Vrij, 2008; Vrij, Granhag, & Porter, 2011). This same problem can be seen in people's ability to

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distinguish between true and false confessions. To demonstrate, Kassin, Meissner, and Norwick (2005) videotaped male prison inmates as they gave true confessions for their crimes and concocted false confessions to crimes they did not commit. When lay people and police investigators later judged the statements, neither group was particularly adept at distinguishing true from false confessions, exhibiting accuracy rates that typically did not exceed chance level performance, even when told that half the statements were false. These findings suggest people cannot readily distinguish true and false confessions in the same way that they have difficulty distinguishing true and false denials and other statements.

In addition to people's generalized tendency to trust self-report and difficulty at deception detection, anecdotal data from actual cases suggest that police-induced false confessions are particularly challenging because they often contain *content* cues commonly associated with truth telling and guilty knowledge. In a recent examination of 33 false confessions derived from the Innocence Project's DNA exoneration case files, Garrett (2010) found that all of them contained accurate crime details; 32 contained accurate details that, according to police, were not in the public domain. But what else characterizes this population of false statements and what effect do they have on jurors' perceptions of guilt? Precisely because confession evidence is so persuasive, yet often forms the basis for wrongful conviction, the current research was designed with two goals in mind: (1) to analyze the contents of police-induced false confessions in the first descriptive study of its kind, and then (2) to systematically vary crime details and other key aspects of these statements in a mock jury study to determine their impact on perceptions of guilt. We predicted that the typical false confession would be a richly detailed narrative of what the suspect allegedly did, how, why, and with what effect. We also predicted that the more detailed the narrative is in these ways, relative to a mere admission of guilt, the greater its impact would be on perceptions of guilt.

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Study 1

Anecdotally, false confessions often seem credible despite a lack of corroboration because they contain not only admissions of guilt but also factual details, statements of voluntariness, statements about motivation, error corrections, and other factors that interrogators are trained to include in taking a confession (Kassin, 2006). Despite the widespread impact of confessions in the legal system, to date there have been no attempts to describe the typical police-induced false confession. Our first study was thus designed for that purpose.

Method

Twenty false confessions were selected for content analysis. These confessions were derived from the Innocence Project case files and from the third author for cases in which the confessor was subsequently exonerated. The following two criteria were set for a confession to be included in our sample: (1) the confession resulted from the process of police interrogation and was not, therefore, voluntary and spontaneous; and (2) the confessor's factual innocence had been established to varying degrees of certainty (e.g. by DNA, a dismissal of all charges, an acquittal, or an overturned conviction).

All of the false confessions in our sample were to major crimes – seven to rape, six to murder, and seven to both rape and murder. All of the confessors were male. Of the 20 confessions, 14 of the defendants were fully exonerated – and hence, rendered factually innocent – by DNA evidence; six were cleared by other less certain means (e.g. acquittal at trial; the real perpetrator was found; the conviction was overturned by an appellate court and the defendant was not retried). With regard to their format, nine of the confessions were audiotaped or videotaped question-and-answer sessions that had been transcribed, six were 'verbatim' or summary narratives that were typed or handwritten by a detective, four were records of question-and-answer sessions that were handwritten by a detective, and one was taken from a transcript of in-court testimony in which the confession was read verbatim at trial. The full list of confessions used appears in Table 1.

By examining the most popular training manual on interrogation (Inbau, Reid, Buckley, & Jayne, 2001) – which contains advice on how to convert an oral admission into a full narrative confession – and by perusing an initial sample of false confessions, a set of categories was developed for use in coding the 20 statements. Through these sources, 26 categories were identified that concerned (a) the medium and format of the confessions; (b) the presence and type of various crime details, including visual and auditory details about the crime and crime scene; sketches, maps, or reenactments of the crime; references to the time and location of the crime; references to the victim's appearance, words/sounds, and actions; and references to any alleged accomplice's words and actions; (c) the confessor's self-reported state of mind both at the time of the crime and during the confession, including reports of drug and alcohol use, reflections on emotional states, inferences about actions to fill in gaps in memory, and apologies and expressions of remorse; and (d) indicators of

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Table 1. Study 1 sample and characteristics.

Confessor	Crime	Means of exoneration	Years in prison	Format
Bradford	rape-murder	DNA	6.5	typed Q&A
Dallas	murder	real perpetrator found	2	typed Q&A
DiStephano	murder	overturned on appeal	6.5	written Q&A
Godschalk	rape	DNA	14.5	audio Q&A
Halsey	rape-murder	DNA	19	typed Q&A
Kogut	rape-murder	DNA	17	detailed narrative
Johnson	murder	acquitted at trial	0	Q&A
Laughman	rape-murder	DNA	16	written Q&A
Linscott	rape-murder	DNA	3	audio Q&A
Lloyd	murder	DNA	17	detailed narrative
McCray	rape	DNA	6	video Q&A
McCullom	rape-murder	real perpetrator found	2	audio Q&A
Nunez	rape	DNA	0	detailed narrative
Ochoa	rape-murder	DNA	11.5	trial transcript
Ollins, C.	rape-murder	DNA	13.5	typed Q&A
Reilly	murder	overturned on appeal	2	audio Q&A
Richardson	rape	DNA	5.5	video Q&A
Santana	rape	DNA	5	video Q&A
Tankleff	murder	overturned on appeal	17	detailed narrative
Wise	rape	DNA	11.5	video Q&A

the voluntariness of the confession, such as explicit statements of free will or the correction of errors.

Once the categories were identified, the first two authors took fresh copies of the confessions and independently marked each instance of the mutually exclusive 26 categories, enabling us to note both the presence and frequency of items in each category per statement. To determine the interrater reliability of the coding scheme, both raters initially coded seven confessions. This procedure, and the comparison of the frequencies per variable per confession, yielded an overall interrater agreement rate of 86%. Disagreements were resolved by discussion between the two coders (per cent agreements for the individual variables discussed in this article can be seen in Tables 2 and 3). The remaining confessions were then coded in the same manner by the first author, with the second author reviewing the results for added accuracy.

After the confessions were coded, two research assistants independently counted each instance of the 26 categories to determine the presence or absence and frequency of each variable in each confession. If there were differences, a third research assistant recounted the instances to resolve these discrepancies. If the discrepancies were still unresolved, the three values were averaged together (agreement could not be reached in only 8% of the 520 cases).

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Results

On average, the confessions ranged from 279 to 3114 words, with a mean length of 1323.46, SD = 966.12. Our analysis focused on the nature of the crime details and extraneous elements contained within these statements.

Crime details

Although the format of the confessions varied, results from our analysis showed, ultimately, that the confessions were similar in their 'deep structure,' with all recounting stories of who, what, how, and why the crimes were committed. All 20 of the confessions cited the time and location of the crime. All contained visual details about the crime and the crime scene (e.g. 'There was blood all over the walls,' 'there was a seed spreader, chair, scissors, nails'). All referenced the victim and described the victim's behavior before, during, and after the crime (e.g. 'She tried to run away,' 'Her body rolled out of the blanket'). Overall, 95% of the statements referenced co-

Table 2. Details contained within the confessions.

Variable	Frequency	*M* (SD)	Interrater % agreement
Cites time	100%	6.63 (5.53)	84%
Cites location	100%	17.28 (13.58)	86%
Visual details	100%	13.25 (11.58)	82%
References victim	100%	55.40 (27.31)	92%
References others	95%	52.45 (57.05)	88%
Victim's behavior	100%	14.98 (10.33)	88%
Auditory victim	80%	2.85 (1.84)	92%
Victim's appearance	75%	8.60 (7.54)	86%
Victim's mental state	45%	2.00 (1.12)	100%

Table 3. References to internal states.

Variable	Frequency	Interrater % agreement
Reflections	85%	73%
Motives	80%	86%
Themes	60%	100%
Remorse	40%	100%
Apology	25%	100%

perpetrators, witnesses, and other actors (e.g. 'Denis, as John's driving around, says to the girl, ''You want to party'', ''forget about getting fired'', ''do you want to do the right thing.''); 80% described what the victim said (e.g. 'They said ''I am going to call mommy''', 'Leave me alone, let me out'); 75% described the victim's face, hair, body, clothing, jewelry, or other aspects of appearance (e.g. 'She was about 15 or 16 years old, dark hair, medium long. She had on a blue denim dungaree jacket, I think a dark top, dark pants, and white high top sneakers,' 'They are Gloria Vanderbilt jeans. Her blood is on the back left pocket from the intercourse'); and 45% described the victim's mental or emotional state (e.g. 'She was scared,' 'She could hear me coming'). These results are summarized in Table 2.

This analysis shows that the typical false confession contains more than a simple 'I did it' admission of guilt. It may seem counterintuitive, but most are richly detailed statements complete with descriptions of the what, how, and why the crime was committed. In one case, for example, DNA exoneree Byron Halsey (1985) provided an exquisitely detailed and gruesome description of his alleged actions, at one point saying 'I hit Tyrone several times in the head with a brick. He was on the floor when I hit him. I hit Tyrone in the head several times. In the basement I found some scissors and some nails and I left the nails in his forehead. I used the brick to put some nails in the forehead.' Additionally, most statements contained vivid details about the victim and crime scene. For example, John Kogut, who was DNA exonerated 17 years after he was convicted, described the victim's appearance, at one point stating 'I recall seeing a gold colored chain with what looked like a double heart on it with a piece broken off of it. I think there were other charms on the chain but I don't remember what they looked like.' It is interesting that 45% of false confessions also included what we have called an 'illustrator.' Illustrators were defined as either a hand-drawn sketch, a map of the crime scene, or a physical reenactment of some portion of the crime itself (e.g. Antron McCray said, 'I had her like, just like this;' Eddie Joe Lloyd, drew a map of the crime scene, including the bus stop where the victim was abducted and the parking garage where she was raped). These illustrators add an extra level of credibility, suggesting firsthand knowledge, about how and where the crime was committed – relative to a mere description that could have been parroted back by a compliant suspect.

Other 'extraneous' elements

As previously noted, we sought to identify other aspects of false confessions that, in addition to the presence of factual crime details, might have enhanced perceptions of their credibility. One important feature was the confessor's introspections. In our sample, 85% reflected on their own thoughts and feelings at the time of the crime.

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After admitting that he killed his wife, for example, Todd Johnson (2002) said, 'I just became so upset and angry at the condition of our brand new house (dirty) and I just snapped.' Additionally, 80% described their motive for committing the crime. For rape confessions, the most common motive was a desire or need for sex. For murder, the most common motive was a reaction to provocation. In confessing to the 1988 murder of his parents, for example, Marty Tankleff said he was angry at his parents because 'They ruined my summer by not letting me use the boat,' and 'They wanted me to drive the crummy old Lincoln.'

Interestingly, 65% of the confessions in our sample contained a minimization theme that psychologically justified, excused, mitigated, or externalized blame for the crime in question. The presence of such themes is consistent with the commonly used interrogation tactic known as 'theme development' by which apparently sympathetic police seek to reduce the anxiety associated with confession by normalizing and minimizing the moral seriousness of the offense. This tactic, while effective at obtaining true confessions, also puts innocent suspects at risk by implying leniency and increasing the rate of false confessions (Horgan, Russano, Meissner, & Evans, in press; Klaver, Lee, & Rose, 2008; Narchet, Meissner, & Russano, 2011; Russano, Meissner, Narchet, & Kassin, 2005). Importantly, too, jurors do not view the use of minimization tactics used during interrogation as coercive (Kassin & McNall, 1991). Common types of minimizing themes include blaming the victim, drugs, alcohol, raging hormones, peer pressure, self defense, an accident, or some type of provocation for the commission of the offense (Inbau et al., 2001; Senese, 2005). In our sample, 38.5% of the false confessors who used minimizing themes asserted that the crime was spontaneous, accidental, or not premeditated; 15.4% blamed drugs or alcohol; 15.4% blamed peer pressure; 15.4% blamed the victim; and 15.4% placed the blame on others who were present. For example, Peter Dallas, exonerated after two years in prison when the real perpetrator was found, explained that his gun fired accidentally, 'maybe it was when he hit me the trigger got pulled.'

In addition to describing their alleged internal states at the time of the crime, an astonishing 40% of the confessors in our sample expressed sorrow and/or remorse about having committed the crime for which they were factually innocent; 25% outright apologized. DNA exoneree Byron Halsey told detectives, 'I am sorry for what I done. I didn't mean it. It was an accident. I wish I could change things. I'm willing to pay for what I did. I'm seeking help. Please help me.' In the infamous Central Park Jogger case, 16-year-old Kharey Wise, one of the five juveniles whose videotaped confession was used in his wrongful conviction, was seen on videotape shaking his head and telling detectives, 'This is my first rape. This . . . I never did this before. This will be the last time doing it.'

Nearly half of the false confessions contained elements that fostered a perception of their voluntariness. Notably, 50% of false confessors explicitly asserted that their confession was given voluntarily (e.g. John Kogut stated, 'I understand my rights and make the following statement freely and voluntarily;' Marty Tankleff stated, 'Having my rights in mind, I want to tell detectives McCready and Rein what happened to my parents this morning').

Perhaps one of the most compelling tactics police officers are trained to use to demonstrate that a confession is both voluntary and reliable is the 'error correction' ploy (Inbau et al., 2001). As a tactical matter, investigators are advised to purposefully include in the written statement minor factual errors (e.g. an incorrect

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name, date, street address, crime detail, or misspelling) that the suspect will presumably notice, correct, and initial before signing the confession. Because only perpetrators – not innocents – have the requisite guilty knowledge to identify these errors, this technique appears to have good diagnostic potential. However, in case the suspect fails to identify the errors, Inbau et al. (2001) advise, 'the investigator should keep the errors in mind and raise a question about them in the event the suspect neglects to do so' (p. 384). In short, by showing that the suspect proofread the statement and verified its contents, the error correction trick is designed to enhance the illusion of credibility. Are corrected errors found in the false confessions of innocent people lacking guilty knowledge? Yes. In our sample, 44% of typed and handwritten confessions contained at least one corrected error. In DNA exoneree Marcellius Bradford's confession to the rape and murder of a nursing student in 1986, there are 13 error corrections including a typo correction and four changes of the murder weapon from a brick to concrete.

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Discussion

Our content analysis indicates that false confessions are highly scripted statements with a number of common features. Beginning with a simple admission of guilt, these narrative statements typically contain specific details about the crime, the victim, and the scene. Other research has shown that the facts contained within false confessions are often accurate details about the crime that were not in the public domain (Garrett, 2010), details that were purposefully or inadvertently transferred to confessors during the process of interrogation.

Whether or not the details contained within police-induced false confessions are factually correct, the present analysis shows that they are regularly accompanied by non-verifiable references to the confessor's self-reported thoughts, feelings, and motivations during and after the commission of the crime; descriptions of the victim's appearance, mental and emotional state, and behavior; minimizing themes concerning the confessor's alleged motives; apologies and expressions of remorse; illustrators in the form of crime scene sketches and physical reenactments; and explicit assertions of voluntariness – cues strongly suggesting that the suspect's confession was born of personal experience. In short, although people are prone to trust police-induced confessions as a matter of common sense – regardless of the conditions under which they were given, and even in the absence of corroborating evidence – it appears that the task is rendered even more difficult for judges and juries by the interrogation methods used to generate these confessions.

Study 2

Although we have thus far identified common aspects of false confessions that may inflate perceptions of their credibility and although past research shows that confessions have great impact on perceptions of guilt, little is known about the aspects of confession evidence that mediate this impact. Study 1 indicated that false confessions are complex accounts of the admitted crime. All of the statements in our sample contained vivid visual and auditory details about the crime and how it was committed; 80% contained a statement of motivation to explain why the suspect committed it; and 40% contained an apology or expression of remorse.

Building upon these results, we conducted a mock jury experiment to determine the individual and cumulative effects on potential jurors of three components of confessions: visual and auditory details, a statement of motivation, and an apology and expression of remorse. Research in non-forensic contexts has shown that the perceived plausibility of a story concerning human behavior is enhanced by the presence of vivid details (Koehler, 1991). Moreover, the attributions of causality that are inherent to motive statements have been shown to increase juror's perceptions of guilt (Kaplan, 1989). Thus, we hypothesize that, when compared to a simple admission, jurors will rate confessions elaborated with details and motive statements as more indicative of the confessor's guilt.

Apologies and expressions of remorse play a complex but powerful role in the criminal justice system – often, for example, increasing sympathy and reducing negative perceptions of the presumed offender (Petrucci, 2002). Wrongdoers who apologize or show remorse tend to be viewed more favorably than those who do not (e.g. Bornstein, Rung, & Miller, 2002; Darby & Schlenker, 1982; Ohbuchi, Kameda, & Agarie, 1989; Scher & Darley, 1997). In addition, some studies have shown that mock jurors tend to be more lenient in sentencing defendants who show remorse for their crimes (e.g. Robinson, Smith-Lovin, & Tsoudis, 1994; Rumsey, 1976).

Most research in a legal venue has involved appraisals of offenders whose guilt has been determined (Etienne & Robbennolt, 2007). The potential role of apologies and remorse in disputed confession cases is thus particularly intriguing because both signal the confessor's acceptance of responsibility. Study 1 revealed that 40% of false confessors apologized or expressed remorse. Therefore we sought to test the effects of apology and remorse on mock jurors' judgments of guilt. When a confession is in dispute, we predicted that the presence of an apology and remorse will indicate that the defendant had accepted responsibility for the crime, thus indicating guilt. Although they communicate different messages – an apology admits fault; remorse expresses regret – both are present in many confessions and both imply an acceptance of responsibility. Thus, for the purposes of this study, we combined the two into one variable that we called 'apology.' We hypothesized that the commonly seen benefits of apologizing would be negated here. As with details and motive statements, we predicted that the presence of an apology would increase perceptions and confidence in guilt.

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Method

Participants and design

One hundred and forty-one introductory psychology students participated in exchange for extra course credit. Participants were randomly assigned to one of nine cells produced by a 2 (details present vs absent) $\times$ 2 (motive explanation present vs absent) $\times$ 2 (apology present vs absent) factorial design with an added no-confession control group. Three participants were excluded from analyses because they incorrectly answered two or more manipulation check questions, suggesting they did not carefully read the case (resulting *n*s = 16–19 per cell). An additional 17 participants were randomly assigned to a no-confession control group. Four of these participants were excluded because they erroneously recalled that the defendant had confessed ($n = 13$).

Procedure

Experimental sessions were conducted in small groups ranging in size from two to eight participants. They were told that they would read a summary of a criminal case, evaluate the evidence against the defendant, and answer a series of questions. In each experimental condition, participants read a two-page case summary describing a rape and murder, the ensuing police investigation, and the interrogation of the suspect who was subsequently arrested. In the experimental versions of this summary, the defendant confessed to police during his interrogation but then retracted that confession. Participants in these groups then received one of eight written versions of a signed confession. Those in the control group were told that the defendant had denied involvement in the crime, whereupon they were presented with a signed statement of denial. All participants completed the same questionnaire and a series of manipulation checks. Afterward they were debriefed and thanked for their time.

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Stimulus materials

All participants read a one-page summary of case entitled *State v. Trotter*. The case facts were derived from an actual US case from New York involving a DNA exonerated confessor convicted of murdering a local teenage girl. The state maintained that the defendant and two friends had abducted, raped, and murdered the girl on her way home from work and then left her dead in a wooded area. The defendant maintained that he was partying with friends at the time of the crime. Except for the confession, the state's evidence was purely circumstantial: an inconclusive result on a lie detector test, suggestive but not conclusive hair evidence, and a jailhouse snitch of questionable credibility. The basic case without the confession was pilot tested on 20 participants and yielded a conviction rate of 30%.

By random assignment, experimental participants read one of eight confessions (or no-confession control group) adapted from the actual case, supplemented by various common elements of false confessions identified in Study 1. In the *details-present* condition, the confession included an account of what happened and *how* it happened. This account included a step-by-step description of the abduction, rape, and murder of the victim as well as specific details about what the victim wore ('She had on a blue jean jacket, I think a dark top, black pants and white high top sneakers'), what she said ('I heard her say she wanted to get out' and 'kept saying over and over again that she was going to the police'), and what she did ('she screamed' and 'when she came to, she was crying'), as well as what the alleged accomplices said ('Dennis called her to invite her in') and did ('That's when John or Dennis, I don't know which, punched her in the face . . . The next thing I knew they were pulling off her clothes and raping her') during the commission of the crime. In the details absent condition, the defendant's admission of guilt was not accompanied by these narrative details. In the *motive-present* condition, the confession contained an account of *why* the men raped the teen (they were drunk, high, and wanted sex) and then murdered her (they were afraid she would report them to the police). In the *apology-present* condition, the confession included an expression of remorse for having committed the crime, an apology to the victim's family, and a promise to not commit such a crime again. The order of these confession components was

counterbalanced in cells in which two or three of them were presented. In the no-confession control group, participants read a short statement of denial signed by the defendant.

Dependent measures

After the case summary and statement from the defendant, to ensure that participants had read, understood, and recalled the information necessary for their condition, we asked a series of yes or no questions about whether or not the defendant had confessed and, if so, whether each of the components (details, motive, apology) was present in the confession. The results confirmed the effectiveness of our manipulations. More participants in the confession conditions (100%) than in the no-confession control group (23%) stated that the defendant had confessed, $\chi^2(1, N = 158) = 117.5$, $p < 0.001$ (the four participants in the control group who erroneously believed that the defendant had confessed were dropped from further analysis). More participants in the details condition (100%) than in the no-details condition (38%) stated that the defendant provided details of what happened and how it happened, $\chi^2(1, N = 141) = 50.8$, $p < 0.001$. More participants in the motive condition (74%) than in the no-motive condition (8%) stated that the defendant explained why he committed the crime, $\chi^2(1, N = 141) = 58.1$, $p < 0.001$. Finally, more participants in the apology condition (98%) than in the no-apology condition (6%) stated that the defendant had apologized, $\chi^2(1, N = 141) = 118.1$, $p < 0.001$.

Participants were then asked to render a verdict (*guilty* or *not guilty*) and rate their confidence in that verdict on a 10-point scale (1 = *not at all*, 10 = *very*). Next they estimated the likelihood that the defendant committed the crime (0–100% scale, in intervals of 5) and how convincing they found the confession to be (1 = *not at all* and 10 = *very*). Finally, to assess how the presence of a confession might affect perceptions of the circumstantial evidence in the case, participants rated how convincing of guilt they found each of the five pieces of circumstantial evidence in the case to be. These were (1) an inconclusive lie detector test; (2) hairs consistent with the victim's found in a co-defendant's van; (3) the testimony of a jail house informant; (4) the defendant's history of excessive drinking; and (5) the lack of an alibi for the defendant (all on 10-point scales, 1 = *not at all* and 10 = v*ery*).

Results

Verdicts

Analysis of verdicts replicated the usual finding concerning the powerful impact of confession evidence. In sharp contrast to the low 30% conviction rate in the baseline no-confession control group, 95% of participants voted guilty across the eight confession groups of the $2 \times 2 \times 2$ factorial design, $\chi^2(1, N = 151) = 51.6$, $p < 0.001$. As a result of this ceiling effect, there were no significant differences in verdict among the experimental conditions.

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Verdict-confidence scores

To obtain a more sensitive measure of verdict preferences, a scalar variable was created by multiplying each participant's confidence rating by −1 for a not guilty verdict or + 1 for a guilty verdict (scores could thus range from −10 to + 10). A one-way ANOVA showed that participants were significantly more likely to favor conviction in the confession conditions ($M = 8.28$, SD = 3.62) than in the no confession control group ($M = -3.31$, SD = 7.51), $F(1,149) = 96.17$, $p < 0.001$, $H\eta_p = 0.392$. Furthermore, a three-way ANOVA on verdict-confidence scores in the confession conditions revealed the predicted significant main effect for the presence of details, $F(1,130) = 4.23$, $p = 0.042$, $H\eta_p = 0.03$. Jurors exhibited more confident guilty verdicts when the confession contained details of how the crime was committed ($M = 9.11$, SD = 1.80, 95% CI [8.81, 9.41]) than when it did not, ($M = 7.40$, SD = 4.72, 95% CI [6.61, 8.19]). A significant main effect was also obtained for the presence of a motive statement, $F(1,130) = 4.23$, $p = 0.042$, $H\eta_p = 0.03$. Jurors were more confident in their guilty verdicts when the confession contained a motive statement ($M = 8.82$, SD = 2.42, 95% CI [8.41, 9.23]) than when it did not ($M = 7.70$, SD = 4.54, 95% CI [6.94, 8.46]). Although the results were in the predicted direction, there was not a significant main effect for the presence or absence of an apology (Ms = 7.94 and 8.61, SDs = 3.32 and 3.91, respectively), $F(1,120 = 1.43)$ $p = 0.23$.

There was also a significant details × motive interaction $F(1,130) = 8.15$, $p = 0.024$, $H\eta_p = 0.04$. Specifically, jurors were more confident in their guilty verdicts whenever the confession contained factual details about the crime – regardless of the presence or absence of a motive (Ms = 9.06, 9.17, SDs = 2.24, 1.23, respectively), $F(1,130) = 0.03$, $p = 0.87$, $d = 0.06$, 95% CI [−1.76, 1.49]. When the confession did not contain these details, however, jurors were more confident in their guilty verdicts when a motive statement was present ($M = 8.58$, SD = 2.59) than when it was absent ($M = 6.03$, SD = 6.12), $F(1,130) = 9.15$, $p = 0.003$, $d = 0.54$, 95% CI [0.89, 4.24]. No other interactions were significant. These results are presented in Figure 1.

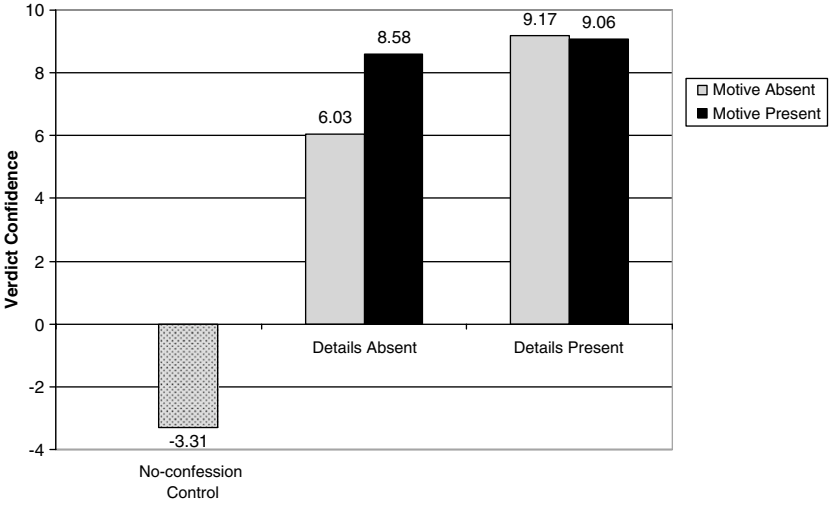

Figure 1. Study 2 verdict-confidence scores.

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Probability-of-commission ratings

Participants estimated the likelihood that the defendant committed the crime on a 0–100% scale (notably, verdict-confidence scores and probability-of-commission ratings were highly correlated, $r = 0.70$, $p < 0.001$). Similar to our analysis of the verdict-confidence scores, a three-way ANOVA revealed a significant main effect for details and a nearly significant effect for motive. The main effect for details showed that participants saw the defendant as more likely to have committed the crime when the confession contained details ($M = 90.35$, SD = 12.22, 95% CI [88.29, 92.41]) than when it did not ($M = 80.07$, SD = 18.90, 95% CI [76.89, 83.25]), $F(1,130) = 15.13$, $p < 0.001$, $H\eta_p = 0.10$. The effect for motive showed that participants saw the defendant as slightly more likely to have committed the crime when the confession contained a motive statement ($M = 87.64$, SD = 13.12, 95% CI [85.43, 89.85]) than when it did not ($M = 82.88$, SD = 19.49, 95% CI [79.60, 86.16]), $F(1,130) = 3.77$, $p = 0.056$, $H\eta_p = 0.03$. Once again, the effect for apology on these estimates was in the predicted direction but not quite significant (Ms = 82.86 & 87.79, SDs = 18.21 and 14.56, respectively), $F(1,130) = 3.25$, $p = 0.074$. There were also no significant interactions.

Ratings of the confession and other evidence

Participants rated how convincing the defendant's statement was of his guilt on a 1–10 scale. A three-way ANOVA revealed that participants rated the confession as more convincing of guilt when it contained details ($M = 8.92$, SD = 1.43, 95% CI [8.68, 9.16]) than when it did not ($M = 7.94$, SD = 2.23, 95% CI [7.56, 8.32]), $F(1,130) = 11.77$, $p = 0.001$, $H\eta_p = 0.08$, and when it contained a motive statement ($M = 8.90$, SD = 1.52, 95% CI [8.64, 9.16]) than when it did not ($M = 7.94$, SD = 2.18, 95% CI [7.57, 8.31]), $F(1,130) = 11.60$, $p = 0.001$, $H\eta_p = 0.08$. The effect for apology was not quite significant (Ms = 8.22 and 8.66, SDs = 2.06 and 1.76, respectively), $F(1,130) = 2.10$, $p = 0.15$. Consistent with the verdict confidence measure, there was a significant details × motive interaction $F(1,130) = 8.15$, $p = 0.005$, $H\eta_p = 0.06$. Specifically, jurors rated the confession as more convincing of guilt when it contained details regardless of the presence or absence of a motive (Ms = 9.00, 8.83, SDs = 1.35, 1.69), $F(1,130) = 0.16$, $p = 0.69$. In the absence of details, however, jurors found the confession more convincing of guilt when it contained a motive statement ($M = 8.81$, SD = 1.52) than when it did not, ($M = 6.94$, SD = 2.38), $F(1,130) = 18.99$, $p < 0.001$, $d = 0.94$, 95% CI [1.02, 2.72]. No other significant interactions were obtained.

In addition to rating the credibility of the confession, participants were asked to rate how convincing of guilt they found the circumstantial evidence items presented by the prosecution. Although a one-way ANOVA comparing the control group denial to the simple admission found no significant differences in jurors' ratings of this evidence, a three-way ANOVA comparing the experimental conditions found a significant details × apology interaction on one item, $F(1,127) = 6.12$, $p = 0.015$, $H\eta_p = 0.046$. Specifically, when the confession contained details, jurors rated the hair evidence as more convincing of guilt when the confession lacked an apology ($M = 8.64$, SD = 1.68) than when an apology was present ($M = 7.58$, SD = 1.94).

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Discussion

Study 2 revealed that a simple, non-elaborated admission of guilt, even though it is later retracted, provided mock jurors with a sufficient basis for conviction relative to a no-confession control group. Moreover, a more elaborate confession – specifically one that contained details of *how* the crime was committed, or a motive to explain *why* it was committed – significantly increased the impact of that confession. Jurors who read a confession that described the 'how' and 'why' of the crime found the statement more believable, were more confident in their guilty verdicts, and saw the defendant as more likely to have committed the crime, than those that were not provided with such information. These findings suggest that jurors presented with a detail-rich false confession would be harder to sway than those presented with a simple admission of guilt. This finding is especially noteworthy in light of the fact that simple admissions have proved particularly persuasive in past studies of confession effects on mock juries (e.g. Henkel, 2008; Kassin & McNall, 1991; Kassin & Neumann, 1997; Kassin & Sukel, 1997; Kassin & Wrightsman, 1980, 1981; Neuschatz et al., 2008). Although we failed to find a significant effect for apology in this study, our lack of significant findings may have been due to a lack of power. This aspect of confession should thus be investigated further, perhaps in the context of simple admissions that lack vivid details and statements of motivation. In addition, apology and remorse should be separated into distinct aspects of confession to identify their respective effects on perceptions of guilt.

Like many juror confession studies, ours exhibited a ceiling effect on conviction rates (95% across confession groups), limiting our ability to fully discern what elements of false confessions are more and less persuasive of verdicts. The predicted effects of details and motive were obtained, however, on the more sensitive continuous measures – verdict-confidence scores and probability-of-commission ratings. Another limitation concerns the fact that we collected data only from individual mock jurors, not deliberating juries which, at times, can serve to mitigate the tendency of individuals to convict. Third, as in actual cases, the confession we presented was longer when it contained details than when it did not, thereby conflating message content and length. Study 1 showed that false confessions are richly detailed accounts that often contain the elements we tested. Further studies should examine whether jurors are influenced not only by the content of a confession but by its sheer wordage or length.

General discussion

Although false confessions are drawn from innocent suspects lacking guilty knowledge, Study 1 showed that most are not simple admissions but rather rich and textured narratives that contain a broad range of details about how the crime was committed as well as an explanatory motive. Study 2 showed that these aspects of narrative confessions increase perceptions of their credibility and of the confessor's guilt. This research helps to explain the power of confession evidence in real cases.

Research has shown that people cannot readily distinguish between true and false confessions and that confession evidence has a potent, if not irrevocable, effect on juries. Some common social perception phenomena – such as the fundamental

attribution error, the truth bias, and various confirmation biases – help explain why false confessions are so readily believed, sometimes even in the face of contradictory and exculpatory evidence. It is now clear, however, that police practices designed to convert interrogation-induced admissions into full narrative confessions (e.g. containing details of who, what, when, and how; statements of motivation; expressions of remorse; and error corrections) can enhance the credibility of these confessions. During interrogation, for example, American investigators are trained to confront suspects with assertions of guilt, and sometimes, as part of that process, inform suspects about the evidence against them (e.g. showing pictures of the victim and crime scene). This practice, however, can also communicate details of the crime, enabling an innocent suspect incentivized by stress and various interrogation tactics to regurgitate these details once he or she has made the decision to confess.

A recent content analysis of 33 false confessions showed that all of them contained accurate crime details; 32 contained *non-public* information that, according to detectives, 'only the perpetrator could have known' (Garrett, 2010, p. 1068). Because the confessors were innocent and had no firsthand basis for this guilty knowledge, it is clear that police had inadvertently or purposefully communicated these details. In an article entitled, 'I Took A False Confession – So Don't Tell Me It Doesn't Happen!' Washington DC Detective Jim Trainum (2007) described finding out that he took a false confession. Upon reviewing the videotape of the interrogation, he discovered that: 'To demonstrate the strength of our case, we showed the suspect our evidence, and unintentionally fed her details that she was able to parrot back to us at a later time.'

In addition to indicating the presence of visual and auditory details, our content analysis reveals that false confessions obtained in the US contain statements about jealousy, revenge, sexual frustration, alcoholic intoxication, peer pressure, and other possible crime motives; minimizing themes that provide face-saving excuses and moral justification; assurances of voluntariness; apologies and expressions of remorse; and corrected errors, the presence of which should only be known to the perpetrator. In addition, these results show that at least two common aspects of false confessions – crime details and motive statements – create complex narratives that are highly credible and highly incriminating for jurors who must render a verdict. At this point, having described the content of false confessions, future research should aim to use the same coding scheme on a comparable sample of corroborated *true* confessions to identify similarities and differences.

We believe that the present results provide a strong empirical foundation for the argument that all interrogations should be electronically recorded. In England, under the Police and Criminal Evidence Act of 1984, the mandatory requirement for tape-recording police interviews was introduced to safeguard the legal rights of suspects and the integrity of the process. At first resisted by police, this requirement has positively transformed the ways in which police interviews are conducted and evaluated (for a review, see Gudjonsson, 2003). Over the years, the need for taping has drawn a number of advocates in the US as well (see Drizin & Reich, 2004; Sullivan, Vail, & Anderson, 2008; The Justice Project, 2007) and was the first reform recommended in a recently published White Paper of the American Psychology–Law Society (Kassin et al., 2010).

There are two sets of advantages to a recording policy. To begin, the presence of a camera or recorder will deter interrogators from using highly coercive tactics and

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deter frivolous defense claims of coercion where none existed. Second, an electronic record provides trial judges and juries with a full, objective, and accurate account of the process by which a confession was taken – a common source of ignorance, misunderstanding, and dispute in court. Most of the confessions used in our content analysis were presented in isolation and out of context, giving judges and juries little insight into how they were constructed – for example, where the details originated, or how the motive statements came about. Because it is now clear that these confessions were false and the confessors were innocent, it is apparent in hindsight that these elements were derived not from personal experience but from secondhand sources. What if the eliciting interrogation was available as well? To examine the impact of this exposure, Kassin, Leo, Crocker, and Holland (2003) found that mock jurors who watched videotapes of the full interrogation, when compared to those who saw only the final confession, were more likely to make accurate judgments of the confession itself, convicting the guilty and acquitting the innocent confessors. These results suggest that judges and juries could become more accurate fact finders if they could see not only the full and final narrative confession but also the conditions under which it was produced.

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