

## On the Power of Confession Evidence: An Experimental Test of the Fundamental Difference Hypothesis

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*In Arizona v. Fulminante (1991), a U.S. Supreme Court majority stated that confessions are similar to, not fundamentally different from, other types of evidence. To evaluate this claim, three mock juror studies compared the impact of confessions to other common forms of evidence. In Experiment 1, participants read summaries of four criminal trials (murder, rape, assault, theft), each of which contained a confession, an eyewitness identification, character testimony, or none of the above. Significantly, the confessions produced the highest conviction rates. In Experiments 2 and 3, participants read a murder or assault trial containing all three types of evidence and made a series of midtrial judgments. Results indicated that the confession was seen as the most incriminating, followed by the eyewitness and character testimony. Although the comparisons we made are limited in certain respects, our findings suggest that confessions are uniquely potent.*

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In criminal law, confession evidence has long been regarded as powerfully incriminating against a defendant. In his classic treatise on evidence, Wigmore (1970) ranked confessions as highest in the scale of evidence. McCormick (1983) further stated that the "introduction of a confession makes the other aspects of a trial in court superfluous" (p. 316). And in *Bruton v. United States* (1968), the U.S. Supreme Court argued that confessions are "probably the most probative and damaging evidence that can be admitted" (p. 7).

Over the years, the courts have established guidelines for the admissibility of confession evidence. For example, the U.S. Supreme Court ruled that a confession must be voluntary, not coerced, as determined by the "totality of the relevant circumstances" (*Culombe v. Connecticut*, 1961) and that the police

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must inform a suspect of his or her constitutional rights to silence and to an attorney (*Miranda v. Arizona*, 1966). Although there is no simple litmus test, judges will typically suppress a confession from evidence if it was elicited by brute force, threats of harm or punishment, offers of leniency or immunity, or without notifying the suspect of his or her *Miranda* rights (for recent reviews, see Kamisar, LaFave, & Israel, 1994; Kassin, 1997; Wrightsman & Kassin, 1993).

One reason for excluding involuntary confessions from the trial record is that even though suspects are sometimes coerced into making false confessions, their statements are still likely to influence a jury. Thus, convictions of the past were reversed automatically whenever an appeals court found that a coerced confession was erroneously admitted into evidence. Then in the recent case of *Arizona v. Fulminante* (1991), the U.S. Supreme Court broke new ground. In that case, Oreste Fulminante was convicted and sentenced to death for the murder of his young stepdaughter. There was no evidence linking him to the murder. While in prison for an unrelated crime, however, he was befriended by a fellow inmate who was really an FBI informant posing as an organized crime figure. The inmate warned Fulminante that other prisoners would attack him because of a rumor that he was a child killer — and that he would protect him in exchange for “the truth.” Fearing for his safety, Fulminante confessed. He later sought to suppress the statement, but the trial judge ruled that the confession was not coerced. On appeal, the Arizona Supreme Court disagreed and ordered a new trial. The U.S. Supreme Court also saw the confession as coerced and its admission as prejudicial error. By a 5-4 majority, however, the Court asserted for the first time that, in principle, an erroneously admitted confession may constitute “harmless error.”

The concept of harmless error was first articulated in *Chapman v. California* (1967), where the U.S. Supreme Court argued that erroneously admitted testimony can be considered harmless if the State can show beyond a reasonable doubt that “the error complained of did not contribute to the verdict obtained” (p. 24). In that ruling, however, the Court cautioned that “some constitutional rights [are] so basic to a fair trial that their infraction can never be treated as harmless” (p. 23). Specifically, the Court excluded from its analysis any infringements on the rights to counsel, an impartial judge, and freedom from coerced confessions.

The *Fulminante* Court’s unprecedented application of harmless error to coerced confessions was based on two assumptions. One is that jurors can correctly evaluate and, if necessary, attach zero weight in their decision making, to testimony regarding a coerced confession. The second assumption is that special status should not be conferred upon erroneously admitted confession evidence because confessions are not fundamentally different from other potent types of evidence.

Kassin and Sukel (1997) examined the first hypothesis in two mock jury studies. In both experiments, participants read one of five versions of a murder trial. In a low-pressure version, the defendant was said to have confessed immediately upon

questioning. In a high-pressure version, participants read that the defendant was in pain while being interrogated and frightened when the detective waved his gun. The judge then ruled the confession admissible or inadmissible (there was also a no-confession control group). The results offered illusory support for the Supreme Court's harmless error analysis. Confronted with a confession produced by high-pressure interrogation tactics, participants responded in a legally prescribed manner: they judged the statement to be involuntary and said that it did not affect their decisions. On the all-important measure of verdicts, however, all groups receiving a confession were more likely to vote guilty — despite the high-pressure police tactics and despite the judge's instruction to disregard. These findings suggest that confession evidence is inherently prejudicial and that people do not discount it even when it was logically and legally appropriate to do so.

The present research tested the second assumption contained in *Fulminante*: that confessions are “similar” to (the term used in the majority opinion) rather than fundamentally different from (as described in the minority opinion) other types of evidence. As noted earlier, many eminent legal scholars have, on the basis of intuition, ranked confessions as highest in the scale of evidence (*Bruton v. United States*, 1968; McCormick, 1983; Wigmore, 1970). To date, however, no research has systematically evaluated this claim. As a first step, we thus sought to compare the effect of confessions to that of two other common and powerful categories of evidence: eyewitness identifications and character testimony.

Over the years, hundreds of studies have pointed to problems in eyewitness identifications (for recent reviews, see Ross, Read, & Toglia, 1994; Sporer, Malpass, & Koehnken, 1996), thus producing a body of knowledge about which experts testify in court (Kassin, Ellsworth, & Smith, 1989). Yet numerous studies have shown that juries tend to overestimate the accuracy of eyewitness testimony and are highly influenced by that evidence when it is presented in court (for a review, see Wells, 1993). Indeed, it has been suggested that even an eyewitness who has been discredited has an impact on jurors (e.g., Loftus, 1974), in part by influencing the way they interpret and weigh the other evidence for the prosecution (Leippe, 1995).

A second common and potent type of evidence comes in the form of character testimony. Within the rules of evidence, information may be presented about a defendant's character, or disposition to engage in certain forms of conduct (e.g., violence, dishonesty). Based on the concern that juries would attach too much weight to such testimony, the law generally excludes such evidence from trial. There are, however, exceptions to this rule (e.g., when a defendant takes the stand, putting his or her credibility at issue, or when the defendant offers positive character evidence to support the claim that he or she did not commit the crime), which enable prosecution witnesses to state their opinions of the defendant's character or testify about his or her reputation (for a review of case law, see Mueller & Kirkpatrick, 1995). The law's concern that character evidence would have an excessive impact is reinforced by a good deal of research. For example, studies have shown that jurors are highly influenced by disclosure of a prior conviction (Greene & Dodge, 1995; Hans & Doob, 1976; Wissler & Saks, 1985), concurrent charges revealed when crimes are joined at trial (Greene &

Loftus, 1985; Tanford & Penrod, 1984), and general information about a defendant's personal characteristics (Dane & Wrightsman, 1982; Kaplan, 1985).

Three mock jury studies evaluated the comparative impact of confession evidence. In Experiment 1, participants read summaries of four criminal trials (murder, rape, assault, and theft). Each contained either a confession, eyewitness identification, character testimony, or none of the above. They then rendered a verdict and answered other case-related questions. In Experiments 2 and 3, participants read summaries of a murder or assault trial containing all three types of evidence and rated their impact both during and after the trial presentations. Consistent with the minority view in *Fulminante*, we hypothesized that confessions are more potent than other incriminating forms of evidence.

## EXPERIMENT 1

### Method

#### *Participants and Design*

Sixty-two psychology undergraduates participated in exchange for extra course credit. Each participant read summaries of four criminal trials (murder, rape, aggravated assault, and automobile theft, in that order). Each trial contained weak circumstantial evidence plus a confession, eyewitness identification, or character witness (there was also a fourth, no-evidence control group). The presentation order of the evidence was fully counterbalanced across participants, so that the confession, eyewitness, character, and control conditions were presented first, second, third, and fourth an equal number of times. The entire experiment was conducted in group sessions ranging in size from 8 to 15.

#### *Stimulus Trial Summaries*

Each participant read four two-page cases containing summaries of opening statements, direct and cross-examinations of witnesses, closing arguments, and a judge's instruction. Each case contained either a confession, an eyewitness identification, a character witness, or no additional evidence.

*The Murder Trial.* The murder case involved a man charged with the murders of his estranged wife and male neighbor. The prosecutor charged that the defendant, Charles Wilson, had killed his wife and neighbor in a fit of jealous rage after finding them together. The defendant claimed that he merely found the bodies when he returned to his former home to retrieve personal checks and bank documents. In a control version of the case, the evidence was circumstantial, weak, and ambiguous — designed to elicit a low baseline conviction rate. Indeed, the only evidence against the defendant was that he was six feet tall (the estimated height of the murderer), that he had called his lawyer before contacting the police, and that he had recently hired, but then fired, a private investigator to follow his wife.

In the *confession* group, it was revealed through the testimony of a police officer that the defendant was arrested, brought to the police station, and questioned for an hour, at which point he “lost it” and confessed to the murders. On cross-examination, however, the officer admitted that Wilson was upset and incoherent at the time, and that he immediately retracted his confession. In the *eyewitness* group, a neighbor testified that he was parked outside the Wilson home the night of the murder, heard yelling, saw someone run out with something in his hand, and identified the defendant in a lineup 1 week later. On cross-examination, this eyewitness admitted that it was dark at the time and that he was parked 60 feet away. Finally, in the *character* group, a neighbor testified that Wilson was very intense, that he and his wife were never seen together in public, and that they were often heard fighting. On cross-examination, this witness conceded that he did not know the Wilsons personally and had no first-hand knowledge.<sup>3</sup>

*The Rape Trial.* In this case, the defendant, Herman Burks, was tried for aggravated rape. As in the murder case, the evidence in the baseline control group was weak. According to the prosecution, Burks entered the victim’s apartment building, approached her from behind, unscrewed a light bulb, and raped her in the foyer. The key evidence was that the victim had identified the defendant who, as it turns out, was at a drinking party in her building that day. In contrast, the defense pointed out that Burks was too short to have unscrewed the light bulb, that the victim did not smell alcohol on the rapist’s breath, and that hair samples found at the scene were of no value because the defendant was in the building.

In the *confession* group, a police detective testified that in talking to the police, Burks confessed to the rape after about an hour of stressful interrogation. However, Burks claimed that he was arrested the morning after a drinking party and was not in a condition to be questioned in a coercive manner. He soon retracted his confession. In the *eyewitness* group, a woman testified that on the day in question, she walked down the hallway stairs and saw a man standing over the victim, put something into his pocket and run out the door. She later positively identified the defendant as the man she saw. On cross-examination, this eyewitness conceded that the hall lighting was dim and that everything happened very quickly. In the *character* group, a neighbor of the defendant pointed out that Burks had a reputation in the community for fighting with his girlfriend and for having bad relationships with women in general. When cross-examined, this witness admitted that he did not know the defendant very well and had no first-hand knowledge.

*The Assault Trial.* In this case, the defendant, Samuel Adams, was tried for aggravated assault in the stabbing of Michael Zemp. Zemp had owed him money, so the two men met in a bar to settle up. According to the prosecution, a heated discussion ensued, a fight broke out, several other customers joined in, and Adams stabbed Zemp in the stomach with a broken glass. As in the other trials, the evidence in the control group was weak, and nobody — including the victim — actually saw who did the stabbing.

<sup>3</sup>In this case, and in the others as well, the evidentiary basis for the admission of negative character testimony was established by having the defendant offer evidence of his positive character (e.g., “this isn’t me, I’m not a violent person by nature”).

In the *confession* group, the defendant was arrested in the parking lot of the bar after the fight. He was immediately taken in handcuffs to the station, where he confessed after an hour of a grueling interrogation. Adams later withdrew his confession, claiming that he was in shock at the time, dazed, and confused. In the *eyewitness* group, a customer from the bar said that he saw the whole fight and soon identified Adams in a lineup as the person who stabbed Zemp. When cross-examined, he admitted that the bar was crowded that night and that he was not 100% certain of his identification. The *character* group included a witness who said that Adams was a regular at the bar and had a reputation for getting drunk and having an explosive temper. On cross-examination, this witness admitted that he never actually saw Adams "blow up."

*The Automobile Theft Trial.* In this case, the defendant, Ron Oliver, was charged with stealing a used car and driving it across state lines. According to the prosecution, Oliver was looking at used cars, liked a Ford Mustang, and asked the salesman if he could test drive the car home to show to his parents. When Oliver did not return by an agreed-upon time, the dealer called the police. Oliver was later apprehended on a highway in a neighboring state. According to the defense, he had no idea that the car was stolen because he was just driving it home for an acquaintance, who was similar in height and general appearance.

In the *confession* group, a state trooper testified that he spotted Oliver driving the stolen vehicle, made the arrest, and interrogated him for over an hour, until the defendant confessed. On cross-examination, the trooper admitted that Oliver had not consulted an attorney and was under intense pressure to make a statement. In the *eyewitness* group, a customer who was at the dealership that day positively identified Oliver in a lineup as the man who drove the car from the lot. On cross-examination, this customer admitted that he never actually interacted with the man he saw and was not paying very close attention. In the *character* group, a co-worker of Oliver's said it was common knowledge at work that Oliver could not be trusted. When cross-examined, however, this witness conceded that he did not know Oliver personally and never actually worked on the same shift with him.

### *Procedure*

At the beginning of the session, participants were told that they would receive a packet containing four case summaries. They were asked to read each one carefully, fill out the accompanying questionnaire, and move on to the next case. An entire session took approximately 40 min to complete. All participants were then thanked, debriefed, and given credit for their time.

After reading each case summary, participants filled out a brief questionnaire in which they voted guilty or not guilty and rated their confidence in that judgment on a 10-point scale (1 = *not at all confident*, 10 = *very confident*). With verdicts being a dual function of the perceived probability that the defendant committed the crime (probability of commission) and the standard of proof deemed necessary for conviction (reasonable doubt), these variables were also assessed. All participants thus estimated the likelihood that the defendant committed the crime by circling a number from 0 to 100 (in multiples of five) and filled in the blank, "The defendant should be found guilty if there is at least a \_\_% chance that he committed the crime."

## Results

All participants read the murder case first, followed in sequence by the rape, assault, and theft cases, respectively. For the *murder* case, verdicts were significantly affected by the type of evidence,  $\chi_2(3, N = 62) = 12.39, p < .01$ . Specifically, participants were more likely to vote guilty when the prosecutor's case contained a confession (62%) than an eyewitness identification (27%), character witness (25%), or no additional evidence (13%). Specific comparisons indicated that the conviction rate was higher in the confession condition than in all other groups (all  $ps < .05$ ). Significant differences were also obtained on the probability-of-commission estimates,  $F(3, 58) = 7.41, p < .001$ , as the defendant was seen as more culpable when the case contained a confession ( $M = 77.19$ ) than when it included an eyewitness identification ( $M = 54.69$ ), character testimony ( $M = 49.33$ ), or no additional evidence ( $M = 44.33$ ). Finally, with regard to the standard of proof deemed as necessary for conviction, participants said there should be at least an 89.10% chance that the defendant committed the crime in order to vote guilty. This quantification of "beyond a reasonable doubt" matches estimates found in previous research (Kagehiro, 1990). There were no significant differences on this measure,  $F(3, 57) = 1.07, p > .50$ .

In the *rape* case, verdicts were again affected by the evidence manipulation,  $\chi_2(3, N = 62) = 15.41, p < .01$ . The conviction rate was highest when the case contained a confession (56%), followed by the eyewitness identification (40%), character testimony (13%), and control conditions (0%). Specific comparisons revealed that the conviction rate was significantly higher in the confession and eyewitness conditions than in the character testimony and no-evidence conditions ( $ps < .05$ ). A similar pattern was obtained on probability-of-commission ratings,  $F(3, 58) = 10.60, p < .001$ , which were significantly higher when the case contained a confession ( $M = 74.06$ ) than in the eyewitness, character testimony, and no-evidence conditions ( $Ms = 59.67, 40.13, 29.06$ , respectively). With regard to standards of proof deemed necessary for conviction, participants set higher standards in the no-evidence and confession conditions ( $Ms = 92.67$  and  $91.66$ , respectively) than in the character testimony and eyewitness conditions ( $Ms = 83.19$  and  $81.73$ , respectively). This difference was marginally significant,  $F(3, 57) = 2.57, p < .06$ .

In the *assault* case, participants were far more likely to vote for conviction when the case featured a confession (60%) than when it included an eyewitness identification (20%), character testimony (12.5%), or no evidence (6%),  $\chi_2(3, N = 62) = 14.34, p < .01$ . In this case, paired comparisons indicated that the conviction rate was significantly higher in the confession condition than in the other evidence conditions (all  $ps < .05$ ). This pattern was also obtained on probability-of-commission estimates, which were higher in the presence of a confession ( $M = 73.33$ ) than in the eyewitness ( $M = 54.67$ ), character ( $M = 46.25$ ), and no-evidence conditions ( $M = 40.25$ ),  $F(3, 58) = 5.71, p < .01$ . On average, participants set their standard of proof at 86.67%. There were no differences in these estimates as a function of the type of evidence presented,  $F(3, 57) < 1$ .

**Table 1.** Mean Probability-of-Commission Estimates for the Four Cases and Evidence Conditions

Cases	Confession	Eyewitness	Character	Control
Murder	77.19	54.69	49.33	44.33
Rape	74.06	59.67	40.13	29.06
Assault	73.33	54.67	46.25	46.25
Theft	68.00	73.67	58.67	54.38
Total	73.15	59.34	49.94	43.50

In the *automobile theft* case, verdicts were not significantly affected by the evidence manipulation,  $\chi_2(3, N = 61) = 4.50, p < .20$ . In contrast to the pattern obtained in all other cases, the eyewitness identification elicited the highest conviction rate (60%), followed by the confession (47%), character testimony (33%), and no-evidence groups (25%). Although probability-of-commission estimates were somewhat higher when there was an eyewitness ( $M = 73.67$ ) than in the confession ( $M = 68.00$ ), character ( $M = 58.67$ ), and no-evidence conditions ( $M = 54.37$ ), these differences also were not significant,  $F(3, 57) = 1.82, p < .50$ . Finally, the mean standard of proof was set at 88.27%. As in other cases, there were no significant differences on this measure,  $F(3, 58) = 1.05, p > .50$ .

To summarize, confession evidence proved to be significantly more incriminating than an eyewitness identification or character testimony in three of the four cases. The only exception occurred in the automobile theft trial, where the eyewitness identification elicited more guilty votes and higher probability-of-commission estimates than did the confession. Although the latter difference was not significant, it may have resulted from the fact that the eyewitness in this case corroborated a second eyewitness whose testimony was part of the no-evidence control condition. As shown in Table 1, the combined results are consistent with the hypothesis that confessions are uniquely persuasive in their impact on juries.

## EXPERIMENT 2

Experiment 1 showed that the introduction of confessions into evidence increased the conviction rate more than did eyewitness or character testimony. A second experiment was designed to retest this hypothesis by measuring the online (i.e., during the trial) impact of confessions relative to other evidence. All participants were thus presented with a case summary containing a confession, an eyewitness, and character testimony. Each participant was provided with a hand-held response dial and asked to turn the dial up or down at specified points in the trial to indicate the extent to which the most recently presented evidence led them to see the defendant as guilty or innocent.



## Method

### *Participants and Design*

Forty-three undergraduates played the role of mock jurors in exchange for extra course credit. They were randomly assigned to one of six groups produced by counterbalancing the presentation order of the confession, eyewitness, and character testimony. The study was conducted in small-group sessions.

### *The Stimulus Trial*

The stimulus trial used in this study was a modified version of *Illinois v. Adams*, the aggravated assault case used in the first experiment. The case still involved a dispute between two men in a bar, in which one man stabbed another with broken glass. The evidence against the defendant in this case contained a confession, an eyewitness identification, and character testimony. The trial presentation contained 18 paragraphs that summarized the opening statements, the examination of eight witnesses, closing arguments, and the judge's instructions. The three key items of evidence — including both the direct and cross-examinations — appeared in paragraphs 4–5, 7–8, and 10–11. Their presentation order was fully counterbalanced, so each item appeared first, second, and third an equal number of times.

### *Procedure*

Upon their arrival, participants were told that to simplify and condense the trial presentation, we had prepared a written summary of the facts and arguments. They were informed that the entire case would be summarized in paragraphs and shown on a TV monitor, and that each paragraph would be presented for 40 s (this pace was determined through a pretesting of reading times).

To examine the instantaneous “online” impact of the key items of evidence, we gave each participant a wireless hand-held response dial equipped with a digital numeric display that ranged from 0 (with the dial hand pointed to the far left) to 100 (with the dial hand pointed to the far right), with a midpoint of 50 (with the dial pointed up at a 90° angle).<sup>4</sup> The experimenter then read verbatim the following instructions:

To get your views on the material while it is fresh in your mind, I will ask you to register your responses using these hand-held dials. Each of you will be given a dial to hold. After each paragraph, the word “respond” will appear on the screen. You will then have 10 sec to register your response to that item on a scale ranging from 0 to 100. You can make your response as precise as you want by checking the digital readout on the face of the dial.

<sup>4</sup>These dials are part of a system known as a Perception Analyzer, a computerized program that simultaneously records and stores multiple responses from a large number of participants.

As I said, your responses can range from 0 to 100. As we start the experiment, I'd like you to set your dial to 50 — which we define as the neutral point. To respond to the trial evidence, you should move your dial up or down from that point, depending on your view of the evidence as summarized in the preceding paragraph. With 50 being the neutral point, move the dial up toward 100 if the paragraph you just read leads you to see the defendant as guilty. So you might move the dial up to 55, 60, 75, 90, or even 100 depending on how guilty you think the defendant is based on the last item of evidence. With 50 being the neutral point, you can also move the dial down toward 0 if the paragraph you just read leads you to think the defendant is innocent. So you can move the dial down to 45, 40, 25, 10, or even to 0 depending on how innocent you think the defendant is as a result of the last item of evidence. Keep in mind that it is natural for jurors to form and then change their opinions during the trial.

You will have 10 seconds to settle in on a response. After you make the response, leave the dial alone and your response will then be recorded. When you see the word “reset” on the screen, you should then reset your dial to 50 and wait for the next paragraph. At that point, you'll receive another item of evidence for 40 seconds, read it, respond, reset the dial for the next item, and so on, until the entire trial summary has been presented. Any questions?

Participants watched the videotape and, as instructed, they rated each item for the extent to which it led them to perceive the defendant as innocent or guilty on a 0–100-point scale. The entire presentation took approximately 18 min to complete (there were 18 40-s items, each followed by a 10-s response period and a 10-s dial reset period). Afterward, all participants filled out a questionnaire individually and without deliberation. As in Experiment 1, they were asked to render a verdict (*guilty* or *not guilty*) and rate their confidence in that judgment on a 1–10-point scale. In addition, they were asked to rate the likelihood that the defendant committed the crime on a 0–100-point scale (in multiples of five), quantify their standard of proof (by filling in the blank, “The defendant should be found guilty if there is a \_\_\_% chance that he committed the crime”), and list, in order of importance, three factors contributing to their verdict.

## Results

Overall, 17 participants voted guilty and 26 voted not guilty, for a conviction rate of 39.54%. The mean level of confidence in verdicts was 6.28 on a 10-point scale [interestingly, participants who voted guilty were more confident than those voting not guilty,  $t(42) = 20.23, p < .01$ ]. Looking at the additional measures taken, the basis for the low-to-moderate conviction rate is clear. On average, participants estimated that there was only a 66.98% chance that the defendant committed the crime, which fell short of their mean standard of proof of 90%.

### *Online Evidence Ratings*

After each paragraph, participants rated the evidence on a 0–100-point scale for the extent to which it led them to see the defendant as innocent or guilty. These online ratings were then analyzed within a 3 (Confession, Eyewitness, Character)  $\times$  2 (Direct Examination, Cross-Examination) repeated-measures ANOVA.

This analysis yielded two significant main effects. First, a main effect for type of evidence indicated that the confession was judged to be more incriminating than both the eyewitness and character testimony ( $M_s = 73.88, 64.22, \text{ and } 54.45$ , respectively),  $F(2, 84) = 48.03, p < .001$ . Indeed, the confession elicited higher ratings than both the eyewitness,  $t(41) = -5.10, p < .001$ , and the character testimony,  $t(41) = -10.02, p < .01$ . Not surprisingly, a significant main effect for type of examination also indicated that participants saw the defendant as more guilty after the direct examinations of the three key prosecution witnesses than after their cross-examinations ( $M_s = 69.60 \text{ and } 58.76$ , respectively),  $F(1, 42) = 58.47, p < .001$ .

### *Posttrial Reports of Influence*

On the posttrial questionnaire, participants were asked to list, in order of importance, the three factors that led them to a guilty or not-guilty verdict. Using a 0–3-point scale, these data were then coded for the order in which they appeared on the list. Thus, an item was assigned a score of 3 if it was listed first, 2 if second, 1 if third, and 0 if it was not cited at all. These scores were then analyzed within a  $2$  (Guilty vs. Not-Guilty Verdict)  $\times 3$  (Confession, Eyewitness, Character Evidence) within-subjects ANOVA. This analysis yielded significant main effects and an interaction. As one would expect, a significant main effect for verdict revealed that participants who voted guilty were more likely to cite the key items of evidence than were those who voted not guilty ( $M = 1.45 \text{ and } 0.46$ , respectively),  $F(1, 41) = 45.26, p < .001$ . A main effect for type of evidence further indicated that participants in general were more likely to cite the confession ( $M = 1.44$ ) and eyewitness ( $M = 1.26$ ) as a basis for their verdict than they were the character testimony ( $M = 0.18$ ),  $F(2, 82) = 27.42, p < .001$ . Most importantly, a significant interaction revealed that those who voted guilty and not guilty cited different items of evidence,  $F(2, 82) = 10.58, p < .001$ . Participants who voted not guilty were more likely to cite the eyewitness than the confession,  $t(24) = 2.21, p < .05$ , or character testimony,  $t(24) = -4.46, p < .001$  ( $M = 0.92 \text{ vs. } 0.46, \text{ and } 0.10$ , respectively). In contrast, those who voted guilty cited the confession as more decisive than the eyewitness,  $t(15) = -2.25, p < .05$ , or character testimony,  $t(15) = -5.44, p < .001$  ( $M = 2.41 \text{ vs. } 1.59 \text{ and } 0.35$ , respectively). Participants thus saw the defendant's confession to the police as more supportive of a guilty verdict than the other key items of evidence.

## EXPERIMENT 3

Making judgments in an aggravated assault trial, participants in Experiment 2 perceived the confession as the most powerful form of evidence. In light of the implications of these results for the *Fulminante* majority's assumption, a third study was conducted to replicate these results in the context of a different trial.

## Method

Thirty-three undergraduates, taking part in exchange for extra course credit, were randomly assigned to one of six groups produced by fully counterbalancing the presentation order of the three key items of evidence. As in Experiment 2, the trial summary was shown on a TV monitor and participants used hand-held response dials to record their midtrial responses to the evidence.

The stimulus case used in this study was a modified version of *State v. Burks*, the rape trial described in Experiment 1. As before, the evidentiary record included a confession, an eyewitness identification, and character testimony. The entire trial — from opening statements to the examinations of six witnesses, closing arguments, and judge's instructions — was summarized in 17 paragraphs. Including both direct and cross-examinations, the three key prosecution items appeared in paragraphs 4–5, 8–9, and 11–12.

As in Experiment 2, each paragraph was presented on a monitor for 40 s, after which participants received 10 s to respond on the 0–100-point scale described earlier and another 10 s to recalibrate their dials to 50. Afterward, participants filled out a posttrial questionnaire identical to that used in the previous study (i.e., they made a judgment, rated their confidence, estimated the defendant's probability of commission, quantified their standards of proof, and listed the three most important factors in their verdict).

## Results

Overall, only 12 participants voted guilty, while 21 voted not guilty. The mean level of confidence was 6.01 on a 10-point scale. As in the previous experiment, those who voted guilty were more confident in their verdicts than those who voted not guilty  $t(31) = 4.62, p < .001$ . As before, the low number of guilty verdicts is reflected in the fact that participants estimated on average that there was a 65.76% probability that the defendant committed the crime and held a standard of proof that required a 90.10% level of certainty for conviction.

A 3 (Confession, Eyewitness, Character)  $\times$  2 (Direct vs. Cross-Examination) repeated-measures ANOVA on the 0–100-point midtrial ratings of guilt yielded two significant main effects, but no interaction. The main effect for evidence showed, simply, that participants saw the confession as most incriminating ( $M = 75.35$ ), followed by the eyewitness ( $M = 62.11$ ) and character testimony ( $M = 56.29$ ),  $F(2, 64) = 28.13, p < .001$ . Significantly, the confession elicited higher guilt ratings than both the eyewitness,  $t(31) = 4.45, p < .001$ , and character testimony,  $t(31) = 6.68, p < .001$ . As before, a second main effect revealed that participants viewed the defendant as more guilty after the direct examinations of the three key witnesses ( $M = 69.68$ ) than after their cross-examinations ( $M = 59.49$ ),  $F(1, 32) = 56.67, p < .001$ .

After the trial presentation, participants listed, in order of importance, three factors that contributed to their guilty or not-guilty verdicts. As in the previous study, each of the key items of evidence was assigned a score of 3 if it was cited first, 2 if cited second, 1 if cited third, and a 0 if not cited at all. These scores were then analyzed within a 2 (Verdict)  $\times$  3 (Type of Evidence) within-subjects ANOVA. Consistent with the results of Experiment 2, a main effect for verdict showed that participants were more likely to cite these items if they voted guilty than not guilty ( $M_s = 1.25$  and  $0.24$ , respectively),  $F(1, 31) = 51.29$ ,  $p < .001$ . Furthermore, a main effect for evidence showed that participants were most likely to cite the confession ( $M = 1.31$ ), followed by the eyewitness ( $M = 0.70$ ) and character testimony ( $M = 0.22$ ),  $F(2, 62) = 16.72$ ,  $p < .001$ . Most importantly, a significant interaction was obtained, which indicated that different evidence items were cited by participants who voted guilty as opposed to not guilty,  $F(2, 62) = 13.94$ ,  $p < .001$ . Those who voted not guilty cited the confession, eyewitness, and character evidence about equally ( $M_s = 0.29$ ,  $0.24$ , and  $0.19$ , respectively). Among those who voted guilty, however, the confession was far more important than either the eyewitness,  $t(10) = -2.38$ ,  $p < .05$ , or character evidence,  $t(10) = -7.24$ ,  $p < .001$  ( $M = 2.33$  vs.  $1.16$  and  $0.25$ , respectively). As before, participants saw the defendant's confession to the police as more incriminating than the other types of evidence.

## DISCUSSION

The present research examined the Supreme Court's assumption that confessions are "similar in degree and kind" to other types of evidence. In Experiment 1, mock jurors made judgments on four criminal cases, each of which contained a confession, an eyewitness identification, character testimony, or none of the above. Overall, confessions produced the highest conviction rate, followed by the eyewitness and character evidence. Experiments 2 and 3 reexamined the relative impact of confessions. On both midtrial ratings of the evidence and posttrial listings of the factors that most influenced their verdicts, participants presented with all three types of evidence found the confession significantly the most incriminating. Taken together, our findings demonstrate that confession evidence has a greater impact *on* jurors — and is seen as having a greater impact *by* jurors — than other potent types of evidence.

Legal scholars have long realized that confession evidence is uniquely potent. In *Chapman v. California* (1968), the Supreme Court stated that the erroneous admission of a coerced confession should never be treated as harmless. Then in *Arizona v. Fulminante* (1991), the minority described coerced confessions as fundamentally different from other types of erroneously admitted evidence. In a critique of the majority opinion in this case, Ogletree (1991) argued that "coerced confessions generally are not susceptible to harmless error analysis because of the overwhelming, prejudicial effect such confessions have on jurors' beliefs" (p. 165). Our results provide clear support for this widespread belief that confessions are devastating to a defendant.

In concluding that confession evidence is uniquely potent, a next step is to understand why it carries so much weight. Toward that end, it is important to realize that although eyewitness and character testimony consist of third-party reports about an event or person, a confession is a first-hand admission of culpability, a statement presumably made by someone with intimate *knowledge* of the event in dispute. In addition, whereas eyewitness and character testimony are often (though not always) given by people who do not have a vested interest in the disposition of a case, a confession is a statement by the accused that unambiguously contradicts his or her own interest or *motivation*. Over the years, attitude change research in nonlegal settings has shown that communicators have greater credibility and persuasive impact when they are perceived as having knowledge or expertise and when they can be trusted because they lack a self-serving motivation (for reviews, see Eagly & Chaiken, 1993; Petty & Cacioppo, 1986). Thus, people find it difficult to believe that anyone would confess to a crime he or she did not commit (Kassin & Wrightsman, 1985; Wrightsman & Kassin, 1993).

From a methodological standpoint, our results may be limited in three ways. One is that our participants made their decisions individually rather than in deliberating groups. Although research in general suggests that jury verdicts are highly predictable by the predeliberation distribution of individual votes (Kalven & Zeisel, 1966; Kerr, 1981; Sandys & Dillehay, 1995), it would be instructive to know whether confessions also have unique relative impact in the jury room — as measured, perhaps, by the amount of time spent discussing various items of evidence. A second concern is that our participants read or viewed brief, condensed summaries of actual trials. Although this procedure may serve to inflate the absolute impact of the confession manipulation, it is important to keep in mind that the key issue in this research concerned the impact of confessions relative to other forms of evidence presented within the same context. In this regard, it is also important to note that Kassin and Sukel (1997) found that confessions were highly persuasive even when embedded in a full trial transcript. Third, participants in Experiments 2 and 3 were repeatedly asked to rate the evidence during the trial, perhaps forcing them to process information in a more active or analytical manner than they normally would. However, Kassin and Wrightsman (1979) found that mock jurors who made similar paper-and-pencil judgments during the trial were not affected by this procedure in any of their posttrial responses to the case.

Substantively, the present studies are limited in an important respect. In seeking to evaluate the extent to which confessions are “similar” versus “fundamentally different” from other types of evidence, we compared their impact to eyewitness identification and information about the defendant’s character — two other common and potent forms of testimonial evidence. In all cases the eyewitness evidence consisted of a lineup identification made by an objective bystander. It could be argued, however, that our manipulations of character testimony were not the strongest possible. Adhering to laws of evidence that severely restrict such testimony, we created case scenarios in which the defendants raised rebuttable character issues (e.g., “I’m not the kind of person . . .”), which opens the door for prosecution witnesses (Federal Rules of Evidence 404). In operationalizing character evidence, we then also adhered to the general rule that such witnesses may offer opinions and

reputation evidence, but not describe specific instances of the defendant's past conduct (Federal Rules of Evidence 405). In certain situations, however, past conduct evidence is now permissible (e.g., in trials involving sexual assault or child molestation, similar past acts may be introduced). Thus, our comparisons are limited by the possibility that character witnesses are more persuasive when they cite instances of past conduct than mere opinion or reputation. Finally, in light of recent technological advances, it also remains to be seen whether confessions are weighed more heavily by juries when compared to tests involving DNA and other genetic markers, trace evidence, ballistics tests, drug tests, autopsy results, computer-animated reconstructions, psychiatric testimony, surveys and statistical studies, and other forms of scientific evidence often brought into court (Giannelli & Imwinkelried, 1993).

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### REFERENCES

- Arizona v. Fulminante, 59 U.S.L.W. 4235 (1991).
- Bruton v. United States, 391 U.S. 123 (1968).
- Chapman v. California, 386 U.S. 18 (1967).
- Culombe v. Connecticut, 367 U.S. 568 (1961).
- Dane, F. C., & Wrightsman, L. S. (1982). Effects of defendants' and victims' characteristics on jurors' verdicts. In N. Kerr & R. Bray (Eds.), *The psychology of the courtroom* (pp. 83-115). New York: Academic Press.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt, Brace, Jovanovich.
- Giannelli, P. C., & Imwinkelried, E. J. (1993). *Scientific evidence* (2nd ed.). Charlottesville, VA: Michie.
- Greene, E., & Dodge, M. (1995). The influence of prior record evidence on juror decision-making. *Law and Human Behavior, 19*, 67-78.
- Greene, E., & Loftus, E. F. (1985). When crimes are joined at trial. *Law and Human Behavior, 9*, 193-207.
- Hans, V., & Doob, A. (1976). Section 12 of the Canada Evidence Act and the deliberations of simulated juries. *Criminal Law Quarterly, 18*, 235-253.
- Kagehiro, D. K. (1990). Defining the standards of proof in jury instructions. *Psychological Science, 1*, 194-200.
- Kalven, H., & Zeisel, H. (1966). *The American jury*. Boston: Little, Brown.
- Kamisar, Y., LaFare, W., & Israel, J. (1994). *Modern criminal procedure* (8th ed.). St. Paul, MN: West.
- Kaplan, M. (1985). Character testimony. In S. M. Kassin & L. S. Wrightsman (Eds.), *The psychology of evidence and trial procedure* (pp. 150-174). Beverly Hills: Sage.
- Kassin, S. M. (1997). The psychology of confession evidence. *American Psychologist, 52*, 221-233.
- Kassin, S. M., Ellsworth, P. C., & Smith, V. L. (1989). The "general acceptance" of psychological research on eyewitness testimony: A survey of the experts. *American Psychologist, 44*, 1089-1098.
- Kassin, S. M., & Sukul, H. (1997). Coerced confessions and the jury: An experimental test of the "harmless error" rule. *Law and Human Behavior, 21*, 27-46.
- Kassin, S. M., & Wrightsman, L. S. (1979). On the requirements of proof: Timing of judicial instruction and mock juror verdicts. *Journal of Personality and Social Psychology, 37*, 1877-1887.
- Kassin, S. M., & Wrightsman, L. S. (1985). Confession evidence. In S. Kassin and L. Wrightsman (Eds.), *The psychology of evidence and trial procedures* (pp. 67-94). Beverly Hills, CA: Sage.
- Kerr, N. L. (1981). Social transition schemes: Charting the group's road to agreement. *Journal of Personality and Social Psychology, 41*, 684-702.

- Leippe, M. (1995). The case for expert testimony about eyewitness memory. *Psychology, Public Policy, and Law*, 1, 909-959.
- Loftus, E. F. (1974). Reconstructing memory: The incredible eyewitness. *Psychology Today*, December, pp. 117-119.
- McCormick, C. T. (1983). *Handbook of the law of evidence* (2nd ed.). St. Paul, MN: West.
- Miranda v. Arizona, 384 U.S. 436 (1966).
- Mueller, C. B., & Kirkpatrick, L. C. (1995). *Modern evidence: Doctrine and practice*. Boston: Little, Brown.
- Ogletree, C. J. (1991). *Arizona v. Fulminante*: The harm of applying harmless error to coerced confessions. *Harvard Law Review*, 105, 152-175.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. NY: Springer-Verlag.
- Ross, D. F., Read, J. D., & Toglia, M. P. (Eds.), (1994). *Adult eyewitness testimony: Current trends and developments*. New York: Cambridge University Press.
- Sandys, M., & Dillehay, R. C. (1995). First-ballot votes, pre-deliberation dispositions, and final verdicts in jury trials. *Law and Human Behavior*, 19, 175-195.
- Sporer, S. L., Malpass, R. S., & Koehnken, G. (Eds.) (1996). *Psychological issues in eyewitness identification*. Mahwah, NJ: Erlbaum.
- Tanford, S., & Penrod, S. (1984). Biases in trials involving defendants charged with multiple offenses. *Journal of Applied Social Psychology*, 12, 453-480.
- Wells, G. L. (1993). What do we know about eyewitness identification? *American Psychologist*, 48, 553-571.
- Wigmore, J. H. (1970). *Evidence* (Vol. 3). (Revised by J. H. Chadbourn). Boston: Little, Brown.
- Wissler, R. L., & Saks, M. J. (1985). On the inefficacy of limiting instructions: When jurors use prior conviction evidence to decide on guilt. *Law and Human Behavior*, 9, 37-48.
- Wrightsmann, L. S., & Kassin, S. M. (1993). *Confessions in the courtroom*. Newbury Park: Sage.