Psychology and the Federal Rules of Evidence

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The primary function of the Federal Rules of Evidence (FRE), which came into effect on June 1, 1975, was to "enact into law the will and intent of the Supreme Court and its Advisory Committee" and to "operate as guidance for the exercise of discretion" within the judicial system (Weissenberger 1992, p. 1307). The FRE govern all cases in federal courts, be they criminal or civil. State courts have generally either adopted the FRE or have enacted their own similar state rules. This chapter will concentrate on the FRE, with the understanding that individual state rules might differ slightly across jurisdictions. Many of the rules are based on assumptions about the ways in which those involved in the legal process (e.g., judges, jurors, litigants, or attorneys) engage in decision making. Others were created as reflections of Congress' policy decisions and do not necessarily take into account the impact such rules could have on legal actors.

Very little psychological research has addressed the impact and assumptions of the FRE. What research has been conducted tends to focus mainly on specific aspects of the rules. For example, the majority of the research has focused on Rule 702, which addresses testimony by expert witnesses (see Blau 1998; Dror et al. 2013; Faust and Ziskin 1988; Kassin and Wrightsman 1985). This is not surprising, as expert testimony is an area that is relevant and applicable to psychologists in a number of capacities—both those who study areas related to law (e.g., eyewitness testimony, interrogation practices) and those who perform psychological evaluations for the courts. These research and practicing psychologists could be called into the courtroom to testify, and therefore, it is important to understand how best to do so. However, 702 has little to do with behavioral assumptions of the law of evidence.

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This chapter will examine the psychological implications for jurors and verdict outcomes of the FRE. It will begin by examining some of the previous research related to the FRE and then move onto discussing specific rules that are contrary to or do not seem to take into account psychological literature. Then, we will examine rules that seem to rely on and are supported by psychological research. Finally, we will look to some of the rules and areas of evidence law in which psychological research is lacking.

The Rules and the Current Body of Literature: 401 Relevance and 403 Prejudice

Before any piece of evidence may be admitted into the courtroom, it must pass Rule 401, which governs the standard of general admissibility for all evidence in the courtroom. This rule states that only relevant evidence is admissible. Evidence is relevant if it has any tendency to make a fact more or less probable than it would be without the evidence and if this fact is of consequence in determining the action (FRE 2004). However, whereas irrelevant evidence is always inadmissible, relevant evidence is not necessarily always admissible. One bar to admissibility is Federal Rule of Evidence 403, which states that the court may exclude relevant evidence if its probative value is substantially outweighed by a danger of unfair prejudice. The Notes of the Advisory Committee on the Proposed Rules define unfair prejudice to mean an undue tendency to suggest a decision would be made on an improper basis, commonly, though not necessarily, an emotional one. This reflects that Congress is not unaware of the impact that emotions can have on members of the jury. Criminal defendants have a constitutional right to be considered innocent until proven guilty beyond a reasonable doubt and a right to an impartial jury and fair trial. This means that jurors should be finders of fact who are not unduly swayed by the emotion-laden nature of testimony or other such evidence, but are influenced only by the strength of the case at hand. Thus, Congress drafted the FRE in an attempt to protect the rights of parties and in recognition that jurors might rely on their emotions to make quick bias-driven decisions, compromising their impartiality, and harming the parties. Rule 403 provides courts with a discretionary tool to exclude evidence that would otherwise be admissible under the rules but could evoke such emotion in the jury and lead to an unfairly prejudicial outcome (Gold 1984).

Much of the research in psychology and law that examines whether a specific argument or piece of evidence would influence the verdict outcome ultimately examines whether that item is unduly prejudicial. For example, studies show that a defendant's religion might affect verdict decisions (see Bornstein and Miller 2009; Johnson 1985). To apply this research to the courtroom, lawyers would need to rely on a 403 argument to bar any evidence of religion if it could negatively affect their clients.

Issues arising under 403 are brought to the judge for a determination of whether the evidence would promote or undermine accurate fact-finding by the jury (Gold

1984). This means that the judge must make decisions that require an understanding of human decision making. This clearly raises the question of whether judges have the requisite knowledge to make such decisions. Judges typically are not psychologists and will most likely rely on their own experiences and reactions to the type of evidence in question. A study by Teitelbaum et al. (1983) examined the validity of the premise that judges are accurately able to determine whether a piece of evidence will ultimately be prejudicial to the jury. Using lawyers as stand-ins for judges, the researchers compared lawyer ratings to those of community members to determine perceptions of how prejudicial specific items of evidence would be to a defendant's case. Overall, the community ratings of prejudice were almost always significantly lower than those of the attorney group. Aside from the obvious problem of using lawyers to represent judges (the researchers found defense lawyers rated items more prejudicial than did plaintiffs' lawyers), this result requires some consideration. Even if the lawyer results do correspond with judicial determinations, then this indicates that judges are likely to exclude evidence that members of the jury would not find unduly prejudicial. This overinclusivity may be good, if one believes that it is better to err on the side of caution and keep out items that could prejudice a jury. However, it also means that juries are not seeing or hearing evidence that could be crucial in arriving at an accurate decision. It is also important to note that this study relied on self-report of beliefs that an item is prejudicial and, as will be discussed later, jurors may not always be aware that their verdict is being influenced by a prejudicial piece of evidence. Judges might be aware of this natural tendency and correct for it by ruling more stringently and keeping potentially prejudicial evidence out. Further research is clearly required in this area.

One example of a hotly contested 403 issue arose in the trial of Casey Anthony, a woman accused of murdering her two-year-old daughter Caylee (*State of Florida v. Anthony* 2011). During the trial, the prosecution entered into evidence a video, depicting an image of Casey and Caylee together, which then morphed Caylee's face into a skull (Black 2011; see Fig. 1). The defense objected, but the judge deemed the tape highly relevant, which inspired many legal scholars to question how this could be relevant and not prejudicial under both a 401 and 403 argument. The picture of Caylee and Casey could be admitted as relevant to provide background information and set the context of a mother and her daughter. The image of

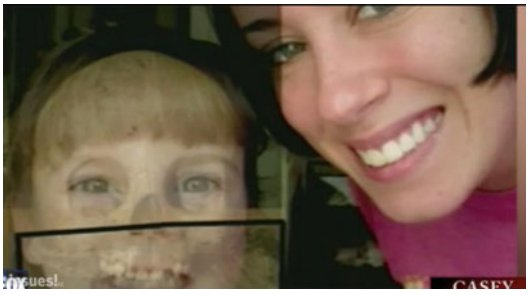

Fig. 1 Caylee Anthony image presented to the jury

Caylee's skull could also be relevant to show a specific pattern of wounds or disintegration. However, the introduction of the skull superimposed over the child's picture arguably has no relevance in and of itself and even if it did, it is potentially prejudicial to the defendant. The prosecution seems to have introduced the image, seen below, purely in an attempt to influence the jury's emotion. Casey Anthony was ultimately acquitted, but had she been found guilty, she would likely have had a strong argument for a new trial on appeal.

Courts often deem graphic photographs to be relevant and admissible, as gruesome crimes often beget gruesome photographs in the course of the investigation (Bright and Goodman-Delahunty 2004). To the prosecution, gruesome pictures might be important evidence to point to the defendant's guilt, whereas the defense may view that same evidence as inflammatory, prejudicial, and violating the defendant's right to a fair and impartial trial (Douglas et al. 1997). Multiple psychological studies have examined the impact of gruesome images on verdict outcomes, suggesting that emotional reactions to such horrifying evidentiary details could inhibit logical, rational processing, and draw jurors' attention away from evidence with more probative value (Bright and Goodman-Delahunty 2006). This research finds that such vivid pictures are more persuasive than pallid evidence and could invoke moral outrage that leads viewers to demand accountability and responsibility (Bell and Loftus 1985; Thornton et al. 1991).

Douglas et al. (1997) examined the prejudicial effect that graphic images might have on the verdicts of mock jurors. Participants were assigned to one of three conditions: Color, Black and White, or Control. Those in the control group only read a graphic description of the victim's body in the medical examiner's testimony that contained all the same information that could be viewed in the photographs. In the Color and Black and White conditions, participants read the same description but also viewed three explicit photographs of an actual homicide victim, either in color or in black and white. In addition, participants completed questionnaires measuring their emotional reactions to viewing the evidence. Participants exposed to the victim photographs were almost twice as likely to find the accused guilty as participants in the control condition. The two photograph conditions did not differ from one another. Finally, the more that participants reported feeling sad, vengeful, outraged, shocked, and anxious in response to the photographs, the more likely participants were to find the defendant guilty. This result means that, while gruesome photographs might be relevant to the case, defense attorneys should rely on Rule 403 to argue that they are unduly prejudicial to their client's case. Despite being presented with the same factual information, the simple presence of photographs invoked such emotion in the mock jurors that the defendant was far more likely to be found guilty. Potentially the most important result of Douglas et al.'s study was that when they asked participants whether they felt they acted in a fair and unbiased manner and whether the autopsy information, be it photographs or testimony, affected their verdict, there was no difference across the conditions. This means that, despite a clear prejudicial impact of the photographs on the verdicts, participants were unaware of this influence. Participants believed they were deciding based only on the facts. Not all studies of the phenomenon have found a

prejudicial effect of gruesome photographic evidence, however (for review, see Bornstein and Greene 2017; Bornstein and Nemeth 1999).

Rules Conflicting with Psychology Research

Although the majority of the FRE are based on assumptions about human behavior and decision making, some of these assumptions do not reflect rigorous scientific research. This section will examine two of these problematic rules, focusing on their assumptions and the conflicting research that suggests that the reasons for their implementation may be flawed.

404: Character Witness Evidence

The first rule we will discuss is Rule 404, which pertains to character evidence. This rule prohibits the use of "evidence of a person's character or character trait…to prove that on a particular occasion the person acted in accordance with the character or trait" (FRE 404(a)(1); 2011). This is also known as the propensity argument, because it may prejudice the trier of fact into believing that somebody is of such a type of character that he or she is likely to act in accordance with that trait at all times and therefore is more likely to have committed the act in question. In addition, the assumption is that character evidence, if admitted, may subtly permit the trier of fact to reward a defendant for good behavior or punish him for bad behavior, despite the actual facts.

Despite this prohibition, there are exceptions that allow character evidence to be admitted. The most common exception applies to defendants in criminal cases. Rule 404(a)(2)(A) allows defendants to offer evidence of their own character traits related to the alleged crime, and only then is the prosecutor allowed to offer rebuttal evidence. If a defendant chooses to introduce evidence of his character, he may generally do so only by reputation or opinion evidence (FRE 405(a); 2011). This means that the defendant will need to bring in a character witness who will provide the jury or judge with background information about the defendant (Hunt and Budesheim 2004). When presented, however, this form of evidence may not include specific examples but only general impressions of the defendant's character. Once introduced, the prosecutor may cross-examine the character witness by asking him or her about relevant specific instances. For example, if in a trial for assault, the witness for the defendant testifies that her opinion of the defendant is that he is peaceful and calm, the prosecutor may ask the witness on cross-examination about whether the witness knows about the last five bar fights that the defendant instigated. This would likely be allowed because it tests the credibility of the witness. If she did not know about those bar fights, then her testimony might not be reliable or trustworthy. Jurors are not supposed to use this evidence of specific acts to infer the

defendant's guilt (in accordance with the 404 propensity rule), but only to evaluate the witness's credibility. In addition, the prosecution may now call its own witness to testify that the defendant has a reputation of being violent and angry. If the defendant had not called the original witness, the prosecutor would have been unable to do so. Whether or not the defense chooses to introduce the defendant's character into evidence is therefore an important consideration because it may open the door to contrary evidence and specific negative examples that would otherwise have been excluded. Thus, psychological research on the jury's perception of character evidence is crucial for the defense to know so that they can decide if introducing the evidence is a risk worth taking.

Hunt and Budesheim (2004) stated that admissibility of such evidence is predicated on three assumptions: (1) That the defendant's personality characteristics are relevant to determining whether or not he committed the act in question; (2) that jurors actually use the character evidence when evaluating a case against the defendant; and (3) that cross-examination or rebuttal evidence will reduce the credibility of the character witness without negatively biasing impressions of the defendant.

For the first assumption, personality psychologists have examined whether people do behave consistently. In general, personality traits are inconsistent and cannot accurately predict behavior across different situations (Mischel 1969; Peterson 1968; Vernon 1964).

For the second assumption, some research has shown that descriptions of personality traits do not necessarily influence impressions of the target and instead might be more likely to be used to form an impression of the person providing the description (Wyer et al. 1994). In addition, it is important to evaluate the combination of the first and second assumptions. When jurors are presented with such evidence, do their interpretations reflect that people do not generally behave consistently across different situations? Wissler and Saks (1985) investigated how prior conviction evidence, which we will discuss in more detail in the next section, influenced mock jurors' assessment of credibility and guilt. They manipulated the type of crime for which the defendant had received a prior conviction. They found that mock jurors were significantly more likely to convict when the prior conviction was the same as the present charge than when the previous conviction was for a dissimilar crime. Therefore, jurors assumed that because the defendant's behavior related to the current charge was consistent with his previous behavior, he had a propensity to commit that specific type of crime. Therefore jurors may actually use character evidence, but do so in a manner inconsistent with research that people act inconsistently.

For the third assumption listed above, research suggests that on balance, the prosecution might have an unfair advantage due to their ability to cross-examine with specific examples, whereas the defendant may use only general information (Miller and Burgoon 1982). The lack of detail that the defense witness provides could lead jurors to believe that the witness does not have detailed, credible information about the defendant, particularly as it is unlikely that jurors are aware that the defense is not allowed to use specific examples.

Hunt and Budesheim (2004) conducted a study to examine the impact of character evidence (hereinafter referred to as "CE") on jurors. They manipulated the type of CE presented by the defense: no CE, general CE, or specific, positive CE. They also manipulated the type of CE brought by the prosecution: no CE, specific bad acts cross-examination, or a rebuttal reputation/opinion witness. The results indicated that the character witness was viewed more favorably when presenting specific and detailed evidence than when presenting general evidence. Further, jurors rated the witness more negatively when the prosecutor introduced rebuttal CE. In addition, when participants were exposed to witnesses who provided positive CE, it did not reduce conviction judgments, but when they saw witnesses who were cross-examined about specific bad acts, they were significantly more likely to find the defendant guilty. This means the defense is always at a disadvantage when they introduce character evidence because positive CE did not reduce guilty verdicts, but specific bad acts CE did increase guilty verdicts.

In sum, the second of Rule 404's assumptions holds true in that jurors are using the defendant's personality characteristics in evaluating the case against the defendant. However the first and third assumptions do not hold true. For the first, as people generally do not behave consistently across different situations, character evidence may not be relevant to determinations of guilt. For the third, jurors are not just using the prosecution's rebuttal or cross-examination evidence only to reduce the witness's credibility; they are also using it as inadmissible propensity evidence and to infer the defendant's guilt. This suggests that defendants need to be particularly cautious about introducing CE because once they do, 404 allows the prosecution to introduce evidence that can harm them more than their initial CE helps their case.

608 and 609: Prior Convictions

Rule 404 has another exception that allows the admission of character evidence for witnesses. Rule 607 states that "any party…may attack the witness's credibility." These attacks, however, are limited under Rule 608 only to evidence related to the witness's truthfulness or untruthfulness. This is one of several methods for impeaching or discrediting the witness. Credibility cannot be attacked unless the person testifies as a witness, and evidence of truthfulness can only be introduced after the witness's credibility has been attacked. Whether or not the witness's testimony is honest and factual is crucial for the jury to discern, and therefore propensity evidence is admissible to help the jury determine whether the testimony could potentially be a lie. Specific examples are allowed during cross-examination if they are probative of truthfulness.

One approach to using this type of impeachment is through prior conviction evidence, which is governed by Rule 609. Conviction evidence is "significant… because it stands as proof of the commission of the underlying criminal act," because the witness was found beyond a reasonable doubt to have committed the act (Advisory Committee Notes 1972). When the defendant is the witness, this

might seem to contradict Rule 404(b)(1), in which evidence of prior bad acts is not admissible. This evidence is prohibited because the jury may punish the defendant for his previous behavior, for simply being a "bad" person, or they may assume that someone who has behaved in a specific way in the past is much more likely to do so in the future. In addition, possessing a prior criminal record may cause jurors to think that, since the defendant already has a criminal record, another conviction would not be as serious as if he had no prior convictions. Therefore jurors might require less evidence to be convinced that the defendant is guilty beyond a reasonable doubt (Cleary 1984). However, there are two ways in which prior conviction evidence would be deemed admissible. The first is under Rule 404(b)(2), which states that in a criminal case, evidence of a crime, wrong, or other act "may be admissible for another purpose [than character], such as proving motive, opportunity, intent, preparation, plan, knowledge, identity, absence of mistake, or lack of accident." For example, if the victim was killed by a gunshot and the defendant denied knowing how to use a gun, a prior conviction for armed robbery in which the defendant used a gun would be admissible to show knowledge.

Rule 609 allows some prior conviction evidence to be introduced for witness impeachment purposes. This means that as long as the conviction is not admissible for a purpose other than character, as laid out above in 404(b)(2), then any of the defendant's prior convictions will be inadmissible unless he chooses to testify. In enacting Rule 609, the legislators do appear to have taken into account psychological evidence of the prejudicial propensity effect that prior conviction evidence could have on a defendant. The Advisory Committee Notes for Rule 609 (1972) specifically state that the "rule incorporates certain basic safeguards, in terms applicable to all witnesses but of particular significance to an accused who elects to testify." For all witnesses other than the defendant, the conviction *must* be admitted when offered by the prosecution for any crime punishable by death or imprisonment for more than 1 year, regardless of the actual punishment received, subject to the prejudicial balancing test of 403. For criminal defendants, however, as opposed to all other witnesses including civil defendants, the rule applies a more stringent test. Whereas the 403 standard states that the evidence may be excluded if the probative value is substantially outweighed by prejudice, 609 states that prior conviction evidence must be admitted for criminal defendants who testify only if the probative value outweighs its prejudicial effect. Thus, the usual standard is reversed for these defendants who testify, such that prior conviction evidence is assumed to be highly prejudicial and is *not* admissible unless the probative value is so high and so crucial to the case that it cannot conceivably be excluded. This suggests that the law recognizes that prior conviction evidence is automatically dangerous to the defendant. However, if the conviction involved proving or admitting a dishonest act or false statement, such as for perjury, the conviction is automatically admissible regardless of whether the witness is the defendant. In these cases, the conviction is determined to be highly probative of a character for truthfulness and must therefore be admitted.

When admissible as impeachment evidence under Rule 609, the jury is expected to use the prior conviction only to determine whether the witness, potentially the

defendant, has a propensity to lie on the stand. However, it is impermissible for the jury to use the prior conviction to infer that the defendant has a propensity to commit crimes (Tanford and Cox 1988). Because the law does take into account the prejudicial effect this could have, the additional safeguard of limiting instructions is usually given to the jury. The instructions will explicitly state to the jury that they are to use the evidence only to assess credibility and not to assign blame.

There is a very large body of research on limiting instructions that this chapter will not examine in much detail, but it is relevant to discuss in relation to impeachment via prior conviction. Limiting instructions have generally been found to be ineffective in cases involving both inadmissible evidence and prior convictions (Hans and Doob 1976; Steblay et al. 2006; Thompson et al. 1981; Wissler and Saks 1985). There is some evidence for a backfire effect in which the instructions only make the inadmissible evidence more salient by focusing the jury's attention on what they are intended to ignore, thereby enhancing the prejudicial effect (Pickel 1995; Wolf and Montgomery 1977). Prior conviction evidence differs from inadmissible evidence, as the jury does not need to disregard it entirely, but use it for credibility purposes only and not propensity. Greene and Dodge (1995) found that mock jurors were more likely to convict and found the defendant less credible when prior conviction evidence was used for impeachment purposes, regardless of whether limiting instructions were provided. The authors surmised that the mock jurors may not have understood the instructions, which is a common determination in jury instruction research (see, e.g., Alvarez et al. 2016; Bornstein and Greene 2017; Dumas 2007; Lieberman 2009).

Tanford and Cox (1988) found that prior conviction impeachment evidence appeared to influence jury decision-making in legally impermissible ways. They manipulated prior conviction evidence and character evidence in a civil negligence trial, and their results indicated that prior convictions did not decrease credibility perceptions (the legally permissible and intended impact of such evidence), but they did increase perceptions of propensity (the legally impermissible use). They also found that evidence of a dishonest character lowered credibility judgments of the defendant witness as intended by the rules, but it also led to increased propensity judgments. Overall, propensity inferences increased the likelihood of liability verdicts. This means that both character and prior conviction evidence produced inappropriate propensity bias, and the latter did not even succeed in its intended purpose of impeaching the defendant's credibility.

In the same series of studies, Tanford and Cox (1988) also manipulated the use of limiting instructions, as well as whether their participants reached their verdicts alone or through group deliberations. They found that without the instructions, credibility judgments were not affected by the prior conviction. However, propensity ratings were higher when prior conviction evidence was provided, regardless of whether instructions were given. Therefore, providing limiting instructions in this study may have helped participants to use the evidence for its intended purpose of lowering credibility, but it did not deter them from using it for making propensity judgments. Participants who deliberated in groups showed even more bias than when they reached a verdict alone. This could be due to the impact

of group polarization, a phenomenon in which preexisting tendencies and beliefs are enhanced through group discussion (Arima 2013; Iyengar and Westwood 2014; Myers and Bishop 1971; Myers and Lamm 1976).

The results of these studies indicate that through the implementation of Rule 609 and its safeguards, Congress does seem to have an awareness of the possibly prejudicial impact of prior conviction evidence. As such, stricter guidelines may be required for admittance when the defendant is a witness. In the current form, the defense needs to be aware of the potential damage that can ensue from allowing the defendant to testify, as it opens the door for the prosecution to submit to the jury prior conviction evidence that would otherwise be excluded. As it stands, the stricter 609 balancing standard means that it is important that judges keep such evidence out through weighing the probative value against the presumed prejudice. However, as we know from the discussion earlier in this chapter, judges might not always accurately estimate the prejudicial value of the evidence. They may also overestimate the jury's ability to follow instructions appropriately and limit their application of the evidence.

Rules Corresponding to Psychology Research

Whereas the previous section discussed areas in which psychology has revealed problems with the assumptions made by the FRE, some of the rules do seem to be accurate in their assumptions about how humans behave. These FRE rules therefore serve as adequate safeguards for issues that could arise without the FRE protections. In this section, we will discuss some of these rules and how they correspond with psychology research.

406 Habit

Rule 406 applies to areas of habit and routine practice. The rule states that "evidence of a person's habit or an organization's routine practice may be admitted to prove that on a particular occasion the person or organization acted in accordance with the habit or routine practice." The Advisory Committee Notes (1972) acknowledge that while habit and character do appear to be similar, habit "in modern usage, both lay and psychological, is more specific. It describes one's regular response to a repeated specific situation." Character is noted as more akin to the sum of many individual habits that represent an overall tendency, whereas habit is discussed almost as conditioned responses. The specific behavior for a habit must be reflexive and automatic, such that anything appearing conscious and volitional is not likely to be admitted under Rule 406. In essence, the rule allows the trier of fact to predict behavior from actions in the past. For example, if a question of fact in a negligence case involving a car accident is whether or not the defendant used his

indicator before turning, the defense may introduce evidence, either through opinions or specific examples, that the defendant routinely used his blinker prior to turning. The jury may use this information to infer that because the defendant had a habit of using his blinker in the past, he was more likely to have used it on the day in question. This rule is important because the defendant himself may be unlikely to answer the question specifically of whether he did in fact use his indicator on the day of the accident, in the same way that many of us often arrive home after work and realize we were driving mindlessly and not paying conscious attention to the route that we drove home. We can still assume we followed the same route that we always take based on habit.

In this sense, while the previously discussed research finding that personality traits may differ across unique situations, this rule assumes that behavior is far more likely to be consistent in those individually unique situations (Mischel 1969; Peterson 1968; Vernon 1964). Research bolsters this assumption. Psychological theorizing about habit and its relation to consciousness goes back at least as far as James (1890). Psychology describes habitual behavior as "a goal-directed type of automaticity…[that is] instigated (by certain triggering stimuli) in the presence of a specific goal" (Aarts et al. 1998, p. 1358).

Aarts and Dijksterhuis (2000) suggested that once habits are established, priming the act then automatically evokes the habitual response. They recruited participants who all owned bicycles but differed in the frequencies with which they used them. In the first phase, participants in the goal priming condition read sentences describing five different travel goals, such as going shopping at the mall. Those in the control condition did not read these sentences and instead skipped straight to the second phase, in which all participants were asked to indicate as quickly as possible whether a specific presented mode of transportation was a realistic means of transport to reach a specific presented location. In the third phase, the researchers measured the participants' habit strength by asking how frequently they used their bicycles. The dependent variable in the study was the response latency across the five target location-transportation pairs in phase two. The results indicated a two-way interaction of habit strength and goal priming. When participants who were habitual bicycle users were not primed with travel goals, their response times did not differ from nonhabitual participants' response latencies. Conversely, participants in the goal priming condition showed significantly faster responses when they were habitual bicycle users than when they were not.

This indicates that habitual behaviors are automatic when a specific goal, such as traveling to the mall, is activated. Rule 406 corresponds with this research by assuming that if the party can provide evidence that a specific behavior in response to a stimulus (e.g., signaling when turning) has occurred continually in the past, then it is more likely that it did occur at the time in question despite the lack of actual evidence of its occurrence on the specific day.

407 Subsequent Remedial Measures, 408 Compromise Offers and Negotiations, 409 Offers to Pay Medical Expenses, and 411 Liability Insurance

Rule 407 refers to any potential measures that a party took subsequent to an earlier injury or harm that would have made that incident less likely to occur. For example, the plaintiff slips and falls in the defendant's store and the defendant consequently installs nonslip flooring. This evidence is inadmissible under 407 as proof that the defendant was actually negligent, though it could be admitted for another purpose. For example, if the defendant denies that he owned the store, the flooring change could be admitted to show that he does have ownership and control. Rule 408 mandates that any settlement and negotiation offers from one party to another, or any statements made in pursuance thereof, are inadmissible as evidence of the validity or amount of the disputed claim. Similarly, Rule 409 prohibits evidence of offers to pay medical expenses to prove liability for the injury.

All three rules are based on related public policy reasoning. For subsequent remedial measures in 407, proponents suggest that without the rule, people, and organizations would be deterred from taking safety precautions in response to accidents because otherwise plaintiffs would be able to use this information to bias the jury. It "also seems unfair…for a defendant to be penalized at a trial for taking the socially desirable action of decreasing risks" (Best 2009, p. 21). The purpose of Rule 408 is to encourage settlements. Without it, parties involved might be afraid to talk about disputes for fear that anything they say may be later used against them in court (Best 2009). Similarly to the reasoning behind Rule 407, Rule 409 was adopted so that those who offer payment of medical expenses for humanitarian reasons will not be subsequently punished for their compassionate offer (Best 2009; Mueller and Kirkpatrick 2013).

Rule 411 prohibits disclosure of any information that the party was or was not insured against liability. The Advisory Committee Notes (1972) state that "the knowledge of the presence or absence of liability insurance would induce juries to decide cases on improper grounds." Knowledge of a defendant's insurance could lead juries to be less concerned with reaching an erroneous decision and to find the defendant liable regardless of evidence of wrongdoing, since the defendant would not be paying for it personally. Alternatively, if the jury is informed that the *defendant* is uninsured, they may be hesitant to impose a large damage award that could potentially bankrupt the defendant. Additionally, if the jury is aware that the *plaintiff* has insurance, they may want to assign lower damages to avoid double recovery. All of these rules work to "blindfold" the jury and keep away information that lacks probative value and could bias their decisions (Greene et al. 2008).

These rules seem to assume two factors: that people want to behave in prosocial ways, and that jurors interpret these behaviors as indications of culpability. A number of studies have examined how people behave when they transgress against others; results indicate that participants tend to engage spontaneously in reconciliatory behavior such as confession, concession, and apology (Gonzales

et al. 1990, 1992; Ohbuchi et al. 1989). In addition, when participants believed they had committed a transgression, such as knocking over a confederate or breaking expensive equipment, they were more likely to attempt to compensate the victim (Konecni 1972; Regan 1971).

However, the question that remains is: How do jurors interpret this behavior? Do they automatically infer that these actions indicate guilt? There is some research that suggests that jurors perceive defendant apologies at the time of the incident as an admission of guilt, but that expressions of remorse in general may result in more favorable perceptions (Bornstein et al. 2002). For example, a study by Robbennolt (2013) showed that participants viewed offenders who offered apologies during settlement negotiations as more moral and as accepting of more responsibility than offenders who did not apologize. They also experienced a lesser desire to punish the offender. This indicates that expressions of remorse may cause jurors to be more likely to find the defendant guilty or liable, but to punish them less severely.

Thus, as stated above, Congress likely enacted these rules out of concern that potential defendants would be discouraged from acting prosocially for fear that jurors may interpret such behavior as inferring guilt. The purpose of these rules therefore is to encourage people to behave prosocially, and if an incident occurs, regardless of fault, to take steps to remedy the injury and prevent it from occurring again in the future. In other words, these rules acknowledge that people might engage in these behaviors when they feel guilty, but for those that are not guilty, Congress does not want to prevent them from acting simply because they could be punished later for conciliatory actions.

Some critics of these rules are concerned that "blindfolding" the jury will only work if jurors do not discuss these topics among themselves during deliberation and do not make their own potentially inaccurate assumptions regardless of the lack of information provided. Greene et al. (2008) tested the assumptions underlying 408's settlement offers and 411's insurance status. Based on a study by Diamond and Vidmar (2001) that indicated that jurors overwhelmingly and spontaneously raised these forbidden topics during their deliberations, Greene et al. assumed that the more frequently their mock jurors discussed the *plaintiff's* insurance status or previous settlements reached with other defendants, the lower the damages awarded would be, and the more frequently they discussed the *defendant's* insurance status, the higher the damage award would be. They found that overall, 83 % of their mock juries mentioned the plaintiff's insurance status, and 75 % referred to the defendant's; 23 % talked about pretrial settlements. Only 4 % of the juries refrained from discussing any of the forbidden topics during their deliberation. While not statistically significant, the relationship between insurance status discussions and the damage award did trend in the predicted direction. There was also no relationship between settlement discussions and damages.

The finding that discussion of forbidden topics did not significantly affect the award size indicates that, although the topics did appear to be meaningful to jurors, their discussion did not actually relate to compensatory damages. Possibly, the discussion of these factors highlights to the mock jurors that they do not truly know the details and therefore should not consider them in their verdicts. Greene et al.

(2008) listed some examples of the type of comments that their mock jurors made referencing these topics: "We don't know. We're assuming he has insurance"; "Because it is so vague, we don't know what kind of insurance the plaintiff has"; "We were not really given information one way or the other, so we have to decide on the information we have" (Greene et al. 2008, pp. 213–216). Further research is needed on the comparison between jury discussions, verdict outcomes and damages when juries are blindfolded from these topics and when they are not.

610 Religious Beliefs or Opinions

Rule 610 states simply that "evidence of a witness's religious beliefs or opinions is not admissible to attack or support the witness's credibility." In *U.S. v. Sampol* (1980), the D.C. Court of Appeals described the purpose of this rule as a guard against prejudice that may occur as a result of disclosure of the witness's faith, in particular those who subscribe to unconventional or unusual religions.

There is some psychological research that supports this reasoning. Henri Tajfel is well known for his work on social categorization and intergroup discrimination. This research suggests that social identification and affiliation with others leads to more favorable attitudes toward the ingroup over any outgroup in order to enhance the collective self-esteem (e.g., Jackson and Hunsberger 1999; Tajfel and Turner 1979). In one study, Tajfel et al. (1971) induced intergroup categorization. All participants were asked to estimate the number of dots projected onto a screen. Participants in the "neutral" condition were told that some people consistently overestimate, whereas others underestimate, but that the kind of estimation did not relate in any way to accuracy of judgments. Participants in the "value" condition were told that some people are consistently more accurate than others. Those in the "neutral" condition were then divided into two groups and told that one consisted of those who tended to overestimate and the other of those who tended to underestimate. In the "value" condition, they were told that one group included those with more accurate judgments and the other those with less accurate judgments. All of these groups were actually randomly assigned. Later, participants were asked to assign rewards individually to either members of their own ingroup (other overestimators/underestimators) or the outgroup. In both conditions, participants showed discriminatory intergroup behavior, consistently choosing to assign rewards to other members of their ingroup. These results indicate that even arbitrarily assigned social categorization can lead to preferential treatment of those appearing to belong to the same social group, which supports the rationale behind excluding irrelevant evidence of a witness's religion. Examples of intergroup discrimination have been consistently shown in a variety of contexts and across numerous forms of real world categorization, such as race, socioeconomic status, nationality, and religion (e.g., Dickter and Bartholow 2007; Falk and Zehnder 2007; Hart et al. 2000; Schwartz and Struch 1989; Shayo and Zussman 2011).

Some studies have shown that in the context of intergroup relations, religious people are unlikely to act prosocially and come to the aid of outgroups and, instead, discriminate against them (Batson et al. 1993; Goldfried and Miner 2002). Jackson and Hunsberger (1999) examined intergroup bias in a religion context, comparing Christian participants to those who reported no current religious affiliation. Their participants completed questionnaires on, among other things, religious group identification, Christian orthodoxy, and attitudes toward four outgroups ("atheists," Christians," "people who do not believe in God," and "people who do believe in God"). Consistent with intergroup discrimination theories, they found that religious group identification predicted positive attitudes toward religious others and negative attitudes toward nonreligious others. They also found that those who were more religious had very positive attitudes toward other Christians, and those who believed in God had slightly negative attitudes toward atheists and nonbelievers. Conversely, those who were less religious showed generally positive attitudes toward all groups. It is possible that for the latter, group identification was less strong and affiliation was less likely, leading to a lack of ingroup/outgroup bias. Together, this research suggests that the enactment of Rule 610 may help to eliminate instances of ingroup/outgroup bias, particularly for defendants who may be treated less favorably based on their religion or lack thereof.

However, Rule 610 applies to credibility impeachment for all witnesses, not just defendants or plaintiffs. Ingroup preferential bias may occur, but how does this translate to credibility? Does information about the witness's religion, or lack thereof, actually alter credibility judgments? Saroglou et al. (2005) examined the relationship among religion, prosocial behavior, and honesty. In their first study, they found that when presented with decision hypotheticals whether to act prosocially, religiosity was positively associated with helping, but this was limited only to close relations and not to unknown targets. In subsequent studies, participants completed altruism and honesty scales and then provided these scales to two of their self-selected peers to complete about the participant. The results showed that religiosity was related to self-reported altruism and honesty and that religious targets were perceived as relatively altruistic and honest by their peers. Therefore, this study provides one example that religion could bolster the credibility of a witness. It is important to note that peer religion was not reported, but as they were selected by the participant, it is likely that the peers belonged to the same religious ingroup. Thus, further research is still needed to determine whether credibility due to religion is consistent across all religious groups, both of the target and the perceiver. Whether or not a witness was perceived as more or less credible based on the witness's religion would presumably depend on the agreement between the religion of the individual juror and witness.

One pervasive current view is that ingroup biases generate positive evaluations of the ingroup, but this does not necessarily lead to negative derogation of the outgroup (see Otten and Wentura 1999; Perdue et al. 1990). It would be important to determine if this holds true in cases of witness religiosity, particularly for those with unconventional and unusual religious beliefs. Regardless, while further research is required on witness credibility across religious groups, Rule 610 does

seem to correspond with research on intergroup discrimination. However, Rule 610 does not address the problem that intergroup discrimination can still occur across social categories other than religion, such as race and ethnicity, which are more clearly apparent than a witness's religion.

Rules 801-807 Hearsay

Hearsay is a particularly difficult topic to tackle within this chapter. It is a complex concept that lawyers and law students alike struggle to master. Perhaps due to its difficulty, psychologists have largely ignored it, but it is based, at least in part, on testable psychological assumptions (Thompson and Pathak 1999).

Hearsay has generally been defined as a statement made out of court that is offered for the truth of the matter asserted (Mauet and Wolfson 2011). For example, suppose that Joseph called Ryan and said that he saw the defendant leaving the victim's house holding a gun. Joseph would be expected to testify on that point himself, but if he was not available to do so, it would be defined as hearsay if Ryan testifies to Joseph's comment, because the statement was offered to prove that the defendant did actually leave the victim's house with a gun. It would not be hearsay, however, if offered to show why Ryan rushed to the victim's house. In the latter case, the statement is admitted only to show the effect it had on Ryan, the listener, it does not matter whether or not the statement that Joseph saw the defendant leaving with a gun was true

Hearsay is generally inadmissible because it lacks three crucial truth-testing tools. First, the original declarant (or speaker) is not under oath, because he is not the one in court to report what he saw. Secondly, the trier of fact is unable to perceive the declarant's demeanor, and thirdly, the declarant is not subject to cross-examination. If Joseph was in court to testify to what he saw, the trier of fact would be able to evaluate his demeanor and only be required to determine whether or not he was telling the truth. Hearsay complicates this process by adding a step. If Ryan testifies to Joseph's statement, the trier now not only has to discern whether Joseph was telling the truth without being able to see him, but also has to figure out if Joseph did actually tell Ryan that he saw the defendant or if Ryan is lying or mistaken. There are a number of exceptions to the hearsay prohibition, such as the admissibility of dying declarations (e.g., Ryan would probably be allowed to testify about Joseph's declaration if Joseph died shortly after making it), but another whole chapter (or book!) would be required to go into more detail about the various hearsay exceptions.

For psychological purposes, the probative value of hearsay depends on specific testable factors (Thompson and Pathak 1999). The declarant must correctly have perceived, remembered, and reported the event in question. Then the listener must also have perceived the statements correctly, remember them, and report them to the jury (of course assuming that neither one is lying). Most of us played broken telephone when we were children and know first-hand that information can easily

become distorted as it passes orally from one person to another, and psychological research confirmed the phenomenon over 80 years ago (Bartlett 1932). As the information passes through each individual, it is processed and filtered through his or her specific cognitive lens and influenced and altered through each person's own expectations, stereotypes, and schemas (Nisbett and Ross 1980). Based on these ideas, the rules against hearsay evidence seem to reflect research suggesting that hearsay may be inaccurate and greatly mangled by the time it reaches the courtroom.

Although some research has shown that jurors are influenced by hearsay testimony (e.g., Golding et al. 1997), interestingly, and perhaps because of the widespread "broken telephone" understanding of the dangers of hearsay evidence, some research has shown that mock jurors are aware that hearsay evidence should be viewed negatively, and they generally ignore it or give little weight to it (Schuller 1995). For example, Kovera et al. (1991) had participants view eyewitness testimony alone, or eyewitness testimony in conjunction with hearsay testimony. The hearsay testimony consisted of graduate students who had viewed the eyewitnesses' videotaped responses answering the same questions as the eyewitnesses. Participants rated eyewitnesses and their testimony more positively than the hearsay witnesses and their testimony. They also were more skeptical of the hearsay testimony, viewing it as less accurate and less useful.

Thompson and Pathak (1999) suggest that psychologists next need to test assumptions about the ways in which jurors respond to such hearsay evidence and whether some of the statements admissible under hearsay exceptions are unusually reliable. Because so much of the hearsay rules seems to be based on widely accepted beliefs about declarations, it is important to compare hearsay statements across different contexts. For example, it is necessary to examine whether a jury is likely to reject the validity of an inadmissible hearsay statement given in an ordinary context but accept its reliability if given under specific circumstances for which the FRE provides exceptions to the rule against hearsay, such as if the declarant's statements were made under the perception of imminent death. And while this last example is not an ethical one to manipulate experimentally, it is an open question whether or not individuals who believe they are on the brink of death would actually be honest under such exceptional circumstances.

Directions for Future Research

The previous sections have discussed the current state of psychological research in regard to the FRE and the ways in which the rules' assumptions do or do not correspond to the research. This section will examine several areas of evidence law that still require further research and will include some suggestions for how this research can and should be conducted.

Rule 606(b)

Federal Rule of Evidence 606(b)(1) states that "during an inquiry into the validity of a verdict or indictment, a juror may not testify about any statement made or incident that occurred during the jury's deliberations…The court may not receive a juror's affidavit or evidence of a juror's statement on these matters." Jury deliberation is one of the only aspects of the trial process that is kept hidden from the public. Court opinions for bench trials are written and published with an analysis detailing the judge's rationale for why the court reached its decision. The Seventh Amendment provides the right to a jury trial in most civil cases, and under the Sixth Amendment, all criminal defendants (except those charged with petty offenses) have a constitutional right to a public trial by an impartial jury. Secret trials are prohibited as a safeguard against any attempt to use the court as an instrument of persecution (*R.L.R. v. State* 1971). The jury room is an exception to this public scrutiny. It has been referred to as a black box for which the inputs (evidence and arguments) are highly regulated and the output (verdict) is made public, but the inner workings are carefully guarded and insulated from review (MacCoun 1987; *United States v. Benally* 2008). The purpose of this rule is to promote open discussion among jurors without fear of postverdict public scrutiny, retaliation, or harassment (Racist Juror Misconduct During Deliberations 1988; *Shillcutt v. Gagnon* 1987). However, this interest in deliberation privacy creates a barrier to a just and fair result for some parties when juror misconduct comes to light after the verdict has been determined. For example, in *Shillcutt v. Gagnon* (1987), after the defendant was found guilty, one juror reported that another juror had stated during the deliberation, "Let's be logical. He's black and he sees a seventeen year old white girl—I know the type." While this clearly appears to be a violation of the defendant's Sixth Amendment right to an impartial and unbiased jury, Rule 606(b) dictated that the juror who initially reported the misconduct was barred from testifying about the existence of the racist statement. Without any admissible evidence of misconduct, the defendant could not be granted a new trial.

However, comments made by jurors could impact the verdict decision making of other jurors. Under the theory of aversive racism, racist remarks by one juror may cause the other jurors to be less likely to find a Black defendant guilty. Aversive racism is a hypothesis that due to contemporary norms, most Whites believe that equality is important, but they may still harbor latent negative attitudes toward Blacks and other minorities (Dovidio and Gaertner 1991). The theory suggests that when race is salient, egalitarian norms and beliefs are triggered and Whites will attempt to suppress any expressions of bias, but when race is not salient, latent prejudice may arise. Kleynhans and Bornstein (2015) tested this theory by manipulating the presence of a racist juror remark. All participants read the same trial fact pattern with a Black defendant accused of aggravated assault. Participants then read a jury deliberation transcript with no reference to the defendant's race, a racially prejudiced comment from one juror, or a neutral comment regarding the defendant's race. The researchers found that those in the negative race condition were the least likely to find the defendant guilty, followed by the neutral race

condition; participants in the control condition, with no reference to race, were most likely to find the defendant guilty. This means that jurors are influenced by the comment—albeit in the defendant's favor—and not relying only on the evidence in the case. Rule 606(b) bars any testimony that could reveal this bias.

A recent Supreme Court ruling has held that 606(b) is not unconstitutional because the right to an impartial jury is still protected by other adequate safeguards (*Warger v. Shauers* 2014). The court stressed that "parties may bring to the court's attention evidence of bias *before* the verdict is rendered" (*Warger v. Shauers* 2014, p. 523; emphasis added). However, this is problematic, because clearly if defendants are unaware of the comment prior to the rendering of the verdict, they are unable to bring it to the attention of the court. The duty then falls solely to other jury members who are privy to the jury deliberation misconduct. Jurors might not feel comfortable reporting the misconduct of another juror until the trial is over and they are physically distant from the biased juror. Therefore, it is crucial to examine whether jurors are actually likely to bring the comment to the attention of the court in the permissible time, prior to the return of the verdict. If the research shows that they are unlikely to do so, then 606(b) may be barring the only realistic avenue of recourse for juror misconduct in the deliberation room.

Rule 603 Oath or Affirmation to Testify Truthfully

The entertainment industry has made the legal oath-taking process and raising one hand while placing the other on the Bible and swearing to tell "the truth, the whole truth and nothing but the truth, so help me God" very familiar to the average person. Rule 603 requires that prior to testifying, "a witness must give an oath or affirmation to testify truthfully. It must be in a form designed to impress that duty on the witness's conscience." The Advisory Committee Notes (1972) comment that the rule is specially designed to allow for flexibility for all witnesses, be they "religious adults, atheists, conscientious objectors, mental defectives [or] children." There is no special verbal formula required as long as the affirmation signals a solemn undertaking to tell the truth, and the oath does not require the Bible or any other exalted text.

The process and its familiarity lead to a number of interesting research questions. First, what is the effect of oath taking? How does it influence the witness, and how does it affect the perception of the trier of fact? In addition, due to the familiarity of the statement above, is there a difference in the perception and impact of the statement if the witness varies the statement and in particular, if the witness removes all reference to religion? This latter question is particularly relevant and interesting in relation to the research discussed above involving ingroup religious bias.

Some researchers have examined truth-telling in the context of embodied cognition, which suggests that people use concrete bodily sensations, the physical environment, and social context to make sense of abstract concepts, such as honesty (Barsalou 2009). Through metaphor, these concepts can become so linked with certain bodily movements that as soon as any component of the pattern is triggered,

the association is activated due to previous frequent connections (see Fetterman and Robinson 2013; Schnall et al. 2008; Williams and Bargh 2008). Parzuchowski et al. (2014) examined the metaphoric association of the heart with the concept of honesty: "from the heart," "cross my heart." They hypothesized that the motor movements of placing a hand over the heart would increase the accessibility of thought content associated with abstract honest behaviors, such that participants would be more likely to perceive honesty or be more honest even without explicitly thinking about the semantic meaning. They showed their participants a photo of a man with either his hands by his sides or one hand placed over his heart. Participants then read a number of statements that were ostensibly made by this man, some of which were highly improbable, such as "I have never argued with members of my family." Participants who saw the picture with his hand over his heart were more likely to perceive the man as honest. Parzuchowski et al. (2014) also found that participants who engaged in the behavior of placing their own hand over the heart were more likely to be honest than those who kept their hands on their hips. Thus, it is possible that the simple behavior of swearing an oath, especially when done with the prototypical movements, could lead to more honest testimony from the witness and a perception of greater witness credibility from the trier of fact.

The simple presence of religious words may also have an effect on prosocial behavior. Randolph-Seng and Nielsen (2007) used a conceptual priming technique in which participants were exposed to words that were either neutral or related to religion or sports. Participants were then asked to complete a circle test designed to measure cheating. The test required writing specific numbers inside a small circle while alone in a room with their eyes closed. Participants were induced to cheat by being provided with unrealistic performance expectations and a promise of additional extra credit for high performance. The researchers also measured religious orientation. They found that there were significant differences in cheating rates between conditions, with cheating rates of 44 % in the neutral, 50 % in the sports, and 0 % in the religious condition. Further, there were no significant differences based on the participant's religious orientation, suggesting that a stereotypical representation of religion triggers an automatic influence on prosocial behavior, regardless of individual religious belief. However, a recent meta-analysis found that while religious priming does have an affect across a variety of outcome measures, it does not reliably affect nonreligious participants (Shariff et al. 2016). Therefore, one question to be asked is whether or not a religious oath would affect a witness's honesty even if the witness is not religious. Moreover, does a religious oath have a greater impact than a simple promise to tell the truth? This is a particularly interesting question as witnesses are not required to refer to religion in their oaths.

The above research provides the hypotheses that witnesses would both be and be perceived as more honest when they give an oath prior to testifying. As all witnesses are required to swear some form of oath, it is less important to examine whether the oath itself leads to truth-telling, but more so to compare the impact of different forms of affirmations, religious or secular, on both the truth-telling of the witness and the perception of the juror. This could also presumably be influenced by the religion of the perceiver, as previously discussed.

Rule 505 and 506 Privileges [Not Enacted]

When the FRE were first proposed, they contained a number of rules that were ultimately rejected by Congress. These rejected rules or variations on them were nevertheless adopted in some jurisdictions. Many of these rejections involved rules pertaining to privileges. One example is Rule 506, which held communications to clergy as confidential and allowed both the speaker and the clergy to claim the privilege and refuse to disclose any part of the confidential communication. Instead, Congress enacted Rule 501, which stated generally that the common law governs claims of privilege. Therefore, while not officially binding, the rejected rules do provide a general guide to many judges, particularly as they are based on common law privileges. Thus, though not formally part of the FRE, the rejected rules are still applicable in many states, often through state statutes, and warrant discussion in this chapter.

Another rejected rule is Rule 505, which states that "an accused in a criminal proceeding has a privilege to prevent his spouse from testifying against him." Rule 505(b) also allows that the spouse may claim the privilege on his behalf. Conversely, in *Trammel v. United States* (1980), which was decided after the enactment of the FRE, the Supreme Court held that only the testifying spouse holds the privilege not to testify, and therefore the accused cannot prevent his or her spouse from testifying. Not all jurisdictions, however, have accepted *Trammel*, and in those that have not, the accused may still prevent the spouse from testifying. This includes some jurisdictions in which the FRE or the common law rules relating to privilege do not apply. While varying by jurisdiction, there are some exceptions to the testimonial privilege, such as crimes that were against the spouse, the spouse's property, or the children of either spouse.

A significant research question that has not been examined is the impact of invoking the privilege on the defendant's case. Although research into this specific question appears to be limited, the topic is similar to research into criminal defendants who invoke their Fifth Amendment right to remain silent, where "no person…shall be compelled in any criminal case to be a witness against himself." Legally, pleading the Fifth should not lead to an inference of either guilt or innocence, as both the guilty and the innocent alike have the right to plead (Hook 1957). However, research suggests that defendants who invoke their right to remain silent, either on the stand or by declining to take the stand, are judged as more guilty than those who do take the stand and testify (Shaffer and Case 1982).

Hendrick and Shaffer (1975) conducted the first study to determine whether pleading the Fifth leads to a stronger inference of guilt. They manipulated whether the defendant denied his guilt or pled the Fifth, and either denied to implicate another person or chose to remain silent about whether that person was guilty. The latter manipulation was to compare the effects of withholding information about another person versus withholding information about the self. The results indicated that those who pled the Fifth for the self and for the other were seen as the least moral as compared to those who did not plead the Fifth. Participants were also more

willing to indict those who pled the Fifth than those who denied their guilt. Participants were then asked about the likelihood that someone else was guilty, but no differences were found among conditions when the defendant either remained silent or denied the other's guilt. Therefore, overall, defendants were worse off when they chose to remain silent, but there was no effect on the perceived guilt of the other whether the defendant denied his guilt or remained silent.

If this study is extended to situations in which a witness invokes the spousal testimonial privilege in a case against his or her spouse, it can be presumed that the spouse would be perceived as less credible, but this provides little information about whether this increases perceptions of the defendant's guilt. There is some evidence that guilty verdicts and judgments are predicted by impressions of the defendant and of his or her character witnesses, and it is possible that this could also include the defendant's spouse, whether or not the spouse chooses to testify (Hunt and Budesheim 2004). These presumptions can be tested by manipulating whether the defendant's spouse testifies or invokes the spousal privilege and then evaluating verdict outcomes, witness and defendant credibility, and defendant guilt perceptions.

Conclusions

This chapter has examined the assumptions and implications of the FRE. While psychological research indicates that some of the rules do reflect reliable research, many of the rules do not seem to correspond with empirical evidence and can leave legal actors, especially criminal defendants, vulnerable. Researchers need to further evaluate the direct impact that use of the FRE may have on the actions of the parties and the perceptions of the triers of fact. To date, psycholegal researchers have concentrated on a small number of evidentiary rules (e.g., those related to relevance, prejudice, and expert testimony) and have paid little attention to many other evidence rules that make psychological assumptions. These literature gaps need empirical attention to ensure that all parties receive the most just procedures and substantive outcomes.

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