Chapter 8
Psychological Issues in Civil Trials

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Synopsis

Civil juries resolve disputes between individuals or between individuals and commercial entities. Most civil jury trials occur in the United States; a few other countries use civil juries occasionally. Spurred by media attention to large damage awards in prominent cases, commentators have expressed concerns about the ability of laypeople to resolve these disputes. They suggest that civil juries are overly sympathetic to plaintiffs, biased against wealthy defendants, and likely to make unpredictable and unreasonable decisions. Psychologists and other social scientists have examined these suppositions and found that although civil jury trials *do* involve complicated and technical issues that tax some jurors' abilities and although the applicable laws are sometimes poorly understood, most judges agree with most jury verdicts. Furthermore, reforms in trial procedures can improve jurors' ability to understand the evidence and apply the law, enhancing the likelihood of reasoned and predictable verdicts.

Psychological Issues in Civil Trials

A civil trial is a legal forum in which juries and judges resolve disputes between individuals or between individuals and businesses or corporations. The vast majority of civil jury trials take place in just one country, the United States, where the right to a trial by jury in a civil case is provided by the Seventh Amendment to the Constitution:

> In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

Though the institution of trial by jury is gaining a foothold in many countries where only a few years ago no such entity existed (Vidmar, 2000), the vast majority of these countries provide for jury trials only in criminal cases; far fewer legal systems resolve civil disputes by means of a jury trial. Although vestiges of civil jury trials do still linger in some of the countries of the former British Commonwealth (e.g., England, Wales, Canada, and New Zealand), the right to a jury trial in these jurisdictions is not absolute and often seems more theoretical than actual.

In this chapter, I first describe the nature of American civil trials, detailing the kinds of disputes that they involve and their typical outcomes, and then analyze civil jury trial practices in other countries. I then detail some oft-heard concerns about the unpredictable nature of civil juries and jury verdicts. To address these concerns, I review the results of psychological research studies that have examined some obstacles to reasoned and predictable decision-making. These include the complexity inherent in many civil cases and the general difficulty that civil jurors experience in understanding and applying their instructions. Finally, I outline the ways that trial procedures are being modified and civil jurors helped to make better, more predictable decisions, along with the psychological data on the effects of these reforms.

The Nature of American Civil Trials

Two issues typically loom in every civil trial in the United States. The first concerns the liability of the defendant (and, in cases of comparative negligence in which the plaintiff has some responsibility for injuries sustained and in cases involving counter-claims, the liability of the plaintiff). The second concerns the amount of money (or damages) to be awarded to the plaintiff as compensation. Damage awards can be of several sorts. Compensatory damage awards are generally intended to return the plaintiff to pre-injury levels of functioning or to repair the harms caused by the injury or wrong. These monies cover the financial costs incurred by the plaintiff such as lost income, medical expenses, lost business opportunity, and damage to one's reputation. These damages are termed "economic" or "pecuniary" because they are based on an arguably quantifiable metric. Compensatory damages can also include a noneconomic (or "nonpecuniary") component to compensate the plaintiff for intangible injuries including pain and disfigurement, emotional distress, and loss of enjoyment of life. These losses are less easy to quantify. In addition to compensatory damages, punitive damages are occasionally awarded to punish the defendant for malicious or egregious conduct and to deter future transgressions. Punitive damages are usually awarded only if compensatory damages have also been awarded and appellate courts expect that there will be some reasonable relationship between the two (*BMW v. Gore*, 1996).

Although jurors and judges must make multiple decisions about liability and damages (e.g., Was the plaintiff harmed? Did the defendant's actions cause the

harm? Should the plaintiff receive compensatory damages?) on the basis of discrete sets of evidence presented at trial, there is some evidence that juries may lack the ability to effectively separate the two broad sets of evidence (i.e., those relevant to liability and to damages) and rely only on the evidence pertinent to each decision. For example, Greene et al. (2001) showed that mock jurors used evidence of injury severity—theoretically related only to damages—when assessing liability, and Greene et al. (1999) showed that jurors used evidence related to the reprehensibility of the defendant's conduct—theoretically related only to liability—when assessing damages. In general, judgments of responsibility are positively correlated with injury severity (Robbennolt, 2000).

Psychologists who study decision-making in civil trials have tended to focus on damages rather than liability.[1] The reasons for this preference are many, including the fact that damage awards are inherently arbitrary and that it is sometimes extremely difficult to attach a monetary value to suffering and losses. In addition, damages are certainly more variable than liability judgments, allowing jurors' sentiments, preferences, and biases to have more impact on the decision. But the primary reason that psychologists have become interested in examining damages determinations is that much controversy surrounds jurors' assessments of damages, spurred in large part by attention from the media.

The media tend to cover large, class-action lawsuits (cases filed by a group of individuals who claim similar injuries allegedly inflicted by large corporations such as tobacco companies and drug manufacturers) and smaller, though still sensational cases brought against corporate executives. Through this process, the public learns, for example, about multi-million (and occasionally, multi-billion) dollar punitive damage awards against large corporations like Philip Morris, Exxon, or Merck (often, these awards are reduced or thrown out on appeal) and about corporate debacles at WorldCom, Enron, HealthSouth, and Tyco, among others.

But are these the kinds of disputes that are typically resolved in civil trials? The answer is a resounding "No"; despite their prominence in the media and in debates about the fairness and efficiency of civil jury trials, Bailis (1996) suggests that these large-stakes cases are, in fact, highly atypical.

Systematic analyses of civil jury trials provide information on typical case characteristics and trial outcomes. For example, data compiled by Cohen (2004) from the 75 most populous counties in the United States in 2001 show the types of disputes that are commonly resolved in civil trials. According to these data, torts (civil wrongs such as automobile negligence and medical malpractice) accounted for two thirds of the 12,000 civil trials held in U.S. state courts. (Contract and real property disputes accounted for the remainder.) Juries decided 90 percent of these cases and judges decided only 10 percent. Automobile accidents were the most

1 Notable exceptions that examine how jurors determine liability include studies by Bornstein, 2004; Cooper et al., 1996; Feigenson et al., 2001; Greene et al., 1999; and Kamin and Rachlinski, 1995.

common source of the dispute (53% of tort trials), followed by premises liability (16%) and medical malpractice (15%). Cases involving intentional torts, product liability, and slander and libel were less common. In terms of the litigants, 70 percent of tort trials involved only one plaintiff and 56 percent involved only one defendant. Four fifths of all tort trials involved one individual suing either another individual or a business, making this constellation of circumstances the most typical form of civil trial overall. Across all trials, plaintiffs won approximately half the time, although they were more likely to be successful in automobile cases (61% win rate) than in premises liability (42% win rate), medical malpractice (27% win rate), or slander/libel cases (42% win rate).

The median damage award for plaintiff winners was not in the million dollar range but rather, was a modest $27,000 though awards varied considerably by type of case (e.g., the median award was only $16,000 in automobile cases and $422,000 in medical malpractice cases.) Damages of $1 million or more were awarded rarely; only 8 percent of plaintiffs who won their cases won more than $1 million. Punitive damages, intended to punish the defendant and to deter the defendant and others from similar conduct in the future, were also rare and, when awarded, were modest. Several of these findings (e.g., that most cases involve single individuals suing other individuals or businesses, that plaintiffs win only half the time and when they do, that awards are generally modest) run counter to public perceptions of civil juries as biased in favor of plaintiffs who receive a windfall by taking their cases to court, and of jurors eager to extract large sums of money from well-heeled corporate defendants.

A slightly different pattern emerges from analysis of cases tried in federal courts (i.e., courts that resolve cases in which the federal government is a party or that involve complaints based on federal laws including statutes and the federal constitution). In his compilation of data from U.S. District Courts, Galanter (2004) showed that of the 4,500 cases tried in 2002, fully one third involved civil rights disputes, slightly fewer than one quarter involved torts, 15 percent concerned contracts, and 11 percent involved prisoner petitions regarding their release and their civil rights claims. Regardless of the precise nature of the civil trial, it is actually of a vanishing breed. Although most civil cases have historically been resolved well short of trial, Galanter (2004) has shown a dramatic drop in the actual number of cases being tried in the past 40 years. The reasons for this are many, including the fact that fewer cases get to court in the first place (perhaps because lawyers are more likely to opt not to represent people whose cases are likely to fail), cases are diverted to alternative dispute forums, and it is becoming increasingly expensive to mount a trial.

A Comparative Look at Civil Trials in Other Countries

While trial by civil jury is becoming less common in the U.S., civil jury trials have become almost nonexistent in most other countries. In fact, only a handful

of countries use any kind of lay panels to resolve non-criminal disputes; most are resolved by judges, magistrates, or commissions. And countries that *do* allow for civil juries, including Canada, New Zealand, England, and Wales, use them only rarely. According to Bogart (2000), the notion of the civil jury in Canada "dangles by a shoestring despite the fact that it enjoys broad public support" (p. 415). Civil juries exist in little more than name only in some jurisdictions in Canada and have been abolished outright in others. Juries are used more in Ontario, the largest province, than in other provinces, but even in Ontario, jury trials are far less common than in the United States. In New Zealand, despite the fact that either party can request a jury trial, they are so rare that the Department of the Courts has apparently stopped keeping statistics on their use (Cameron et al., 2000). In England, less than 1 percent of civil trials involve a jury (Lloyd-Bostock and Thomas, 2000).

One explanation for the paucity of civil jury trials in these jurisdictions is that by law, jury trials are reserved for only specific types of cases: only defamation and personal injury cases in New Zealand (Cameron et al., 2000), primarily tort cases in Canada (Bogart, 2000), and only four, relatively obscure kinds of cases in England: defamation, fraud, malicious prosecution, and false imprisonment (Lloyd-Bostock and Thomas, 2000). A second explanation for the infrequent use of jury trials is concern about jurors' abilities to be fair and impartial. In Canada, for example, if either side moves to eliminate the jury, the judge is likely to grant the request, citing concern about the undue complexity of the factual issues for laypeople. In New Zealand and England, if judges believe that a case presents difficult questions of law or especially complex or technical issues, they can opt to decide that portion of the case themselves. There is also concern about the size of jury damage awards in these venues. Some awards in England, for example, have engendered the outcries commonly heard in the U.S. and have resulted in the promulgation of guidelines for assessing damages. For example, in a case involving the singer Elton John, an appellate court ruled that both the judge and attorneys should have taken actions to rein in excessive jury awards in a libel case, particularly in the way that they instructed jurors on the assessment of damages. The "guidance" to which the court referred could involve reference to other, "appropriate" awards and award brackets (*John v. MGN, Ltd*., 1996). English appellate courts have also established guidelines for the assessment of punitive, or exemplary damages in false imprisonment and malicious prosecution cases (e.g., a maximum award of £50), including an advisement to juries that exemplary damages represent a windfall profit to the plaintiff whose losses were already covered through the compensatory award.

Trio of Concerns about Civil Juries and the Reasonableness of Their Verdicts

In the United States, concerns about the legitimacy of civil jury verdicts have been voiced for some time. The genesis of contemporary denunciations was the tort reform movement of the 1980s that portrayed Americans as excessively litigious and civil

juries as unable to differentiate legitimate from bogus lawsuits and overly generous in their damage awards (Huber, 1988; Olson, 1991). With only brief respites since then, the criticisms have continued. They invariably focus on the jury's ability to assess damage awards (both compensatory and punitive) in a fair and even-handed manner. Thus, recent critics have claimed that awards are capricious and immoderate (Sunstein et al., 1998) and "predictably incoherent" (Sunstein et al., 2002). There is far less concern that juries might undercompensate plaintiffs—which they sometimes do, particularly in cases that involve serious injuries.

Three distinct concerns about civil juries can be identified: first, that they are overly sympathetic to plaintiffs in awarding excessive sums of money, especially for punitive damages; second, that they are biased against wealthy, deep-pocketed defendants; and third, that their decisions are unpredictable and arbitrary (Hans and Albertson, 2003; Vidmar et al., 2000). In the next sections, I examine the data relevant to each of these allegations. But first, a comment about methodology: some data described here were derived from archival studies; others came from simulations. Each methodology has its strengths and weaknesses: archival studies involve data from actual cases but do not allow for cause-and-effect conclusions whereas simulation studies that can provide conclusions about causation (e.g., that complexity of expert testimony caused impaired decision-making) also lack real world consequences. If future results replicate earlier findings, we can be more confident that the data are providing a clear window into the decision-making processes of civil jurors and juries.

Are Civil Jurors Overly Sympathetic to Plaintiffs in Awarding Excessive Damages?

As previously noted, plaintiffs win approximately 50 percent of civil trials and the median damage award is less than $30,000. One might argue that these seemingly moderate figures, standing alone, provide sufficient proof that civil jurors are not overly sympathetic to the plight of plaintiffs. But such extrapolation is unnecessary; empirical data make it clear that laypeople tend to be rather suspicious of plaintiffs and their motives for suing. As part of a series of studies that examined lay perceptions of businesses and corporations, Hans and Lofquist (1994) interviewed jurors who had served in civil cases. Most jurors agreed that there are far too many frivolous lawsuits and that people are too quick to sue. These jurors indicated that during deliberations they carefully scrutinized the plaintiffs' motives and questioned the legitimacy of their complaints. They were especially hostile toward plaintiffs who did not seem to be as injured as they claimed, had pre-existing medical conditions, and might have contributed to, or did little to mitigate their own injuries. Some of these jurors portrayed themselves as acting as a defense against illegitimate grievances and frivolous lawsuits, claiming that they were indeed suspicious of plaintiffs' motives.

These findings are consistent with public opinion polls showing that Americans tend to be distrustful of plaintiffs and suspect that many lawsuits are unnecessary (Greene et al., 1991; Hans and Lofquist, 1994). General distrust of plaintiffs and

their behavior is also apparent in simulation studies showing that mock jurors hold plaintiffs accountable even when their actions are legally blameless (e.g., Feigenson, 2000; Feigenson et al., 1997) and discount a compensatory damage award to a partially negligent plaintiff (as compared to a blameless plaintiff) despite instructions to the contrary (Zickafoose and Bornstein, 1999). Finally, simulation studies have shown that jurors' attitudes about civil litigation (e.g., the "litigation explosion") affect the magnitude of the damages they award (Goodman et al., 1990; Greene et al., 1991; Hastie et al., 1999): those jurors who believe that there is a litigation crisis and that people are overly eager to sue tend to award less.

Although it is not my intent to provide an exhaustive review of the data on punitive damage awards, reference to a few studies may be useful in addressing the concern that juries tend to award excessive amounts as punitive damages. As noted, punitive damages are awarded infrequently. According to Cohen's (2005) analysis of the punitive awards in the 75 largest U.S. counties in 2001, only 6 percent of winning plaintiffs were awarded punitive damages and these awards tended to be given only in certain kinds of cases (e.g., tort cases involving slander/libel and intentional torts, and contract cases involving partnership disputes, employment discrimination, and fraud). In addition, awards tended not to be large: the median punitive damage award in civil jury trials in 2001 was $50,000 ($83,000 in contract trials and $25,000 in tort trials). Only 12 percent of plaintiff winners who received punitive damages were awarded $1 million or more; 69 percent of those receiving punitive damages were awarded less than $250,000.

Other studies suggest that punitive damages tend to be proportionate to the extent of wrongdoing (e.g., Rustad, 1998) and to the level of compensatory damages awarded. For example, Vidmar and Rose (2001) analyzed Florida state court verdicts between 1989 and 1998 and concluded that although the ratio of punitive awards to compensatory awards varied considerably by case type (ranging from 0.1:1 in impaired driver accidents to 6.3:1 in cases involving improper treatment of deceased people), the average punitive damage award was only 68 percent of the compensatory award. Thus, most indices of punitive damages suggest that they are awarded relatively rarely, are concentrated in a few kinds of cases, and, when awarded, tend not to be extremely large. Still, critics point to a few very large punitive damage awards as proof that punitive damage verdicts can be wildly extravagant and that jurors' assessments of punitive awards are both capricious and arbitrary (Sunstein et al., 2003). Fervent debate over the pattern and predictability of punitive damage awards continues to this day (e.g., *Philip Morris v. Williams*, 2006).

Are Civil Jurors Biased Against Deep-Pocketed Defendants?

It is widely believed that civil juries are biased against defendants with extensive financial resources. Huber (1988), for example, suggested that juries in civil damages cases are committed to running a generous sort of charity, transferring money from wealthy defendants to impoverished and injured plaintiffs. This belief may be

related to the media's attention to large damage awards assessed against corporate defendants and their lack of attentiveness to the more common but less sensational situation in which a tort plaintiff wins $18,000 from an apartment manager or from an insurance company.

Although plaintiff win rates are approximately equivalent regardless of whether the defendant is an individual or a corporation, awards do tend to be higher in cases involving the latter. For example, Chin and Peterson (1985) analyzed 20 years of verdicts in Cook County, Illinois and found that juries awarded significantly more money in cases with corporate defendants than in cases with individual defendants. In a mock jury study, Hans and Ermann (1989) found that the defendant "Jones Corporation" was assessed higher damages in a toxic tort case than was the defendant "Mr. Jones." Robbennolt (2002) determined that the punitive damage awards of both jury-eligible citizens and judges were influenced by the wealth of the defendant.

Recent work (e.g., Hans, 2000; MacCoun, 1996) has cast doubt on the assumption that deep-pocketed defendants are treated more harshly than individual defendants because they are perceived as wealthier, however. Using experimental methodology, MacCoun (1996) varied the identity of the defendant in a series of mock personal injury cases by describing the defendant as a corporation, a wealthy individual, or a poor individual. The verdicts on damages were insensitive to differences in perceived defendant wealth: although corporate defendants paid more than wealthy individuals, those wealthy individuals paid no more than poor individual defendants. MacCoun suggests that jurors may treat corporations differently because they find it easier to impose costly sanctions against an impersonal entity such as a corporation and because they hold corporations to a higher standard than individuals (a "reasonable corporation" standard). They expect that corporate resources—both human and capital—should allow a corporation to anticipate harm and act proactively to prevent it. Corporations may indeed be treated differently than individual defendants, but not, apparently, because of their financial status.

Are Civil Jury Decisions Unpredictable and Arbitrary?

The focus of concern about unpredictability is whether damage awards, particularly those for punitive purposes, are highly variable (Sunstein et al., 2003). Although compensatory damages tend to correlate positively with the severity of the plaintiffs' injuries (Wissler et al., 1997), some studies have shown variability in these awards even after controlling for important case characteristics (e.g., Sloan and Hsieh, 1990; Viscusi, 1988).

To what might we attribute this variability? Sunstein et al. (2003) suggest that civil jury verdicts are essentially groundless; that because jurors lack the ability to understand their instructions and to transform their evaluations of the evidence into any kind of reasoned metric, their judgments can be influenced by biases in reasoning (termed "cognitive illusions"), sometimes based on little more than whim and supposition. If this were the case, then one might expect jurors' judgments to

differ markedly from judges' decisions about the same set of evidence because judges have both the requisite training and experience to render predictable and legally-appropriate judgments. Fortunately, several studies have compared the decision-making of judges and civil juries.

These studies typically include judges' appraisal of the nature of the evidence (including its complexity), an indication of what their own verdicts would have been, and a measure of their satisfaction with the jury's decision. According to Hannaford et al. (2000) and Sentell (1991; 1992), judges tend to agree with the jury's verdict in the vast majority of cases. Furthermore, judges' awards are similar in magnitude and variability to those of jurors (Eisenberg et al., 2002; Robbennolt, 2002), and they tend to rely on the same evidence to inform their decisions (Robbennolt, 2002). According to these findings, we have little reason to believe that jurors' reasoning processes or verdict preferences are inherently different from those of judges. In fact, judges have been shown to employ the same cognitive illusions as laypeople (Guthrie et al., 2001).

As Diamond (2003) points out, jurors *do* face challenges in civil trials that can occasionally undermine their ability to reach predictable and legally-appropriate decisions, however. One obstacle is the complex and highly-technical nature of many civil trials, particular those that involve various expert witnesses and multiple intricate and unfamiliar legal claims. Judges interviewed by Goodman et al. (1985) pointed to expert testimony as a significant source of the difficulty for jurors, particularly in complex trials. According to Diamond though, the most serious challenge for a jury involves applying the facts it finds to the law it receives in the form of judicial instructions: "Both the persistently opaque language and construction of jury instructions and the reluctance to address issues that almost inevitably will come up in deliberation impair the ability of the jury to apply the instructions … the jury invests considerable effort during deliberations attempting to apply incomprehensible or ambiguous directives on the applicable law" (Diamond, 2003, p. 154). Could either or both of these difficulties—technical complexity and problems with the instructions—explain the variability that exists in some jury damage awards and the fact that, on occasion, awards seem less rational than might be desired? I consider these possibilities next.

Complexity Inherent in Civil Jury Trials

Civil jury trials have become increasingly complicated. Most now involve expert witnesses and economic forecasting and many require jurors to understand and interpret complicated business transactions, sophisticated medical procedures and terminologies, or detailed industry standards and regulations. Some trials involve multiple plaintiffs and defendants suing and counter-suing one another. Often these proceedings are couched in highly technical language.

Expert Testimony

One clear source of complexity at trial is expert testimony. The use of expert witnesses in civil trials has increased in recent years; in surveys of U.S. District Court judges and attorneys during the 1990s, judges reported information on their most recent civil trial involving experts. In 1991, there was an average of 3.0 experts per trial and by 1998, the average had risen to 4.1 experts per trial. The most frequently presented expert testimony came from economists, followed by experts in the fields of medicine (including mental health);[2] business, finance, or law; and engineering and safety (Krafka et al., 2002). In a review of 529 civil trials, Gross and Syverud (1991) found that 86 percent involved expert testimony and that it was ubiquitous in medical malpractice and product liability cases.

Given that expert testimony is omnipresent in civil trials and that its intent is to inform jurors of standards, findings, or conclusions of which they would otherwise be unaware, the ability of an expert to convey complex points and the ability of the jury to understand those points will often determine how a civil trial is resolved. There is an interesting paradox here, however. As Gross (1991) has noted, "We call expert witnesses to testify about matters that are beyond the ordinary understanding of lay people (that is both the major practical justification and a formal legal requirement for expert testimony) and then ask lay judges and jurors to judge their testimony" (p. 1182). How *do* lay jurors respond to the testimony of expert witnesses? Are they mesmerized by the authority vested in experts and overly accepting of experts' conclusions? Or are they careful to scrutinize the experience and motivation of experts and discriminating in how they use the concepts conveyed by these experts?

There is a large literature detailing jurors' use of expert testimony; only the most cursory of reviews is presented here. These studies have proceeded via case analyses, interviews, and simulation methodology. For example, in a comprehensive analysis of 13 complex civil trials, Lempert (1993) concluded that there was little indication of jury irrationality or of uncritical acceptance of the experts' opinions.

Interview studies also suggest that jurors are not particularly mesmerized by expert witnesses and, in fact, tend to evaluate an expert's testimony rather critically. Shuman et al. (1996) interviewed 156 Texas jurors who had served in civil cases. They determined that jurors scrutinized the credentials of the experts, their familiarity with the facts of the case, the bases for their opinions, and their impartiality—all factors that play into judgments of the experts' credibility. Vidmar (1995) reported that jurors interviewed in medical malpractice cases were often highly skeptical of

2 Medical experts often detail the cause and extent of personal injuries. Testimony of this sort can be especially effective in justifying damages for noneconomic injuries because plaintiffs sometimes lack insight into their own injuries, may have no basis on which to compare their experiences to those of others, and occasionally downplay the extent of their psychological injuries so as not to appear emotionally fragile or vulnerable (Goodman-Delahunty and Foote, 1995).

the experts they heard during trial. In interviews with 55 jurors from seven trials that included expert testimony, Ivkovic and Hans (2003) discerned that even when jurors faced problems with technically complex expert evidence, they used sensible procedures to try to decipher it: assessing the completeness and consistency of the information, comparing it to related information, and relying on more knowledgeable jurors to lead the way. In general, these studies show that jurors neither ignore nor uncritically accept the testimony offered by expert witnesses; even when it is highly technical, the expert evidence is analyzed in a fairly rational and methodical way (Vidmar et al., 2000).

Jury simulation studies have attempted to clarify some of the factors that affect jurors' understanding and use of expert evidence. The inherent complexity of the testimony is obviously an important variable and has been manipulated in several studies. In one study designed to assess the effects of complexity, Cooper et al. (1996) examined jurors' reactions to expert testimony from two scientists who opined about the possibility that the plaintiff's colon cancer resulted from exposure to PCBs. Researchers varied the quality of the experts' credentials as well as the complexity of their messages and found that the highly credentialed expert was more influential but only when the testimony was highly complex and difficult for jurors to evaluate. In the complex version of the trial, jurors tended to use heuristical reasoning processes, relying more on peripheral details of the messenger (i.e., the expert's credentials) than on the content and quality of the message.

In a subsequent study using the same case facts, Cooper and Neuhaus (2000) showed that mock jurors were not affected by peripheral facts such as the frequency with which the expert had testified in the past or the amount of money that he or she received to do so—provided that the expert testimony was presented in terminology that they could understand. When jurors were unable to understand the substance of the testimony, they used characteristics such as the expert's high pay and frequent appearances in court as cues for assessing believability. These findings fit with Petty and Cacioppo's (1986) dual-process, cognitive model of persuasion that suggests that when the message is engaging, accessible, and meaningful, a perceiver will attend to its content; when it is obtuse or seemingly irrelevant the perceiver attends to its non-essential details.

Other studies have shown that when faced with complex statistical expert testimony, civil jurors will sometimes use fallacious reasoning processes. For example, mock jurors in Kovera et al.'s (1999) hostile work environment case relied on heuristic cues like representativeness (i.e., the extent to which the research relied on by the expert represented the facts of the case) and general acceptance (i.e., others' evaluations of the quality of the evidence) when gauging the value of an expert's testimony—factors that may not be reliable indicators of scientific validity. In Bornstein's (2004) simulated toxic tort case, mock jurors were more likely to be persuaded by expert testimony that described anecdotal case histories than data from scientific research studies, suggesting the presence of the base-rate fallacy (i.e., people are more influenced by vivid and salient individual cases than by data drawn

from larger samples). These findings suggest that jurors who are confronted with particularly complicated or abstruse sets of evidence are more likely than those with simpler information to rely on heuristical reasoning processes to reach a verdict.

These studies also show that jurors may have some difficulty making sense of complicated scientific or statistical evidence. (Though even here, findings are not uniform. For example, Diamond and Casper [1992] varied the nature of the expert testimony in a mock antitrust trial. The expert presented either a complex statistical regression model or a more concrete "yardstick" analysis. Mock jurors' damage awards were unaffected by this manipulation.) Still there is little reason to suspect that they passively defer to experts, even when faced with evidence of a highly technical nature. A consistent finding from both interview and simulation research is that jurors attempt to scrutinize both the message and the messenger; in judging the expert's credibility, they critically evaluate both the content of the evidence and the motives of the expert witness (Ivkovic and Hans, 2003). In addition, as Vidmar et al. (2000) point out, juries tend to rely on the thinking of their strongest members (i.e., those jurors with the most experience or knowledge of scientific and technical methodologies and conclusions) who may be able to help the jury perform optimally even in the face of complex evidence.

Judicial Instructions in Civil Jury Trials

As Greene and Bornstein (2003) note, a civil jury's task is further complicated by the fact that jurors must answer several questions yet use different sources of evidence and decision rules for each. For example, jurors in a product liability case would be instructed first to determine, by a preponderance of the evidence (typically deemed to be 51 percent of the evidence), whether the product in question was defective. To do so, they would have to rely on industry standards and policies—writings that may be puzzling and unfamiliar to them. They are instructed next to determine whether any alleged defect in the product caused injury to the plaintiff and must use a different set of evidence to answer this question. They then turn to their next set of tasks—deciding whether the plaintiff is entitled to damages and in what amount. Here, they are instructed to award the plaintiff compensatory damages for both the economic and noneconomic losses that were caused by use of the defective product. In many cases, the plaintiff may have done something to contribute to his or her own injuries, in which case jurors are instructed to determine the extent of the plaintiff's contribution, but then to assess the *full* extent of the damages, being instructed that the judge will reduce the award proportionate to the plaintiff's involvement. Finally, jurors may have the option to award punitive damages. Here, they are instructed to focus not on the plaintiff's condition but instead on the conduct and wealth of the defendant manufacturer. They are instructed to determine whether the plaintiff has proven (often by a higher standard of proof, i.e., by clear and convincing evidence) that the defendant's conduct was willful and wanton and, if so, to impose a punitive damages award that will effectively punish and deter the defendant. Obviously, each

of these multiple decisions involves a complex judgment in and of itself, and each relies on a unique set of evidentiary information. Taken together, they represent a formidable task for most laypeople.

The jury instructions relevant to damage award determinations are particularly difficult to apply. Although jurors are informed about the components of economic damages (including past and future economic losses and past and future noneconomic losses), they are not typically instructed on the definitions of various terms (e.g., pain and suffering, emotional stress) so they must use their own intuitions about what these concepts mean. They also receive no instructions about how to consider and weigh these components, or about how to translate these components into an aggregate award. Further, they are instructed to discount the assessed damages to present economic value (based on the idea that over time, the discounted award will increase in value and eventually reach the amount that jurors opt to award) but may not be told explicitly how to do this.

Perhaps most perplexing for jurors are instructions on punitive damages, often criticized for their ambiguity. For example, Ellis (1989) argued that the vagueness and uncertainty surrounding punitive damages "invite juries to indulge their biases and penchant for wealth redistribution and induce plaintiffs and their lawyers to seek punitive damages from defendants with deep pockets rather than from morally guilty persons" (p. 979). Many judges, including some on the highest court in the United States, are aware of the difficulties presented by jury instructions on punitive damages. According to former U.S. Supreme Court justice William Brennan: "The typical instructions given to jurors, advising them to consider the character and wealth of the defendant and the nature of the defendant's conduct, provide guidance that is scarcely better than no guidance at all" (*Browning-Ferris Industries, Inc. v. Kelco Disposal, Inc.*, 1989, p. 281).

Judges instruct jurors simply to assess punitive damages sufficient to punish and deter and to consider the nature of the defendant's conduct and the defendant's wealth in this assessment. Some courts supplement these instructions with criteria used by appellate courts in post trial review of awards. These considerations include the requirement that the award bear some reasonable relationship to compensatory damages, that it not bankrupt the defendant, and that the jury not be motivated by passion or prejudice. Even those jurors who *do* understand their instructions may nonetheless apply them inappropriately because they do not correctly assess the social costs (e.g., the death of a few dozen people who took a certain medication) and benefits (e.g., a reduction of symptoms in many million users of the same medication) of the defendant's product or conduct. Melsheimer and Stodghill (1994) suggest that instructions on punitive damages provide juries with broad discretion and little guidance, thus allowing their biases and judgmental deficiencies to operate in an unrestrained manner.

Psychological research data on use of jury instructions A number of psycholegal research studies show that jurors have difficulty comprehending and applying

civil jury instructions (see Chapter 6 in this volume for a general discussion of instruction comprehension issues). For example, Landsman et al. (1998) assessed comprehension in jury-eligible adults who, after being instructed, answered multiple choice questions related to liability and compensatory damages. The data were highly skewed: jurors had quite good understanding of some concepts (approximately 80 percent recognized the requirements for proving liability and 90 percent correctly recognized the factors they are to consider in determining compensatory damages) whereas they had significant difficulty understanding other concepts (only 25 percent correctly recognized the standard of proof used in civil trials and only 31 percent knew who would win if the evidence was equally balanced).

Mock jurors in a simulated automobile negligence case, after being instructed on elements of negligence, deliberated on the liability of the defendant and then answered several questions related to their jury instructions (Greene and Johns, 2001). Only a third of mock jurors were able to recognize the definition of negligence or the legal standard associated with that concept. Finally, in a study that assessed comprehension of judicial instructions on liability for punitive damages, Hastie et al. (1998) provided summaries of previously decided cases and instructions that set out factors jurors were to consider in determining whether a defendant's conduct was reckless enough to warrant punitive damages. Participants were asked specific questions about each of several elements of their instructions (e.g., "What is the legal definition of reckless or callous disregard for the rights of others?"). Comprehension was very low: the median score was 5 percent correct. These data suggest that jurors may have difficulty understanding and applying the instructions they receive from the judge, particularly those relating to damage awards.

There is another reason for concern about jurors' ability to apply the law accurately. In comparison to jurors in criminal cases, civil jurors typically have less knowledge of the issues that arise in their trials and fewer resources on which to rely when attempting to understand the novel ideas presented to them in court. To what extent these obstacles result in variability in civil damage awards is difficult to determine, but the lack of clarity in jurors' explanations of the law is concerning and suggests that processes in place to inform jurors may instead be handicapping them in significant ways.

Reforming Trial Procedures to Enhance Civil Jury Decision-Making

As previously described, civil trials can involve complicated and technical evidence, jury instructions replete with legalese, and unique tasks and rules with which most jurors are unfamiliar. It should come as little surprise then that verdicts are occasionally difficult to fathom. In recent years, though, observers of civil juries have begun to suspect that apparent deficiencies or inconsistencies in verdicts may be a result of the ways that the task is structured and presented to juries. Lempert (1993) articulated the situation well:

> A close look at a number of cases, including several in which jury verdicts appear mistaken does not show juries that are befuddled by complexity. Even when juries do not fully understand technical issues, they can usually make enough sense of what is going on to deliberate rationally, and they usually reach defensible decisions. To the extent that juries make identifiable mistakes, their mistakes seem most often attributable not to conditions uniquely associated with complexity, but to the mistakes of judges and lawyers, to such systematic deficiencies of the trial process as battles of experts and the prevalence of hard-to-understand instructions. (p. 234)

Increasingly, psycholegal researchers have begun to examine the prospects for enhancing decision-making in civil trials by changing trial processes and procedures. They have proposed and tested a number of procedural innovations intended to provide jurors with access to tools that will simplify and streamline their decision-making tasks. Some of these modifications (e.g., allowing jurors to ask questions and to discuss the evidence shortly after it is presented rather than wait until the end of the trial) reflect the fact that jurors are naturally active consumers and processors of information who strive to make sense and meaning of the evidence, especially when it is complex or unclear to them. Other innovations (e.g., giving pretrial instructions, simplifying and rewriting instructions by applying principles of psycholinguistics, allowing jurors to take notes, and providing written copies of jury instructions, transcripts, and summaries of witness testimony) allow jurors better access to the arguments, testimony, and the law presented during the trial and increase the chances that verdicts will be based on a full and accurate recollection of the facts and an understanding of the relevant legal concepts and requirements.

Allowing Jurors to Ask Questions and Discuss Evidence Prior to Deliberating

In many jurisdictions jurors are now allowed to ask questions of the witnesses and to discuss the evidence in the midst of trial. A study by Dann and Hans (2004) on the effectiveness of these policy changes showed that jurors like the process of asking questions of the witnesses and believe that it enables them to better comprehend the evidence. Mott's (2003) analysis of the content of more than 2,000 questions posed in 164 actual trials (both civil and criminal) characterized the nature of jurors' questions: jurors questioned both lay and expert witnesses in order to fit the witnesses' testimony with previously-presented testimony and to inquire about common practices in unfamiliar professions. Despite the fact that this process can sometimes be cumbersome and time-consuming, it can clarify jurors' understanding of the evidence, enhance their involvement in the trial process, and lead to more accurate decision-making.

A somewhat more radical reform permits jurors to discuss the evidence during the trial rather than to wait until their formal deliberations begin. Psychologists have hypothesized a number of advantages of such mid-trial discussions based on

fundamental principles of cognitive and social psychology, including the possibility that early discussions will allow jurors to: 1) organize the evidence into a coherent framework over the course of the trial; 2) improve their recollection of the evidence; 3) allow them to clarify points made in mid-trial; and 4) promote greater cohesiveness among jurors. In a field experiment in which researchers randomly assigned approximately one hundred civil jury trials to an experimental "trial discussion" condition and an equal number to a control "no discussion" condition, Hannaford et al. (2000) found that jurors who reported having these discussions were quite positive about them. They said that trial evidence was remembered very accurately during these discussions, that discussions helped them understand the evidence in the case, and that all jurors' points of view were considered during the course of the discussions. Unfortunately, the authors were not able to measure *actual*, as opposed to *perceived*, gains in comprehension because a general comprehension measure applicable to all trials was not feasible. But a study by Vidmar et al. (2003) of videotapes from 50 civil jury trials in Arizona showed that jurors use these discussions to seek information from one another, raise questions they intend to ask in the courtroom, and talk about the evidence they hope to hear; moreover, these discussions led to modest enhancements in understanding of the testimony and did not result in premature judgments.

Restructuring the Presentation of Information to Jurors

In most civil trials, the jury receives judicial instructions about case-specific law only once, after all of the evidence has been presented. This chronology means that throughout the trial, jurors are kept in the dark about the substantive law that applies in the case and about procedural matters such as how to weigh the credibility of witnesses, assess the importance of experts, and reach a verdict during deliberations. Commentators have pointed out that jurors would have an easier time applying the law if it was explained to them at the start of the trial. Such pre-instruction could provide a cognitive structure or schema that would serve as an organizing framework and memory aid. It would help jurors to evaluate the relevance of evidence and to determine whether the requirements of proof have been satisfied. It could also provide a clearer and earlier picture of the law relevant to the case, and allow attorneys to tailor more effectively their case presentations to the relevant legal principles.

The impact of substantive pre-trial instructions has been examined in a series of sophisticated jury simulation studies involving multiple tort plaintiffs with injuries of varying severity (e.g., ForsterLee and Horowitz, 1997; ForsterLee et al., 1993). Data showed that jurors who were given case-specific pretrial instructions produced damage awards that were better calibrated to each plaintiff's degree of injury than did jurors who were not pre-instructed. In addition, the former were better able to recall the evidence than were the latter. These findings suggest that pretrial instruction can moderate the effects of complex testimony, a result of particular import in civil trials.

Judicial instructions are replete with complicated legal terminologies and concepts that are unfamiliar to most laypeople. Accordingly, some researchers (e.g., Charrow and Charrow, 1979; English and Sales, 1997) have used principles of psycholinguistics to simplify and clarify jury instructions. Their procedures involved minimizing or eliminating the use of abstract terms, negatively modified sentences, and passive voice and reorganizing instructions into a more logical format (see Chapter 6 in this volume for a detailed discussion of jury instruction reform issues). In general, these revised instructions are easier for jurors to comprehend and apply. For example, consider this California jury instruction on "burden of proof":

> Preponderance of the evidence means evidence that has more convincing force than that opposed to it. If the evidence is so evenly balanced that you are unable to say that the evidence on either side of an issue preponderates, your finding on that issues must be against the party who had the burden of proving it.

And compare it to a revised instruction on the same topic:

> When I tell you that a party must prove something, I mean that the party must persuade you, by the evidence presented in court, that what he or she is trying to prove is more likely to be true than not true. This is sometimes referred to as "the burden of proof."

Juror cognition can also be enhanced by the opportunity to take notes during the trial. Although this is a relatively simple procedure to implement, it is still not widely used. (Critics suspect that it will distract jurors from attending to the evidence and that jurors with the more voluminous notes will dominate deliberations.) Note-taking has obvious benefits as a memory aid to jurors. Indeed, several studies have shown its advantages (e.g., ForsterLee et al., 1994; Horowitz and Bordens, 2002), particularly as an encoding device, as a way to distinguish among multiple plaintiffs with differing claims, and as a means to focus the discussion during deliberations. Jurors who are allowed to take notes express greater satisfaction with the trial process than those who are not (Horowitz and ForsterLee, 2001).

The accuracy of jurors' decisions can apparently be enhanced further by allowing jurors to take notes *and* by providing them with statements summarizing the testimony of expert scientific witnesses (ForsterLee et al., 2005). In a study designed to test the synergistic effects of these decision tools, aided jurors gave significantly higher damage awards to the most severely injured plaintiffs without increasing compensation to less seriously injured plaintiffs. In addition, jurors who were both allowed to take notes and given witness summaries recalled more evidence than other jurors. Although the provision of summary statements can be cumbersome, it can provide jurors some much-needed assistance in deciphering the essential elements of the testimony and in having a record of what each expert said.

In general, then, significant progress has been made in recent years in advancing and testing procedures to enhance the quality of civil jury decision-making. Procedural innovations change the way the case is presented to jurors and provide opportunities for them to become engaged in the process of receiving and making sense of the evidence. As judges become more familiar with these procedures, we can expect increased usage in courtrooms—a welcome prospect to most civil jurors.

Conclusions

Although the media attend to high-stakes and high-profile cases, most civil trials are of a humbler nature, concerning matters like automobile accidents and slips and falls, and in these cases, damage awards are of modest size. Still, even these seemingly simpler trials can involve legal issues with which most lay jurors are unfamiliar, complex expert testimonies that need to be evaluated, and opaque jury instructions that need to be understood.

Psycholegal research that plumbs the ways jurors manage these tasks during trial has revealed both decision-making triumphs and tribulations. It has shown, for example, that civil juries are not particularly biased in favor of plaintiffs but rather, are suspicious of many plaintiffs and their motives for suing; that judges tend to agree with jury decisions in most civil trials; and that although plaintiffs have somewhat higher win rates when the defendant is a corporation rather than an individual, it is because they hold corporations to a higher standard of conduct and not because they desire to take money from the pockets of well-healed defendants. But these studies have also shown that expert testimony detailing complicated scientific or technical information is poorly comprehended by civil jurors and that judicial instructions tend to be problematic for many jurors. Yet psycholegal research on civil juries has also suggested and tested methods for reforming the ways that information is presented to juries (e.g., through pretrial and simplified jury instructions and by way of trial summaries) and that jurors are allowed to participate in the trial (e.g., by taking notes, asking questions of witnesses, and discussing the case prior to deliberation). These studies show that reforms can enhance the process for all participants and lead to more predictable, reasoned verdicts by civil juries.

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