Creating Convergence: Debiasing Biased Litigants

Linda Babcock, George Loewenstein, and Samuel Issacharoff

Previous experimental research has found that self-serving biases are a major cause of negotiation impasses. In this study we show that a simple intervention can mitigate such biases and promote efficient settlement of disputes.

It is widely perceived that litigation costs and volume have skyrocketed. Part of a veritable flood, books with such titles as *The Litigious Society* and *The Litigation Explosion* lament the historical trends and their costs for society, and numerous efforts at tort reform have been implemented at the federal and local levels in an effort to turn the tide. Some of these reforms have aimed at an alteration of substantive claims, as with limitations on joint and several liability or changes in the availability of punitive damages. A separate set of reforms aims at reducing costs through a variety of procedural mechanisms that seek to impose greater managerial control over litigation. In the domain of federal civil procedure, for example, we see the expansion of managerial power of judges over pretrial procedure under rule 16, the expansion of summary judgment under rule 56, and the greater management of discovery under rule 26.

The rush to reform has engendered its own problems. Despite the salience of trials in both the media and the annals of reported case law, trials are rare events within the constellation of disputes (Insurance Research Council 1994; Keilitz, Hanson, and Daley 1993; Mullenix 1994; Smith et al. 1995). When all the dust has settled, estimates of disputes entering the

Linda Babcock is associate professor of economics at Carnegie Mellon University. George Loewenstein is professor of economics at Carnegie Mellon University. Samuel Issacharoff is the Charles Tilford McCormick Professor of Law at the University of Texas, Austin. The authors wish to thank Chip Heath and Kevin McCabe, two anonymous referees, and especially Colin Camerer for their helpful comments. They also thank Jeremy Bagai for his help in collecting data.

914 LAW AND SOCIAL INQUIRY

judicial system that end up at trial generally run in the vicinity of 5%, and that level may be declining (Eisenberg et al. 1995; Galanter 1993; Yeazell 1994). Any reform intended to reduce litigation must therefore take account of the fact that the vast majority of tort disputes are settled prior to trial. Voluntary settlement is the key to any system of dispute resolution.

One should hesitate to propose fundamental alterations to civil procedure on the basis of a clearly aberrant case. Yet much of the reform of civil procedure has been undertaken in just this manner. Far too often reformers propose change that is designed to address features of specific aberrant cases with insufficient attention to the effects that such change may have on the vast number of cases that are settled relatively quickly. Reform has been pursued for its own sake with self-defeating disregard for the incentives. both economic and non-economic, that may produce unintended consequences for the cases that would ordinarily proceed to settlement. Indeed, we believe that the difficulties encountered by many of the procedural reforms to date can be traced, in part, to their failure to take account of economic and psychological factors that influence impasse and settlement. In two articles, two of the authors (Issacharoff and Loewenstein 1990, 1995) have examined two such reforms-summary judgment (rule 56 of the Federal Rules of Civil Procedure) and mandatory disclosure (rule 26)-and showed how factors not considered by the drafters of the rules may cause them to have perverse effects.

Instead of criticizing past procedural reforms, we here propose and test a type of intervention that could enhance the speed at which cases are settled and increase the overall efficiency of dispute resolution. The intervention we propose is different from most procedural reforms that have been proposed or implemented in that it involves *debiasing* the disputants. The proposed debiasing intervention is based on our earlier work that attributes negotiation impasse, in part, to the "self-serving" judgments of the negotiators (Thompson and Loewenstein 1992; Loewenstein et al. 1993; Babcock et al. 1995; Babcock, Wang, and Loewenstein 1996). In the context of civil litigation, self-serving biases exist when plaintiffs' expectations of the value of trial outcomes are systematically greater than defendants' beliefs. In past research we have shown that the larger the self-serving biases in judgment are, the less likely the parties are to reach voluntary agreements (Loewenstein et al. 1993). Moreover, we found that this relationship was causal that is, that the self-serving bias caused impasse (Babcock et al., 1995).

The intervention we examine is an attempt to debias the negotiators' judgments so as to reduce the magnitude of the self-serving bias. If the selfserving bias is a major cause of bargaining impasse, and the debiasing intervention is successful, it should have the effect of reducing impasse. Thus, beyond providing a practical method for impasse reduction, a finding that

6

debiasing increases the efficiency of dispute settlement would also provide further support for the importance of the self-serving bias.

THEORETICAL BACKGROUND

The Self-Serving Bias

Psychological research has documented the existence of self-serving judgments in diverse nonbargaining situations. In a now-classic study by Hastorf and Cantril (1954), for example, Princeton and Dartmouth students viewing a contentious football game between their two schools were asked to count the number of infractions committed by both teams. Supporters of each team recorded the number of infractions committed by both teams. For each team, the number of infractions recorded by opponents exceeded the number of infractions recorded by supporters, thus revealing a self-serving bias.

In a different context, Messick and Sentis (1979) demonstrated a selfserving fairness bias in judgments of fair remuneration for work. In their study, subjects were told either that they had worked 7 hours at a task and that another subject had worked 10 hours at the task, or that they had worked 10 hours and the other subject 7 hours. In both cases, they were told that the subject who had worked 7 hours was paid \$25 and were asked how much the subject who had worked 10 hours should be paid. When *they* had worked 10 hours, they thought they deserved a payment of \$35.24, on average, but when the other subject had worked 10 hours, they thought that \$30.29 was fair remuneration. The difference between \$35.24 and \$30.29— \$4.95—was cited as evidence of a self-serving bias in perceptions of fairness.

The self-serving bias has also been demonstrated in bargaining settings. At one extreme, highly stylized bargaining experiments in economics suggest results consistent with the self-serving bias (Roth and Murnighan 1982; Weg, Rapoport, and Felsenthal 1990; Kagel, Kim, and Moser 1996). At the other extreme, self-serving biases have been found to be related to negotiation impasses in a field study of labor-management negotiations of public school teachers (Babcock, Wang, and Loewenstein 1996).

In a series of experiments designed to demonstrate the importance of the self-serving bias for legal disputes (reviewed in Babcock and Loewenstein 1997), subjects were randomly assigned the role of either plaintiff or defendant and were asked to read extensive case materials about the nature of the conflict in which they were involved. Both subjects were asked to predict the amount that a judge, who had read exactly the same case materials, had awarded to the plaintiff. Plaintiffs' predictions of the judge's award were, on average, almost twice as large as defendants' predictions. Furthermore, the disputants were much more likely to end up in a costly dispute when they had very different expectations than when they had similar expectations about the judge.

Debiasing

The self-serving bias is only one of a variety of biases that have been identified in psychological research on human judgment. A bias is a pattern of judgment that systematically departs from the prescription of a normative rule. For example, the *hindsight bias* (also referred to as the "knew-it-allalong effect") refers to the tendency to view the past with 20/20 vision that is, to view the present as having been more predictable than it was (Fischhoff 1975; Slovic and Fischhoff 1977). Another commonly discussed bias is *overconfidence*, which refers to the tendency for people to assign too high a probability to events they think will happen (and too low a probability to events they think won't happen), to give too narrow a range of likely outcomes of an unknown numerical quantity such as election results or trial damages, or to display inflated confidence in their judgments (see, for example, Lichtenstein, Fischhoff, and Phillips 1977).

In addition to demonstrating these and other biases, researchers on human judgment have also tested a number of *debiasing* techniques—interventions intended to reduce the magnitude of the bias. For example, many researchers have tried, albeit unsuccessfully, to mitigate various biases by informing subjects about them—for example, by telling subjects about the hindsight bias and its effects or advising them to work harder (Fischhoff 1977).

In the literature on debiasing, one type of intervention stands out as effective against a wide range of biases. This involves having subjects question their own judgment by explicitly considering counterarguments to their own thinking. For example, Slovic and Fischhoff (1977) found that the hindsight bias was reduced when subjects were instructed to provide reasons for why events other than those that occur could have occurred. Koriat, Lichtenstein, and Fischhoff (1980) found that overconfidence was reduced when subjects listed counterarguments to their predictions. They concluded that "overconfidence derives in part from the tendency to neglect contradicting evidence, and that calibration may be improved by making such evidence more salient" (Koriat et al. 1980, 113). Lord, Lepper, and Preston (1984) found that biased assimilation of information and biased hypothesis testing were eliminated when subjects were instructed to "consider the opposite." Anderson (1982, 1983) found that excessive belief perseverance in the presence of disconfirming evidence was weakened if subjects were instructed to develop causal schemas for the opposite beliefs. Based on the success of this method in past research, we decided to attempt to use it as a method of mitigating the self-serving bias.

THE EXPERIMENT

Method

We used the same negotiation case as in our previous research in which two subjects are assigned the role of plaintiff and defendant in a legal dispute. The plaintiff is suing the defendant for \$100,000 for damages that resulted from a motorcycle/automobile accident. The two subjects were given the same 27 pages of background information about the "facts" of the case, testimony of the parties, and witness reports.

The subjects had 30 minutes in which to reach an out-of-court settlement that would be a payment (possibly zero) from the defendant to the plaintiff to settle the case. They were told that the other party had received the exact same case materials and that we had given the same materials to a judge, who had made a ruling in the case. The judge's ruling would be awarded to the plaintiff if they were unable to reach an agreement. The judge's award (unknown to the subjects) was \$30,560.

Before negotiating, subjects were asked for two judgments: (1) their best guess of the amount that the judge would award; and (2) their belief about the value of a fair settlement. They were given incentives (either money or points toward their grade) if their guess of the first item was close to its actual value.

Subjects made simultaneous sealed-bid offers every five minutes, and a settlement was reached at the midpoint if they overlapped. Legal fees of \$5,000 were imposed on each subject for every five minutes in which they did not reach a settlement. The plaintiff's payoff is the award or negotiated settlement minus any legal fees incurred. The defendant's payoff is \$100,000 minus the award or negotiated settlement minus any legal fees incurred. For example, if the subjects agreed on a settlement of \$40,000 after fifteen minutes of bargaining, the plaintiff's payoff would be \$30,000 (\$40,000 minus \$10,000 in legal fees) and the defendant's payoff would be \$50,000 (\$100,000 minus \$40,000 minus \$10,000). The subjects' payoffs translated into points toward their grades in a negotiation class.¹

Half the subjects received a debiasing intervention that was designed to focus their attention on weaknesses in their own case. After the subjects were assigned roles and read the case materials, they were given the following information:

Disputants don't always think carefully about the weaknesses in their own case and are therefore surprised when the judge's ruling is worse than their expectations. For plaintiffs, this means that the judge's award is often less than their expectations. For defendants, this means

^{1.} Our previous research using this case suggests that the results are not affected by using points toward a class grade rather than monetary payoffs.

918 LAW AND SOCIAL INQUIRY

that the judge's award is often greater than their expectations. Therefore, please think carefully about the weaknesses in your case. In the space below, please list the weaknesses in your own case.

Subjects

Seventy students enrolled in the MBA program at the University of Chicago and 28 students enrolled in the MBA program at the University of Pennsylvania participated in this experiment. They were randomly assigned to one of two conditions—the control condition or the debiasing condition described above—and to either the role of the plaintiff or defendant. As described above, the payoffs the subjects received in this negotiation affected their grade in a negotiations class. Grades for subjects assigned the role of plaintiffs would increase in the amount of money they received, and grades for subjects assigned the role of defendants would decrease in the amount of money they paid.

Results

The results indicate a strong relationship between the difference in the negotiators' beliefs about the judge and the ability to reach a voluntary settlement. For the pairs who were able to reach a voluntary settlement (N = 39 pairs), the average difference between the plaintiffs' and defendants' predictions of the judge's award was \$6,562. However, it was \$41,800 for pairs (N = 10) who were unable to reach a negotiated settlement (P < .01).

More important, the debiasing manipulation in this experiment had a large impact on settlement and on the subjects' beliefs about the judge and each other. The measures of settlement activity by condition are presented in table 1. In the debiasing condition (in which the subjects had to list the weaknesses of their own case), the negotiators were more likely to reach a voluntary settlement than in the control condition (top row). Thirty-five percent of pairs in the control condition failed to settle during the 30-minute negotiating period, while only 4% failed to settle in the debiasing condition. They also took less time to reach a settlement (second row) and spent less money on legal fees (third row), as compared to the control condition. In table 1 it can also be seen that the debiasing manipulation accomplished its goal (bottom row). In the debiasing condition there is less than a \$5,000 average difference between the parties' predictions of the judge's award, but more than a \$20,000 average difference in the control condition (P = .02).

Figure 1 illustrates why the experimental manipulation was effective in increasing settlement. The two graphs depict the relationship between the

	Control Condition (N = 26)	Debiasing Condition (N = 23)
Settlement rate	.65 (.10)	.96 (.04) [.01]
Number of periods to settle	4.08 (.46)	2.39 (.34) [.01]
Legal costs incurred	\$27,308 (\$3,785)	(\$13,478 (\$3,182) [.01]
Plaintiff-defendant prediction of judge's award	\$21,783 (\$3,956)	\$4,676 (\$6,091) [.02]

TABLE 1 Settlement Rates, Legal Costs, and Predictions by Condition

NOTE: Standard errors are in parentheses. P values for tests of equality of the means across the debiasing condition and control condition are in brackets.

magnitude of the discrepancy between the plaintiff's and defendant's prediction of the judge's award and the number of periods a pair took to settle (seven periods to settlement means no settlement). On the basis of our earlier work, we expect that the larger the difference between the plaintiff's and defendant's predictions of the judge's award, the longer it will take to settle the dispute.² The graph on the left presents the data for pairs in the control condition; the graph on the right presents the data for subjects in the debiasing condition.

One major difference between the two graphs is in the distribution of the parties' assessments of the judge's award. In the control condition, for the vast majority of pairs, the plaintiff predicted a higher award by the judge than did the defendant. This is evidence of a self-serving bias—a situation where there is a systematic difference between plaintiffs' and defendants' estimates of the judge. In the debiasing condition the distribution is much more evenly spread around the zero point. Even though the difference in estimates of the plaintiff and the defendant is unlikely to be equal in any particular pair, the difference in estimates in the debiasing condition is not

^{2.} An alternative variable to consider is the absolute difference in the plaintiffs' and defendants' predictions of the judge's award. This measures the extent to which the subjects' estimates are different. However, we would not expect a relationship between this measure and the number of periods it takes to settle. That would imply that pairs where plaintiffs' expectations are \$50,000 greater than those of defendants should settle at the same time as pairs where plaintiffs' expectations are \$50,000 lower than those of defendants.



FIG. 1 Relationship between Periods to Settle and Difference between Expectations: Control and Debiasing Conditions

systematic. In other words, it is just as likely that the defendant's expectation is greater than the plaintiffs' expectations as the reverse. On the other hand, in the control condition, the difference between the subjects' estimates is systematically positive.

A second difference between the graphs is in the relationship between periods to settlement and the discrepancy between the plaintiff's and defendant's predictions of the judge's action. In the control condition there is a strong relationship between these variables, but no such relationship holds in the debiasing condition. In addition to reducing the magnitude of the self-serving bias, therefore, the debiasing manipulation also seems to decrease the impact of the discrepancy between the parties' predictions of the judge on settlement. These two effects, in combination, appear to produce the positive effect on settlement of the debiasing manipulation.

Discussion

In our debiasing manipulation, the task was restructured so that subjects now considered evidence that might be normally ignored. When subjects consciously considered the weaknesses in their case or reasons that the judge might rule against them, their judgments exhibited no self-serving bias. This fact suggests that unless this evidence is consciously focused upon, it will be neglected or discounted. Not only did our manipulation have a significant effect on judgment, but it also had a significant effect on behavior. Bargaining pairs in which subjects thought about the weaknesses in their cases were much more likely to settle than those who did not.

As with any experimental research, questions about external validity must be addressed. One concern has to do with the use of inexperienced subjects: students might exhibit this bias in an unfamiliar domain, but trained professionals like lawyers would not succumb to the self-serving bias.

Previous research suggests that professionals are not immune to biases in decision making. Neale and Northcraft (1986) find that the behavior of professional negotiators is influenced by how a problem is "framed," even when the situations are objectively identical. McNeil et al. 1982 find that physicians are also susceptible to framing manipulations in making recommendations for treatment of lung cancer. Research has also found that experienced negotiators are not invulnerable to the self-serving bias—that seasoned negotiators for contracts for public schoolteachers and experienced trial attorneys may suffer from self-serving biases (Babcock et al. 1996; Babcock et al. 1993).

For experience to mitigate the bias and promote settlement, two conditions must be met: negotiators must become aware of the bias, and such awareness must have the effect of reducing the bias. Neither of these conditions is likely to be satisfied in practice. On the first point, the only way for disputants to become aware of the bias would be to go to trial repeatedly and receive much less favorable judgments than they expected. It would probably take a lot of such experiences, however, to persuade someone that the problem lay in their own judgments, as opposed to those of unfair judges. On the second point, in our own prior research (reported in Babcock and Loewenstein 1997) we found that informing disputants of the bias had no impact either on the magnitude of the bias or on settlement. This result is consistent with other research on debiasing, discussed above. Disputants who were informed of the bias expected their bargaining counterpart to exhibit the bias but seemed to think that they themselves were immune.

The external validity of our experiment is also limited by the absence, in our experimental case, of a wide range of strategic factors that are present in actual pretrial negotiations. For example, defendants may be repeat players that are interested in setting legal or informal precedents (Issacharoff and Loewenstein 1990; Posner 1973; Cooter and Rubinfeld 1989), or agency relationships may exist (Grossman and Hart 1983; Shavell 1979; Miller 1987). These complexities may interact with self-serving biases in subtle ways to influence settlement. We do not have data to indicate how our results might be affected by these issues and must leave this as an issue for future research.

Finally, as with any experimental research involving human subjects, there is a possibility of *demand effects*, whereby subjects take cues from the experimenter about how they are expected to behave. If subjects think that litigants have self-serving biases, they may incorporate this into their "role playing" in the control condition of our experiment. To help mitigate these factors, experimenters use incentives, monetary or otherwise, that are meaningful to their subjects. In this experiment, the monetary outcomes that our

922 LAW AND SOCIAL INQUIRY

subjects receive from their negotiations affect their grades in negotiations classes, and in prior studies we have conducted using the same case the subjects' performance determined the monetary payment they received for participating. The use of incentives in these studies lessens potential demand effects by motivating subjects to single-mindedly pursue the goal of negotiating a favorable monetary outcome.

CONCLUSION AND IMPLICATIONS

Our prior experimental work established that the presence of self-serving biases impedes dispute resolution, even where strong incentives are operating to direct parties toward settlement. In these prior experiments, we were struck not only by the magnitude of the biases but by their robustness. This article presents a successful attempt to reduce these self-serving biases and suggests a practical method for promoting efficient settlements. The success of debiasing in our experimental settings further confirms the importance of behavioral impediments in litigation in general, and the central role that self-serving biases specifically can play.

In contrast to our previous experimental observations, we can take the insights garnered from the latest study and apply them more directly in the "real world." In prior studies, for example, we were able to establish that subjects who did not know whether they would be plaintiffs or defendants when they read the case materials, but were told their role only immediately prior to negotiating, did not reveal a self-serving bias and were able to settle more effectively as a result. This finding confirmed the important role of self-serving biases in impeding efficient settlement. Our example of the automobile/motorcycle accident, however, shows the limitation of this observation: in the real world, participants in such an occurrence would be exquisitely aware from the outset whether they were victim or perpetrator and, in turn, whether they would enter the litigation arena as plaintiff or defendant.

By contrast, the relatively simple and inexpensive debiasing technique examined in this paper could be incorporated into the routine efforts of courts to encourage pretrial settlement. For example, Federal Rule of Civil Procedure 16(a)(5) already gives courts discretionary authority to direct litigants to participate in a pretrial conference for "facilitating the settlement of the case." Similarly, this technique could be introduced into many of the structured alternative dispute-resolution programs currently in place. To pick the most obvious, numerous courts refer civil litigants to mandatory court-annexed mediation at an early phase of litigation.

Aside from the low cost of this intervention, two key features of the debiasing techniques discussed in this article should be noted. First, because of the format used, whereby the self-critical examination of each side's posi-

tion was not communicated in any form to either the opposing party or the trier of fact, there should be no concern over strategic gain from attempted manipulation of the procedure. As a result, we have been unable to detect any unintended consequence from the use of the debiasing methods that lie at the core of our experiments. This alone is a significant protection when one is introducing any form of procedural innovation.

The second advantage flows from the first. The process of debiasing is less heavy-handed than procedural change—and much less likely to backfire. For example, many litigants complain that court-imposed alternative dispute-resolution procedures actually add to the cost of litigation by imposing yet another way station on the path to the courtroom door (Hensler 1990, 1994). In addition, the prospect of arbitration, for example, may actually induce disputants to stay in the litigation arena in the hope of a favorable arbitral decision. Studies of the New Jersey mandatory automobile arbitration program have concluded that arbitrated cases were drawn from the distribution that would have been expected to settle rather than be tried, with no appreciable effect upon settlement rates or litigation costs (MacCoun 1992; MacCoun, Lind, and Hensler 1988).

However, the major advantage of debiasing relative to other disputeresolution techniques is that it attempts systematically to confront a welldocumented source of inefficient failure to settle. Too often the mediation process is perceived by the parties simply as an act of exhortation seeking to compel the parties to settle within the boundaries of their preconception of the case. Forcing parties to reexamine critically the foundations of their cases can perhaps serve the same role in facilitating settlement as is played by the ultimate moment of confrontation on the courthouse steps on the day of trial. Perhaps the well-known processes of day-of-trial settlements can be moved to an earlier phase of the proceedings, with gains for all participants.

REFERENCES

- Anderson, Craig. 1982. Inoculation and Counterexplanation: Debiasing Techniques in the Perseverance of Social Theories. Social Cognition 1, no. 2: 126–39.
- Babcock, Linda, Henry Farber, Cynthia Fobian, and Eldar Shafir. 1993. Forming Beliefs about Adjudicated Outcomes: Perceptions of Risk and Reservation Values. International Review of Law and Economics 15:289–303.
- Babcock, Linda, and George Loewenstein. 1997. Explaining Bargaining Impasse: The Role of Self-Serving Biases. Journal of Economic Perspectives 11:109–26.
- Babcock, Linda, George Loewenstein, Samuel Issacharoff, and Colin Camerer. 1995. Biased Judgments of Fairness in Bargaining. American Economic Review 85, no. 5: 1337–43.

- Babcock, Linda, Xianghong Wang, and George Loewenstein. 1996. Choosing the Wrong Pond: Social Comparisons That Reflect a Self-Serving Bias. Quarterly Journal of Economics 111, no. 1: 1–19.
- Cooter, Robert, and Daniel Rubinfeld. 1989. Economic Analysis of Legal Disputes and Their Resolution. Journal of Economic Literature 27:1067–97.
- Eisenberg, Theodore, John Goerdt, Brian Ostrom, and David Rottman. 1995. Litigation Outcomes in State and Federal Court: A Statistical Portrait. Typescript (on file with Linda Babcock, Heinz School, Carnegie Mellon University).
- Fischhoff, Baruch. 1975. Hindsight = Foresight: The Effect of Outcome Knowledge on Judgment under Uncertainty. Journal of Experimental Psychology: Human Perception and Performance 1:288–99.
 - ——. 1977. Perceived Informativeness of Facts. Journal of Experimental Psychology: Human Perception and Performance 3:349–58.
- Galanter, Marc. 1993. News from Nowhere: The Debased Debate on Civil Justice. Denver University Law Review 71, no. 1: 77-113.
- Grossman, Sanford J., and Oliver D. Hart. 1983. An Analysis of the Principal-Agent Problem. Econometrica 51:7-45.
- Hastorf, Albert, and Hadley Cantril. 1954. They Saw a Game: A Case Study. Journal of Abnormal and Social Psychology 49, no. 1: 129–34.
- Hensler, Deborah. 1990. Court Ordered Arbitration: An Alternate View. Legal Forum 1990:399-420.
- ———. 1994. Does ADR Really Save Money? The Jury's Still Out. National Law Journal 16:C2.
- Insurance Research Council. 1994. Auto Injuries: Claiming Behavior and Its Impact on Insurance Costs. Oak Brook, Ill.: Insurance Research Council. Typescript (on file with Linda Babcock, Department of Economics, Carnegie Mellon University).
- Issacharoff, Samuel, and George Loewenstein. 1990. Second Thoughts about Summary Judgment. Yale Law Journal 100, no. 1: 73-126.
 - ——. 1995. Unintended Consequences of Mandatory Disclosure. Texas Law Review 73, no. 4: 753–86.
- Kagel, John, Chung Kim, and Donald Moser. 1996. Fairness in Ultimatum Games with Asymmetric Information and Asymmetric Payoffs. Games and Economic Behavior 00:00–00.
- Keilitz, S., R. Hanson, and H. W. K. Daley. 1993. Is Civil Discovery in State Trial Courts Out of Control? State Court Journal 17, no. 2: 8–18.
- Koriat, Asher, Sarah Lichtenstein, and Baruch Fischhoff. 1980. Reasons for Confidence. Journal of Experimental Psychology: Human Learning and Memory 6, no. 2: 107–18.
- Lichtenstein, Sarah, Baruch Fischhoff, and L. D. Phillips. 1977. Calibration of Probabilities: The State of the Art. In Decision Making and Change in Human Affairs, ed. H. Jungermann and G. deZeeuw, 275–324. Amsterdam: D. Reidel.
- Loewenstein, George, Samuel Issacharoff, Colin Camerer, and Linda Babcock. 1993. Self-Serving Assessments of Fairness and Pretrial Bargaining. *Journal of Legal Studies* 22, no. 1: 135–59.
- Lord, Charles, Mark Lepper, and Elizabeth Preston. 1984. Considering the Opposite: A Corrective Strategy for Social Judgment. Journal of Personality and Social Psychology 47:1231–43.
- MacCoun, R. J. 1992. Unintended Consequences of Court Arbitration: A Cautionary Tale from New Jersey. Justice System Journal 14, no. 2:229-43.
- MacCoun, R. J., E. A. Lind, and D. Hensler. 1988. Alternate Adjudication: An Evaluation of the New Jersey Automobile Arbitration Program. Rand Corporation, Institute for Civil Justice.

- McNeil, Barbara J., Stephen G. Pauker, Harold C. Sox, and Amos Tversky. 1982. On the Elicitation of Preferences for Alternative Therapies. New England Journal of Medicine 306:1259–62.
- Messick, David, and Keith Sentis. 1979. Fairness and Preference. Journal of Experimental Social Psychology 15, no. 4: 418-34.
- Miller, Geoffrey. 1987. Some Agency Problems in Settlement. Journal of Legal Studies 16:189–215.
- Mullenix, Linda S. 1994. Discovery in Disarray: The Pervasive Myth of Discovery Abuse and the Consequences for Unfounded Rulemaking. *Stanford Law Review* 46, no. 6: 1393–1445.
- Neale, Margaret, and Gregory Northcraft. 1986. Experts, Amateurs, and Refrigerators: Comparing Expert and Amateur Negotiators in a Novel Task. Organizational Behavior and Human Decision Processes 38:305–17.
- Posner, Richard. 1973. An Economic Approach to Legal Procedure and Judicial Administration. Journal of Legal Studies 2:399–458.
- Roth, Alvin E., and Keith Murnighan. 1982. The Role of Information in Bargaining: An Experimental Study. *Econometrica* 50:1123–42.
- Shavell, Steven. 1979. Risk Sharing and Incentives in the Principal and Agent Relationship. Bell Journal of Economics 10:55-73.
- Slovic, Paul, and Baruch Fischhoff. 1977. On the Psychology of Experimental Surprises. Journal of Experimental Psychology: Human Perception and Performance 3, no. 4: 544–51.
- Smith, S. L., C. J. DeFrances, P. A. Langan, and J. Geordt. 1995. Tort Cases in Large Counties. U.S. Department of Justice, Bureau of Justice Statistics Special Report. NCJ-153177.
- Thompson, Leigh, and George Loewenstein. 1992. Egocentric Interpretations of Fairness in Interpresonal Conflict. Organizational Behavior and Human Decision Processes 51:176–97.
- Weg, Eythan, Amnon Rapoport, and Dan S. Felsenthal. 1990. Two-Person Bargaining Behavior in Fixed Discounting Games with Infinite Horizon. Games and Economic Behavior 2:76–95.
- Yeazell, Stephen C. 1994. The Misunderstood Consequences of Modern Civil Process. Wisconsin Law Review 1994, no. 3: 631–78.