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***INSIGHTFUL OR WISHFUL: Lawyers' Ability to
Predict Case Outcomes***

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Lawyers' litigation forecasts play an integral role in the justice system. In the course of litigation, lawyers constantly make strategic decisions and/or advise their clients on the basis of their perceptions and predictions of case outcomes. The study investigated the realism in predictions by a sample of attorneys ($n = 481$) across the United States who specified a minimum goal to achieve in a case set for trial. They estimated their chances of meeting this goal by providing a confidence estimate. After the cases were resolved, case outcomes were compared with the predictions. Overall, lawyers were overconfident in their predictions, and calibration did not increase with years of legal experience. Female lawyers were slightly better calibrated than their male counterparts and showed evidence of less overconfidence. In an attempt to reduce overconfidence, some lawyers were asked to generate reasons why they might not achieve their stated goals. This manipulation did not improve calibration.

Keywords: legal decision making, case predictions, confidence judgments, metacognitive realism

Outcome Predictions in Legal Decision Making

Human cognition is not only retrospective but also prospective: People look toward an imagined future and make various assessments and judgments on the basis of possible future events (Flavell, 2004; Kahneman, 1973; Meeks, Hicks & Marsh, 2007). As an important part of prospective reasoning, people establish goals that they attempt to accomplish (Gollwitzer & Schaal, 1998). These goals are associated with confidence judgments, which are defined as subjective assessments of the probability of attaining the desired goal (Koriat, 2002; Perfect & Schwartz, 2002).

In the course of regular legal practice, judgments and meta-judgments of future goals are an important aspect of a wide range of litigation-related decisions

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(English & Sales, 2005). From the moment when a client first consults a lawyer until the matter is resolved, lawyers must establish goals in a case and estimate the likelihood that they can achieve these goals. The vast majority of lawyers recognize that prospective judgments are integral features of their professional expertise. For example, a survey of Dutch criminal lawyers acknowledged that 90% made predictions of this nature in some or all of their real-life cases (Malsch, 1990). The central question addressed in the present study was the degree of accuracy in lawyers' forecasts of case outcomes. To explore this question, we contacted a broad national sample of U.S. lawyers who predicted their chances of achieving their goals in real-life cases and provided confidence ratings in their predictions.

Prediction of success is of paramount importance in the system for several reasons. In the course of litigation, lawyers constantly make strategic decisions and/or advise their clients on the basis of these predictions. Attorneys make decisions about future courses of action, such as whether to take on a new client, the value of a case, whether to advise the client to enter into settlement negotiations, and whether to accept a settlement offer or proceed to trial. Thus, these professional judgments by lawyers are influential in shaping the cases and the mechanisms selected to resolve them. Clients' choices and outcomes therefore depend on the abilities of their counsel to make reasonably accurate forecasts concerning case outcomes. For example, in civil cases, after depositions of key witnesses or at the close of discovery, the parties reassess the likelihood of success at trial in light of the impact of these events.

In summary, whether lawyers can accurately predict the outcome of a case has practical consequences in at least three areas: (a) the lawyer's professional reputation and financial success; (b) the satisfaction of the client; and (c) the justice environment as a whole. Litigation is risky, time consuming, and expensive. The consequences of judgmental errors by lawyers can be costly for lawyers and their clients, as well as an unnecessary burden on an already overloaded justice system. Ultimately, a lawyer's repute is based on successful calculations of case outcome. A lawyer who advises clients to pursue litigation without delivering a successful outcome will not have clients for long. Likewise, a client will be most satisfied with a lawyer who is accurate and realistic when detailing the potential outcomes of the case. At the end of the day, it is the accurate predictions of the lawyer that enable the justice system to function smoothly without the load of cases that were not appropriately vetted by the lawyers.

Several lines of research support the proposition that lawyers' assessments of goals are central in the legal system. Some research singled out the attorney's estimate of the probability of success as the most crucial variable in shaping decisions whether to litigate or settle a case in controversy (Schuck, 1986; Wittman, 1988). An analysis of factors that influence assessments of outcomes in contingent-fee cases revealed three perspectives of salience: that of the client; that of an outside observer (e.g., a judge); and that of the lawyer, on the basis of past experience and knowledge of how similar cases were resolved (Jay, 1989). The lawyer's viewpoint was regarded as the most important factor in shaping outcomes in civil contingent-fee cases.

In civil litigation, both for plaintiffs who often retain counsel on a contingent-fee basis and for defendants who typically do not, cost control and efficient

representation may be achieved by resolving the case before trial. This can be accomplished through negotiation, mediation, arbitration, or some other form of alternative dispute resolution. In criminal cases, plea bargaining is routine (Horowitz & Willging, 1984; Ross, 1970). A lawyer who cannot accurately predict the outcome of a case or who does not thoroughly and efficiently appreciate the litigation risks may ignore alternatives to trial and advise the client to reject reasonable settlement offers. A lawyer who underestimates potential outcomes may advise the client to accept an unreasonably lower amount in settlement than is warranted.

The National Conference of Federal Trial Judges and the American Bar Association conducted a survey to determine which factors were perceived by lawyers as the most instrumental in facilitating settlement. The factor cited more than twice as frequently as any other factor was the ability of the settlement judge to objectively evaluate the strengths and weaknesses of a case (Brazil, 1985). Although lawyers sometimes acknowledge that their ability to objectively assess their cases may be suboptimal, settlement judges rely on lawyers to make these determinations. Failure of lawyers to make proper predictions can impair settlement and litigation performance (Harley, 2007).

Confidence and Calibration in Lawyers' Predictions

We contend that lawyers' forecasts related to the achievement of important goals play a pivotal role in practical legal decision making, but little is known about the reliability of these predictions. To what extent are they realistic? Psychological studies of human decision-making processes in a wide variety of contexts have revealed that overconfidence is a ubiquitous phenomenon. Recently, psychological researchers distinguished three forms of overconfidence: overestimation, overplacement, and overprecision (Moore & Healy, 2008). Overestimation is the inflated perception of one's ability, performance, or chance of success. Overplacement describes the relative judgment of oneself in comparison with others. Overprecision is "excessive certainty regarding the accuracy of one's beliefs" (Moore & Healy, 2008, p. 4).

Overconfidence has been observed in social judgments, self-predictions, and professional predictions, in retrospective as well as prospective judgments (Allwood & Granhag, 1999; Dunning, Griffin, Milojkovic, & Ross, 1990; Lichtenstein & Fischhoff, 1977; Paese & Feuer, 1991; Vallone, Griffin, Lin, & Ross, 1990; Von Winterfeldt & Edwards, 1986). With regard to confidence judgments about achieving future goals, this calibration deficit implies that decision makers systematically overestimate their capacity to reach stated goals.

Metacognitive Realism

Research has identified a number of predictors of calibration (Dougherty, 2001; González-Vallejo & Bonham, 2007; Hogarth, 2001; Hogarth, Gibbs, McKenzie, & Marquis, 1991). For instance, underconfidence or underestimation is common when people estimate their performance on easy tasks or, in the case of skilled individuals, on tasks on which they regard their chances of performing well as high (Moore & Healy, 2008). Overestimation is more common on difficult tasks.

Outcome feedback is an important factor in the development of well-calibrated metacognitive judgments (Hogarth et al., 1991; Murphy & Winkler, 1971; Keren, 1987; Stone & Opel, 2000). To increase calibration accuracy, one needs to learn whether previous predictions were correct. Although lawyers might receive some outcome feedback, several factors bias their judgments in the direction of overconfidence. First, particular professional demands within the framework of the adversarial legal system may contribute to this tendency: Lawyers have an ethical obligation to advocate zealously in representing their clients. In this endeavor, lawyers must behave persuasively and express confidence in their position. Academics have noted, “lawyers need to feel and display overconfidence in order to attract clients, and, later, to keep those clients convinced that their interests are well served” (Loftus & Wagenaar, 1988, p. 450; see also Simon, 1988). These attitudinal demands for high levels of confidence might skew lawyers’ reasoning toward overconfidence even when they attempt to realistically assess the likelihood of success. Confidence may also increase over time to justify commitment to a goal (Brehm, 1956). Previous research revealed that expert predictions of the likelihood of events were influenced by the person on whose behalf they were working and that overconfidence was more prevalent when the expert had some degree of commitment to, and emotional investment in, the outcome (Rehm & Gadenne, 1990). More generally, lawyers may engage in wishful thinking: They might believe a certain outcome is probable simply because of a desire to reach it (Babad, Hills, & O’Driscoll, 1992; Kunda, 1990).

Another factor that might affect the realism of lawyers’ assessments of future goals is perception of control (Dollinger, 2008; Langens, 2007). The extent to which an individual believes he or she can take steps to increase the likelihood of a desirable outcome has been shown to bias confidence estimates in those outcomes. When an event is perceived to be controllable, overconfidence is likely (Weinstein, 1980, 1982, 1983). This bias is linked to what Langer (1975) called an *illusion of control*, defined as “an expectancy of a personal success probability inappropriately higher than the objective probability would warrant” (p. 313). In more recent studies, these results held only in easy tasks, perhaps because the illusion of control is stronger. On performing hard tasks, people tend to perceive their performance as worse than it really is compared with that of others (Moore & Cain, 2007). Lawyers may underestimate or fail to appreciate the extent to which situational factors (e.g., unpredictable judges or juries) may rob them of the ability to control the outcome (cf. Dunning et al., 1990).

Temporal circumstances may also influence the realism of judgments of success. Predictions can be made long before the outcome is known or relatively close to the outcome. The temporal sequence of predicting has been identified as an important factor affecting confidence estimates (Braun & Yaniv, 1992; Gilovich, Kerr, & Husted Medvec, 1993; Hogarth & Makridakis, 1981; Rehm & Gadenne, 1990). Events more distant in time are judged less probable than those closer in time (Keren & Raaijmakers, 1988; Milburn, 1978; Rehm & Gadenne, 1990). Thus, lawyers’ confidence levels about achieving their goals may increase as the trial date approaches.

Empirical Research on Calibration in Lawyers' Predictions

The findings on lawyers' predictions in three published studies on this topic reflect the general finding in judgment and decision-making research that people display a tendency for overconfidence. In the first study, criminal defense lawyers attending legal education seminars stated a goal that they hoped to achieve on behalf of a client and provided a confidence estimate expressing the likelihood that they would achieve this goal (e.g., a 75% chance of an acquittal). The results showed evidence of overconfidence, which was replicated in a second sample of civil defense lawyers (Loftus & Wagenaar, 1988).

A larger study of decision making by criminal lawyers working in the context of an inquisitorial legal system in the Netherlands demonstrated that lawyer confidence was somewhat related to case outcomes: In that sample, lawyers with high confidence levels were more likely to be successful than their counterparts whose confidence estimates were lower, indicating some predictive validity in their judgments (Malsch, 1990). The influence on calibration of demographic variables (e.g., age, gender, years of practice, specialization or area of expertise) was explored. Older lawyers (regardless of years in practice) were better calibrated than younger colleagues. Female lawyers were significantly better calibrated than male lawyers, and specialized lawyers were better calibrated than general practitioners. A link between type of criminal case to metacognitive realism also emerged, in that lawyers were more overconfident in cases involving violent crimes against property and drug-related offenses (compared with nonviolent crimes against property and violent crimes against persons, such as assault).

Overview of the Present Research

The present research extends previous studies on realism in lawyers' prospective judgments by exploring predictions of outcome success in a large national sample of U.S. lawyers. These lawyers represented parties in civil and criminal cases (i.e., members of the plaintiff's and the defense bar in civil cases and prosecutors and defense counsel in criminal cases). We predicted that lawyers would be prone to overconfidence, and we sought to further explore factors linked to calibration in previous research (Gilovich et al., 1993; Malsch, 1989).

Assuming that we would observe more overconfidence than underconfidence, we examined whether a cognitive intervention task would reduce overconfidence and improve calibration. For example, social judgments have been corrected by requiring participants to consider the opposite (Lord, Lepper, & Preston, 1984). The technique we used involves encouraging participants to generate arguments counter to their own predictions and has been used successfully in the past to improve realism in confidence judgments for general knowledge questions (Koriat, Lichtenstein, & Fischhoff, 1980; Vreugdenhil, 1993). This study built on previous research by investigating the extent to which this debiasing technique was associated with more realistic levels of confidence in the prospective judgment of lawyers.

Method

Participants

Participants were 481 litigating attorneys, including new graduates and seasoned practitioners, from 44 states across the United States. Eligible participants were identified by means of two sampling procedures. The majority (59%) were contacted in person at continuing legal education (CLE) seminars. Data were collected at 19 different CLE seminars in diverse geographic regions. The remaining participants (41%) were contacted by telephone on the basis of information sampled randomly from local bar directories for states located in the eastern, western and midwestern regions of the country. An introductory letter was mailed to 1,700 randomly selected lawyers inviting them to participate in the study.

For several reasons, potential participants who were mailed a letter did not participate. First, a group of 523 (30.8%) potential participants could not be reached. In some cases, the letter was returned, indicating that the attorney was no longer at the listed address; in other cases, the telephone interviewer was informed that the attorney had moved without providing forwarding information. Some attorneys were never available for an interview, despite five or more attempts to reach them. This left a total of 1,177 potential participants contacted by mail.

A sizeable number of the 1,177 (272, or 23%) attorneys who were contacted were ineligible either because their practice did not include trial work or because they had no cases expected to come to trial within the study period. A third group of attorneys declined to participate, either at the outset of the interview or at some later point in the procedure. For example, 78 (6.6%) attorneys refused to disclose their minimum goal or to express their confidence in attaining their goal. In all, 859 lawyers completed the initial survey. Further attrition occurred because many of the 859 lawyers who participated in the initial survey did not complete the follow-up interview within the study period. A substantial number of their cases (331, or 39%) were omitted from further analysis because the trial date in the case selected was continued beyond the termination date for the study. A small number of cases (46, or 5%) that were concluded within the study period were excluded from further analysis for other reasons. In some of these cases, substitute counsel had been appointed, so individual calibration measures were infeasible. In others, the initially cooperative lawyers simply declined to continue participating in the study. A handful of lawyers who changed business addresses between the time of the initial interview and the time of the expected trial date were excluded, because no forwarding address was available and they could not be located. Finally, a few cases were excluded because the lawyers were unable to recall which case it was that they had selected to discuss or because the lawyers were unable to report any information about the case outcome. In all, follow-up interviews were completed with 56% (481 of 859) of the lawyers who had completed the initial interview.

Survey Questionnaires and Procedures

Participants were screened for eligibility on the basis of whether they had a case that was expected to go to trial within a specified time period (6 to 12 months). Two questionnaires were used: one for telephone interviews and one for in-person contacts.

First, attorneys were asked to provide a code name (e.g., Explosion, Drug-bust) for a case in litigation to help them identify that case at a later date and enable them to protect client confidentiality. Second, they were asked to provide a brief description of the type of case, the party represented, and to answer the following question: "What would be a win situation in terms of your minimum goal for the outcome of this case?" Then, lawyers indicated their degree of certainty that they would achieve the stated minimum goal, or something better, by answering the following question: "From 0 to 100%, what is the probability that you will achieve this outcome or something better?"

As mentioned, we included an experimental manipulation and randomly assigned participants to one of two conditions. In the reasons condition, participants were asked to generate reasons why they might fail to achieve their minimum goal before indicating how likely it was that this goal would be achieved. In the no-reasons condition, participants generated reasons *after* the estimation task.

However, lawyers in the no-reasons groups at CLEs were not invited to consider reasons why they might not achieve their minimum goal. This procedure was followed because when the survey questionnaires were distributed in person, there was no way to control the order in which the participants elected to read and/or respond to the written questions. For analysis, data from the telephone and in-person reasons groups who generated reasons before estimating the probability of success were collapsed to form a single "reasons" group. Similarly, data from the telephone and in-person interview groups who did not produce reasons before making their predictions were collapsed to form a single "no-reasons" group.

Call sheets were prepared for follow-up interviews scheduled after the date the case was expected to come to trial. The follow-up interviews were conducted by telephone with a structured questionnaire. A combination of open- and closed-ended questions elicited factual information about how the case was resolved, the negotiation process, and the final case outcome or resolution. Other questions sought subjective information, such as the attorneys' perception of the outcome, any changes the participants would make if they had the opportunity to retry the case, and what factors affected the outcome.

Results

Cases Included in the Study

We present data from 481 cases. More information was gathered about civil cases (70% of the total sample) than criminal cases (30%), as shown in Table 1.

Table 1
Lawyers in the Final Study Sample by Party Represented

Type of counsel	Frequency	%
Civil plaintiff	182	38
Civil defendant	155	32
Criminal prosecutor	79	16
Criminal defendant	65	14
Total	481	100

The 337 civil cases fell into several broad categories, the most common of which were tort cases (personal injury/negligence, motor vehicle accidents, product liability, malpractice, misrepresentation, etc.) constituting 57% of the civil cases. Contract cases (construction, real estate, etc.) accounted for 19% of the civil cases. Approximately 9% of the civil cases involved workplace disputes (discrimination, worker's compensation, etc.) and approximately 7% consisted of family dissolutions. The balance of the civil cases (8%) involved miscellaneous controversies over matters such as wills and trusts; copyright; trademark and patent law; and bankruptcy, taxation, or administrative matters.

Of the 144 criminal cases studied, the most frequently encountered crimes were those against persons (homicide, rape, robbery, assault and battery) comprising 64% of the criminal cases. Victimless crimes and crimes against property accounted for the remaining 36% of the criminal cases studied (controlled substances, misdemeanors, etc.).

Method of Case Resolution

Not surprisingly, cases were sometimes resolved by trial and sometimes by settlement. The amount of time devoted to negotiation in civil cases exceeded that in criminal cases by a factor of four. A high proportion of the lawyers (80%) reported that settlement negotiations had taken place, and approximately three fifths of the cases (59%) were resolved by some form of out-of-court settlement. Thirty-one percent of the cases were tried in court. An additional 10% of the cases did not proceed to trial but were resolved through dismissal, summary judgment, or some other legal procedural mechanism.

Minimum Goals

Responses to questions about lawyers' minimum goals varied considerably depending on the type of case under consideration and whether the attorney represented a party initiating or defending against the claims. In civil cases, the stated minimum goals were coded into two major categories. By far, the majority of the lawyers (84%) were seeking monetary awards on behalf of their clients. This category included cases in which the attorney represented a civil defendant and the goal was a defense verdict. In 16% of the civil cases, the goals were nonmonetary, such as injunctive relief, specific performance of contractual obligations, a mistrial, or dismissal of the claims before trial.

In criminal cases, the goals of the lawyers were more diverse: Forty-nine percent sought convictions of the crimes charged (the prosecution), and 25% of the lawyers sought acquittals (the defense bar). A further 10% sought convictions of lesser included offenses; 9% sought mistrials; and the remaining 7% sought miscellaneous goals, such as an out-of-court resolution.

Confidence in Achieving Minimum Goals

The majority of the participants expressed confidence estimates that exceeded 50% (mean and median estimates of 64% and 70%, respectively). Reported case outcomes were initially classified in one of three groups, depending on whether the lawyers failed to meet their minimum goals, achieved their goals, or exceeded their goals. In 32% of the cases, the final case outcome matched the goal set by

the lawyers. Among the remaining cases, 24% of the outcomes exceeded the lawyers' minimum goals, and 44% of the outcomes were less satisfactory than the minimum goals set by the lawyers. A number of lawyers who did not achieve the predicted goal erred on the side of underconfidence, because their minimum goals were too modest. However, a larger proportion of the prediction deficits came from lawyers who erred in the direction of overconfidence.

To investigate calibration (i.e., whether lawyers who provided high confidence estimates were more or less accurate in their judgment than lawyers who provided low or moderate confidence estimates), we analyzed the data within different confidence intervals. The following six confidence intervals were used: 0–45%, 46–55%, 56–65%, 66–75%, 76–85% and 86–100%. The number of participant lawyers producing confidence estimates in each of the six confidence intervals is displayed in Figure 1.

As is noted in Figure 2, lawyers who provided a low confidence estimate (0–45%) underpredicted their chances of success. The mean estimated confidence of these 65 individuals was nearly 27%, but their success rate was significantly higher, close to 48%, $t(64) = 3.31, p < .01$. By comparison, lawyers whose initial confidence estimates were in the range of 46–55% and 56–65% tended to be relatively well calibrated, $t(96) = -.09, p = .92$; and $t(64) = -1.15, p = .26$, respectively.

For the three confidence intervals above 65%, lawyers were biased in the direction of overconfidence (see Figures 2): For confidence intervals 66–75%, $t(118) = -2.49, p < .05$; for confidence intervals 76–85%, $t(79) = -4.26, p < .001$; and for confidence intervals 86–100%, $t(54) = -3.75, p < .001$. In summary, far more lawyers were susceptible to the overconfidence bias than to the underconfidence bias. In general, the higher the expressed level of confidence, the greater the overconfidence.

Female Versus Male Attorneys

In the total survey sample, men outnumbered women by four to one (79% vs. 21%). The 361 male participants who reported years of experience were more

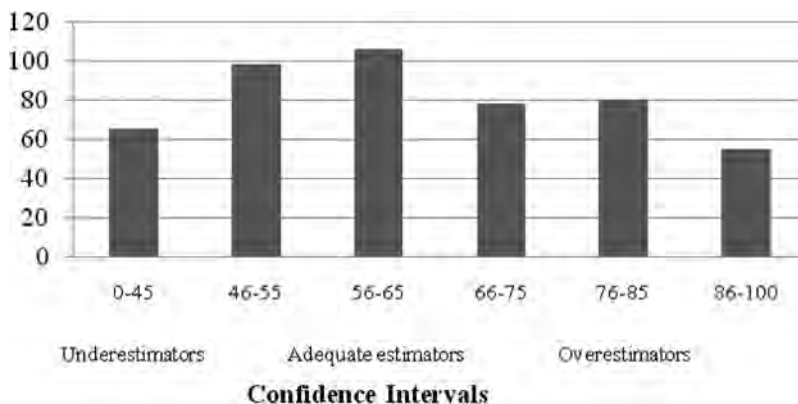


Figure 1. Number of participants with estimates of success in each of six confidence intervals.

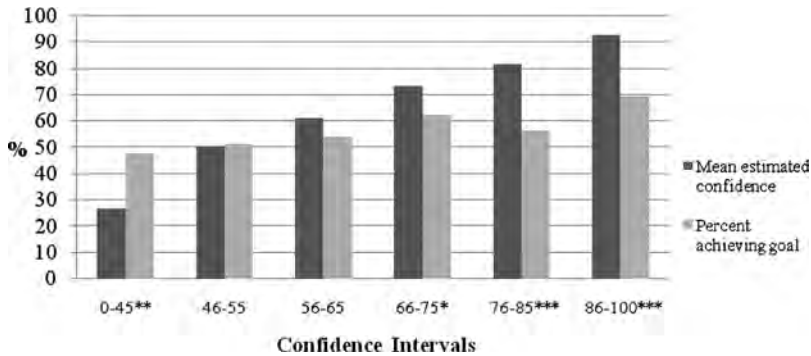


Figure 2. Mean confidence and achievement of minimum goal, by confidence intervals (percentage). Objective success reflects proportion meeting or exceeding minimum goals within respective confidence intervals. Asterisks denote significant differences between confidence expressed and goal achievement. * $p < .05$. ** $p < .01$. *** $p < .001$.

experienced on average (mean years of legal experience = 14.8, $SD = 9.9$) than were the 90 female participants (mean years of legal experience = 7.1, $SD = 4.8$), $t(449) = -7.13$, $p < .001$. A comparison of initial confidence estimates by gender revealed no differences (mean confidence was 65% for female lawyers and 64% for male lawyers), $t(479) = 0.56$, $p = .58$.

As illustrated in Figure 3, consideration of the case outcomes showed a different pattern for male versus female attorneys. Proportionately, although

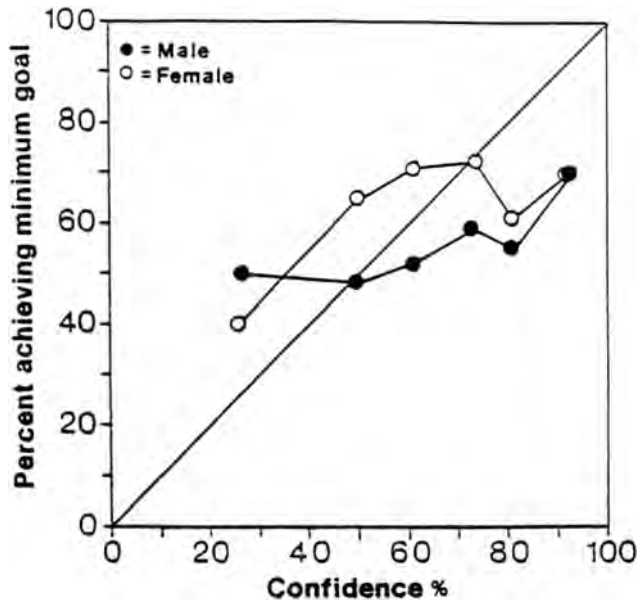


Figure 3. Calibration curves for male lawyers ($n = 382$) and female lawyers ($n = 99$).

nonsignificantly, more female attorneys achieved their minimum goals than did male attorneys (64% vs. 55%), $\chi^2(1, N = 481) = 2.40, p = .12$.

Female attorneys whose confidence estimates were below 65% had a nonsignificant tendency toward underconfidence, $t(39) = 1.69, p = .10$. Female lawyers whose confidence estimates ranged from 66% to 75% were well calibrated, as indicated by the fact that the objective mean for achieved goals was 72%, $t(28) = -0.14, p = .89$. Judgments above 75% by female lawyers were biased in the direction of overconfidence, $t(30) = -2.44, p < .05$. By comparison, male lawyers were significantly underconfident for confidence estimates below 45%, $t(49) = 3.18, p < .01$; rather well calibrated for estimates between 46% and 55%, $t(79) = -0.28, p = .78$; and rather well calibrated for estimates between 56% and 65%, $t(57) = -1.43, p = .16$. Judgments made by male attorneys whose confidence estimates exceeded 66% were systematically biased in the direction of overconfidence: For confidence estimates between 66% and 75%, $t(89) = -2.74, p < .01$; for confidence estimates between 75% and 85%, $t(61) = -4.15, p < .001$; and for confidence estimates between 86% and 100%, $t(41) = -3.29, p < .01$.

Thus, a major source of the gender differences was that female lawyers were susceptible to the overconfidence bias only when the predicted likelihood of success was high. Compared with their female colleagues, male lawyers were less able to discriminate between cases in which they had a moderate probability of success (65–75%) and those in which they had a high probability of success (over 75%).

Effects of Experience

The measure of experience used in this study was number of years in legal practice. This number was used as a proxy for general expertise, because no inquiries were made as to how many cases similar to the study case had the lawyer handled previously or whether they were specialized in any area. Thus, if a lawyer participating in the survey had several years of legal experience but selected as the case for prediction one that was out of the ordinary in his or her practice, this measure could be deceptive. On the other hand, expertise acquired in one substantive legal domain may arguably transfer to another substantive domain.

The range of experience among lawyers included in the study was considerable, from 0 to 45 years of practice, with a mean of 13.3 years in practice ($SD = 9.7$). Years of experience varied somewhat, depending on whether the responding attorneys practiced civil or criminal law and the parties whom they represented. For example, there was a clear difference in years of experience between lawyers handling civil cases ($M = 14.9$ years, $SD = 9.9$) and lawyers handling criminal cases ($M = 8.8$ years, $SD = 7.4$), $t(449) = 6.23, p < .001$. There were no significant differences between the years of experience of attorneys representing civil plaintiffs ($M = 15.7$ years, $SD = 10.2$) versus those representing civil defendants ($M = 14.0$ years, $SD = 9.4$), $t(327) = 1.63, p = .10$. Attorneys prosecuting criminal cases ($M = 6.8$ years, $SD = 6.4$) had significantly less experience than did criminal defense lawyers ($M = 11.1$ years, $SD = 8.0$), $t(120) = -3.33, p < .001$.

If low confidence or uncertainty about case outcomes were correlated with lack of legal expertise, one might expect less experienced lawyers to express less confidence on average than the experienced lawyers. To investigate this hypothesis, we categorized lawyers in two groups: one consisting of lawyers with 10 or fewer years of legal practice ($n = 220$) and one consisting of lawyers with more than 10 years of legal practice ($n = 231$). The mean estimated confidence was 65% for those lawyers with 10 or fewer years of practice ($SD = 20.5\%$) and 63% for those with over 10 years of practice ($SD = 20.3\%$), $t(449) = 1.04$, $p = .30$. The proportion achieving their goals did not differ between the groups ($M = 56.8\%$ for less experienced lawyers and $M = 55.4\%$ for more experienced lawyers), $\chi^2(1, N = 451) = 0.09$, $p = .76$. The full calibration curves based on differential experience are displayed in Figure 4.

It is interesting that, for confidence levels above 60%, both lawyers with less experience ($M = 76.5\%$, $SD = 10.0\%$) and lawyers with more experience ($M = 75.4\%$, $SD = 10.7\%$) were clearly overconfident: $t(151) = -3.86$, $p < .001$, and $t(146) = -4.46$, $p < .001$, respectively. The pattern was replicated for high confidence estimates (over 80%): Less experienced lawyers ($M = 85.9\%$, $SD = 6.4\%$) were prone to an overconfidence bias, $t(62) = 3.88$, $p < .001$; as were more experienced lawyers ($M = 86.0\%$, $SD = 6.6\%$), $t(57) = -4.43$, $p < .001$.

In conclusion, the data provided no support for the hypothesis that lawyers with more practical experience are better calibrated than lawyers with less experience. Years of practice did not count for much, at least as far as calibration goes.

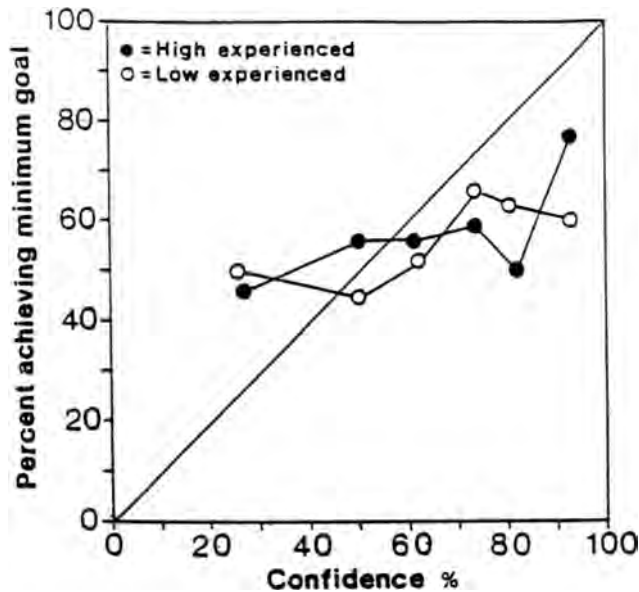


Figure 4. Calibration curves for lawyers with more than 10 years of experience ($n = 231$) and lawyers with 10 or fewer years of experience ($n = 220$).

Civil Versus Criminal Cases

Data from lawyers handling 337 civil cases were examined separately to determine whether those lawyers were better calibrated in predicting their success than the overall sample. The mean confidence estimate from this group was 65.0% ($SD = 18.0\%$), and the percentage that achieved their goals was 56.7%.

As a group, civil lawyers exhibited the same trend toward over- and under-confidence, as did the entire group of participating lawyers. For example, as can be seen in Figure 5, lawyers who were highly confident in achieving the goals they set (estimates exceeding 75%, mean estimate = 80.7%, $SD = 6.6\%$), were significantly overconfident as they achieved their goals in only 62.6% of the cases, $t(146) = -4.52, p < .001$.

Lawyers handling 144 criminal cases had a mean confidence estimate of 62.6% ($SD = 25.2\%$), and the percentage that achieved their goal was 56.9%. There was no difference in confidence estimates between civil and criminal lawyers, $t(479) = 1.16, p = .25$. There was no difference in success rate between civil and criminal lawyers, $\chi^2(1, N = 481) = 0.00, p = .96$.

Confidence as a Function of Temporal Distance to Trial

To determine whether lawyers' confidence levels differed as a function of the distance in time to trial, we correlated the estimated probability of success with the number of months elapsed between prediction and trial date. Contrary to our expectations, the correlation was nonsignificant, $r(427) = .04, p = .40$, indicating no relation between confidence levels and temporal distance to trial.

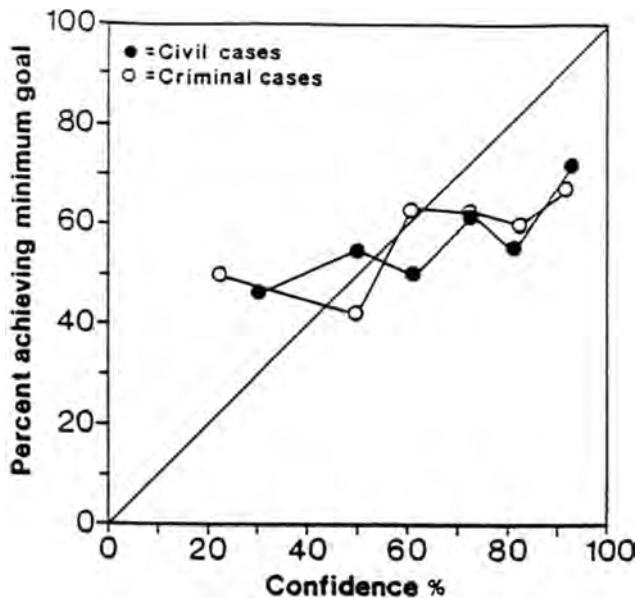


Figure 5. Calibration curves for civil cases ($n = 337$) and criminal cases ($n = 144$).

Calibration by Type of Case

Civil cases. Analyses of calibration by case type were possible to a limited extent, depending on the number of cases of a similar nature included in the study. Several categories of the tort cases in which defendant's negligence was at issue were aggregated into a general negligence case group ($n = 101$). Approximately 50% of the lawyers responsible for these cases achieved their litigation goals, although the mean confidence estimate of the lawyers was 65%. Again, judgment errors were concentrated on the upper end of the scale.

With respect to contract cases ($n = 65$) the same trend toward underconfidence at the lower end of the scale and overconfidence at the upper end of the scale was present.

Criminal cases. Criminal cases were divided into two major categories: crimes against property or victimless crimes (burglary, forgery, arson, possession of controlled substances, DWIs, etc.) and crimes against persons (homicide, assault, sexual offenses, etc.).

When crimes against property or victimless crimes were in issue, lawyers were realistic in their estimates. Mean confidence estimates were 59.1% ($SD = 29.3\%$), and the success rate was 47.9%, which did not differ significantly, $t(47) = -1.54$, $p = .13$. When focusing on crimes against persons, the mean confidence estimate was 63.6% ($SD = 23.1\%$). In this group, 61.1% achieved their goal, $t(89) = -0.48$, $p = .63$ suggesting general calibration.

Subjective Versus Objective Success and Attorney Reactions to Case Outcomes

In the follow-up phase after the case resolved, lawyers described the case outcome and whether they had achieved their minimum goal. They were not explicitly reminded of their earlier stated goal. Occasionally they claimed they had achieved their goal, even when an explicit comparison proved they had not.

To explore these mismatches, we devised two measures of success. Objective success was measured by comparing the reported outcome of the case with the originally stated goal. The measure was coded as a binary variable for which 1 = *less satisfactory than the original goal* ("a loss") and 2 = *equal/better than original goal* ("a win"). A subjective success measure was obtained from the lawyers' self-reports as to whether they achieved their minimum goals. As is reflected in Table 2, the objective success measure confirmed the tendency of the lawyers toward overconfidence. Lawyers' estimated probability for success (i.e., their a priori estimate) was 64.3% ($SD = 20.4\%$), but the objective success rate was 56.8%, which was significantly different, $t(480) = 3.34$, $p < .001$. The mean subjective measure of success was 66.1%, and when confidence estimates were compared with this subjective measure of success, the overconfidence bias was replaced by a tendency toward underconfidence, $t(480) = 68.36$, $p < .001$. Furthermore, percentages of subjective success were significantly higher in all categories than percentages of objective success (see Table 2).

In the follow-up interviews, lawyers rated their feelings about the case outcomes on a scale ranging from 1 to 5, on which 1 = *very disappointed*, 2 = *somewhat disappointed*, 3 = *neutral*, 4 = *somewhat pleased*, and 5 = *very pleased*. Results showed that approximately two thirds (64%) of all lawyers were

Table 2
Mean Prediction, Objective Success, and Subjective Success, by Party Represented (%)

Variable	All	Civil plaintiff	Civil defense	Criminal prosecution	Criminal defense
Mean estimate	64.3	65.1	65.1	72.8	50.1
Objective success	57.0	51.6	62.6	67.1	43.7
Subjective success	66.2 ^a	60.0 ^b	70.3 ^c	77.2 ^d	60.1 ^e
<i>N</i>	481	182	155	79	66

Note. Superscripts denote significant differences between objective and subjective success ($p < .001$).

^a $\chi^2(1, N = 481) = 233.1$. ^b $\chi^2(1, N = 182) = 104.0$. ^c $\chi^2(1, N = 155) = 62.7$. ^d $\chi^2(1, N = 79) = 40.0$. ^e $\chi^2(1, N = 65) = 23.9$.

pleased or very pleased with the outcome of the case. It is interesting to note that this number matched perfectly the estimated mean confidence in achieving the minimal goal (64%), although lawyers achieved their goals in only 57% of those cases. Fewer than one fifth of the lawyers (18%) were very disappointed or somewhat disappointed with the case outcome, although more than twice as many (43%) actually failed to achieve their stated minimum goal. Of the group of lawyers who did not achieve their minimum goal ($n = 208$), two thirds reported that they were somewhat pleased or very pleased with the actual outcome.

Effects of the Debiasing Technique

We predicted that lawyers who generated reasons why they might not achieve their litigation goals would be better calibrated. We expected to find that generating these reasons would reduce the overconfidence observed in lawyers making relatively high estimates of success. To examine this hypothesis, we compared the 212 lawyers who were asked for reasons before they provided their confidence estimate with the 269 lawyers who were not first asked for reasons. Most lawyers (57%, $n = 274$) provided one or more reasons why they might not achieve their litigation goals. The nature of the reasons varied widely. Some pointed to contextual factors, such as an opponent with extensive trial experience or legal skill, a client who was particularly unattractive, or the emotional nature of the case itself.

Of the group who provided reasons, 41.6% provided a single reason; others listed two or more reasons. Accordingly, the first reason provided by lawyers was coded and classified into one of six major categories. The largest category, "case facts" (37.5%), included references to the weakness of the case, the emotional or controversial nature of the case, and evidentiary problems. The next largest category was "judge and jury issues" (24.8%) such as unpredictable fact finders. The next distinct category was "witness factors" (14.2%) such as percipient or expert witness problems. "Client factors" constituted a smaller group (12.5%) and included references to unattractiveness and culpability. The next category, "court context" (8%), comprised references to case precedent, jurisdiction, venue, court, and geographic location. Surprisingly, the reasons least frequently cited were

“attorney factors,” comprising only 3.2% of the reasons stated and referring to the skill, preparedness, or experience of the participant or opposing counsel.

Notably, 18 lawyers in the reasons group declined to generate even a single reason why they might not achieve their minimum goal. For purposes of analysis, we included these lawyers in the reasons group. Perhaps they contemplated some reasons in response to our prompting. Nonetheless, no support emerged for the hypothesis that generating reasons in advance boosted calibration. A comparison of confidence estimates in the reasons ($M = 64.3$, $SD = 19.6$) and no-reasons ($M = 64.3$, $SD = 21.1$) groups revealed no significant differences, $t(479) = -0.03$, $p = .98$.

Figure 6 presents the calibration curves for the two groups of lawyers. With one exception, the calibration curves for the reasons and no-reasons lawyers are markedly similar. When initial confidence estimates exceeded 60%, lawyers in both the reasons ($M = 75.7$, $SD = 10.2$) and no-reasons ($M = 76.6$, $SD = 10.7$) groups both exhibited overconfidence, $t(140) = -3.89$, $p < .001$; and $t(177) = -4.34$, $p < .001$, respectively. Calibration differed for one confidence interval; when initial confidence estimates were low from the beginning (under 45%). In this range, lawyers in the no-reasons group ($M = 26.4$, $SD = 13.2$) displayed a great deal of underconfidence, $t(37) = 3.53$, $p < .001$. In contrast, lawyers in the reasons group ($M = 27.8$, $SD = 12.2$) were well calibrated, $t(26) = 0.98$, $p = .34$.

Overall, generating reasons did not accomplish what we predicted, namely that overconfidence would be reduced.

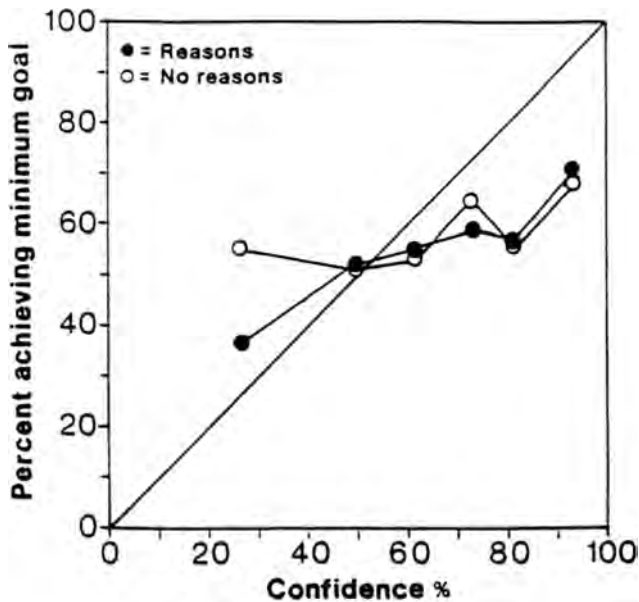


Figure 6. Calibration curves for the reasons group ($n = 212$) and the no-reasons group ($n = 269$).

Discussion

To our knowledge, this study of the ability of lawyers to predict the outcome of their cases is the largest study of American legal practitioners of its kind involving data drawn from actual cases. The findings extend previous research on overconfidence in defense lawyers (Loftus & Wagenaar, 1988; Malsch, 1990), by establishing that similar biases arise in predictions by criminal prosecutors and by counsel for both plaintiffs and defendants in civil cases. Lawyers frequently made substantial judgmental errors, showing a proclivity to overoptimism. The most biased estimates were expressed with very high initial confidence: In these instances, lawyers were extremely overconfident. These findings are consistent with a large body of literature documenting overconfidence in a range of judgments (theoretical explanations of miscalibration of confidence are discussed in Gigerenzer, Hoffrage, & Kleinbolting, 1991; Kahneman, Slovic, & Tversky, 1982; Moore & Healy, 2008).

With respect to the correlates of the overconfidence bias, certain results were somewhat counterintuitive, such as the finding that lawyers with more experience were not better calibrated than less experienced lawyers. By contrast, expertise predicted calibration in Dutch criminal lawyers whose specialization was measured by the number of cases handled per year in a certain field (Malsch, 1990). Experience alone did not serve to calibrate either the Dutch or the North American lawyers, although they plausibly received some form of contextual outcome feedback that could have enhanced their calibration. Three potential explanations to account for this finding are posited. First, more experienced lawyers may handle cases of higher complexity and ambiguity than their less experienced colleagues. Support for the notion that overconfidence is more extreme in tasks of greater difficulty has emerged in several studies (Brenner, Koehler, Liberman, & Tversky, 1996; Rehm & Gadenne, 1990). Second, a lawyer's need for a highly confident professional persona (Loftus & Wagenaar, 1988) may perpetuate a tendency toward overconfidence over time rather than diminish it. Third, the contextual effects of inquisitorial versus adversarial justice systems and the differential feedback that lawyers receive over time may influence their predictions.

Studies of forecasting in other professional domains showed that when the ambiguity of the problem was reduced, forecasters relied on more objective and fewer subjective factors in making their predictions (Braun & Yaniv, 1992). Similarly, the finding that lawyers responsible for criminal cases involving victimless crimes or crimes against property were better calibrated, compared with lawyers responsible for cases involving crimes against persons, may be a function of the relative ambiguity of the two types of cases.

With regard to gender, we replicated results obtained by Malsch (1990) that female lawyers were better calibrated than their male colleagues. Male practitioners were more overconfident than female practitioners. These findings are in line with gender differences observed in research on metacognition (Pallier, 2003).

Calibration did not increase as a function of time to trial. However, lawyers selected cases that they expected to go to trial within 6–12 months. The variability in temporal distance to trial may have been insufficient to detect the predicted influence of proximity to trial.

We applied two measures of success to determine the extent to which the lawyers were well calibrated. One measure was the degree of correspondence between the lawyers' a priori goals and the reported actual case outcomes. This was designated the objective measure of success. The subjective measure of success was the lawyers' self-report as to whether the a priori minimum goal was achieved. The overconfidence effect disappeared and was replaced by underconfidence when comparing lawyers' a priori estimates to their subjective reports of success. This is likely due to the fact that lawyers' own perception of success after the case was resolved was significantly higher than the objective measure of success. The same self-serving bias (e.g., Babcock & Loewenstein, 1997) that causes overconfidence in prospective judgments may also skew retrospective judgments of success.

Improving Calibration

We failed to find support for the prediction that a cognitive manipulation (asking participants to generate reasons against achieving their minimum goal) was related to more realistic estimates. This might be due to the anchoring and adjustment heuristic (Tversky & Kahneman, 1974): Lawyers choose a desirable outcome, the anchor, and thereafter make insufficient adjustments for uncertainty even when asked to generate reasons against their initial goal. Results in other studies have also failed to show an influence on calibration of arguments generated against the chosen alternative (Allwood & Granhag, 1996) or a reduction of unwarranted optimism in personal predictions by using pessimistic-scenario generation (Newby-Clark, Ross, Buehler, Koehler, & Griffin, 2000).

Lawyers are exposed to several additional factors that may influence the predictive validity of the specific information they have regarding an upcoming case. Compared with professional weather forecasters, lawyers are different in two crucial respects. First, meteorologists cannot in any way influence the outcome of their predictions. Nothing they do can make it rain. Lawyers, on the other hand, can behave in ways that influence the case outcome. Because they have this opportunity, they may overestimate their own capacity and neglect the importance of factors beyond their control (Dollinger, 2008).

Second, lawyers have a much keener interest in the goals of their predictions than do meteorologists. Because of this, lawyers might be susceptible to overoptimism and wishful thinking. In several studies, researchers have demonstrated that merely imagining an event can increase subjective probability estimates that the event will occur (Carroll, 1978; Sherman, Cialdini, Schwartzman, & Reynolds, 1985). Thus, even before the questions about confidence estimates and the reasons why lawyers might not achieve their goals were posed, lawyers might have been biased in the direction of overoptimism. This explanation is consistent with findings in previous studies in which judgments about probability and likelihood were significantly influenced by whatever side of the issue individuals thought about first (Hoch, 1984). Generation of a particular mental scenario may have hindered the later generation of alternative, incompatible scenarios. People can enjoy the experience of wishful thinking "as long as they are willing to pay the price of painful disappointment when reality does not unfold as expected" (Babad, Hill, &

Driscoll, 1992, p. 471). In the context of litigation, we agree with Griffin and Tversky (1992):

It can be argued that people's willingness to engage in military, legal, and other costly battles would be reduced if they had a more realistic assessment of their chances of success. We doubt that the benefits of overconfidence outweigh its costs. (p. 433)

How can metacognitive realism in lawyers be improved? We failed to find improved calibration as a function of a cognitive debiasing intervention. Perhaps unrealistically optimistic predictions are too closely intertwined with the professional motivation of lawyers to be overcome by a cognitive intervention. These lawyers may also be susceptible to a general human tendency to downplay unfavorable aspects about oneself (Fiske & Taylor, 2008) and a tendency to interpret the past in an unrealistically favorable light (Gilbert, 2006). A lawyer's commitment to the client and the case may induce a self-serving bias. A self-serving bias is the expectation of one party that exceeds the beliefs of the opposing party (Babcock, Loewenstein, & Issacharoff, 1997). Self-serving biases in litigation were strong predictors of nonsettlement before proceeding to court (Loewenstein, Issacharoff, Camerer, & Babcock, 1993). In previous research on self-serving biases, encouraging participants to consider the weakness in their case was effective in debiasing participants (e.g., Babcock & Loewenstein, 1997). The debiasing manipulations in these studies were similar (generating reasons why the goal might not be achieved versus thinking about the weaknesses in one's own case). The discrepancy between our finding and the previous finding may be due to the fact that the participants in our study made judgments about their own cases rather than simulated cases assigned to them in an experimental setting. A more profound investment in the outcome in real-life cases may increase resistance to debiasing interventions.

Policy Implications

The results of this study have practice and policy implications for lawyer–client relationships, case management strategies, court efficiency, and lawyer training and education. These policy issues can be addressed both formally and informally.

Lawyer–client relations. Clients of lawyers who are susceptible to an overconfidence bias may detrimentally rely on the advice of these legal professionals when making decisions about whether to litigate, they may choose litigation over settlement, or they may allocate valuable resources without securing anticipated objectives. These clients are likely to experience disappointment, frustration, or anger if the outcomes they were led to expect are not achieved. Client dissatisfaction may increase public antipathy toward lawyers and diminish public confidence in the legal system. Lawyers who have had several experiences with dissatisfied clients are likely to adopt a risk-averse strategy in managing client relationships to avoid a negative outcome by deliberately lowering all client expectations so that subsequent disappointment is avoided. Lawyers who are better calibrated can avoid dissatisfied clients by obviating the need to reduce client expectations to preserve their relationship. Lawyer–client relationships,

client satisfaction, general public opinions of lawyers, and confidence in the legal system may all be enhanced by well-calibrated lawyers. Clients are not well served if their legal representatives cannot appropriately assess litigation risks or if lawyers exercise poor judgment in advising them or deliberately lower all client expectations.

Case management strategies. One implication of the present findings is that lawyer performance can be improved by implementing case management strategies that take into account the potential overconfidence biases of the litigators. Case consultations with legal peers can take place informally. For example, in many legal firms, regular meetings are held where cases are periodically reviewed so that the partners can manage the caseload efficiently and ethically. These meetings provide ideal opportunities to obtain objective opinions from other legal professionals in the form of third-party feedback about the strengths and weaknesses of a case and the likelihood that the stated goals can be achieved. Many of the most overconfident lawyers will be the senior partners who may not typically obtain third-party review or feedback in the course of their practice. Law firms should take affirmative steps to incorporate third-party feedback for the more experienced or senior litigators in their case management systems. Legal practitioners should also consider regularly obtaining customer feedback by sending their clients anonymous survey questionnaires at the close of every case; these should include questions that target the issues surrounding the management of client expectations about the achievement of goals in a particular case.

In addition, lawyers should consider obtaining more formal external third-party views on the likelihood of achieving their litigation goals on behalf of their clients. It is in the early stages of litigation that patterns and expectations for the case are established and where an intervention can have the most beneficial effects. For example, in an evaluation of the Northern California Early Neutral Evaluation (ENE) Program (Brazil, Kahn, Newman, & Gold, 1986), attorneys reported changing their initial assessments of the merits of their case on the basis of a better understanding of the case's legal and factual issues gained during the ENE. Furthermore, participants reported greater satisfaction with the outcome of the case and perceptions of procedural fairness regardless of the eventual resolution. However, these successful ENE programs have not been widely implemented (Levine, 1987; Wissler, 2002). Alternatively, lawyers can seek the input of an experienced third-party neutral, such as an alternative dispute resolution practitioner, mediator, or arbitrator. These professionals are often consulted jointly by the parties in mediation, but they can also be consulted independent of the opposing party specifically to obtain evaluative feedback of this nature.

Court efficiency. Overconfidence in difficult or ambiguous cases could be a barrier to alternative forms of dispute resolution; lawyers may pursue litigation in cases even though the litigation objective cannot be achieved. This practice may clog the courts with cases that lack merit and with unnecessary or protracted litigation in cases that might be better suited to dismissal or settlement. To address this issue, courts should consider requiring parties to appear before a third-party neutral, such as a magistrate, judge, or mediator, for an assessment of the merits of the case. A party who does not have an interest in a particular outcome might be less prone to metacognitive biases that color the litigator's decision making. In many areas of law, trial may proceed only if mediation has been attempted and

failed. The advantage of policies of this nature is that the mediation may provide third-party neutral feedback to the lawyers that reduces overoptimism. Thus, these policies should be further supported. Other policies in the form of interventions that may be effective in inhibiting unnecessary litigation should be considered (e.g., more early neutral evaluation options and expanded use of pretrial conferences in criminal as well as civil cases).

Lawyer training and education. Finally, the findings that many lawyers are susceptible to an overconfidence bias have implications for legal training and education. Information about the outcomes of this and similar studies should be included in the relevant curricula in clinical practice courses and in professional and ethical responsibility classes both at law school and bar admission. Better informed lawyers will be more likely to seek third-party feedback to avoid subjective overconfidence.

The key in all policy recommendations is the provision of feedback to lawyers about the link between their professional judgment and their performance. Outcome feedback is central to developing well-calibrated judgments (Hogarth et al., 1991; Keren, 1987; Murphy & Winkler, 1971; Stone & Opel, 2000). To enhance calibration precision, one needs to determine the accuracy of previous predictions. Lawyers should be encouraged to monitor their predictions in multiple ways. Case outcomes in the form of judicial opinions or jury verdicts are dependent on many factors outside the control of the lawyer and provide only limited information (win/lose); these are, thus, very blunt instruments to rely on for enhancing calibration. More sensitive, fine-grained feedback may be available from opposing counsel, judges, or an analysis of audio-visual recordings. Several avenues to help lawyers better calibrate their metacognitive judgments are advised. Policies requiring lawyers to consult external third parties to obtain more realistic evaluations of cases and their likely outcomes may benefit clients, lawyers, the justice system, and the public interest.

Conclusion

Future research should examine factors that enhance lawyer calibration, such as case-related aspects and performance feedback. If case ambiguity and case complexity are controlled, a lawyer's experience may prove to be a better predictor of calibration. To date, no research has thoroughly examined this issue. Similarly, the extent to which input from an external party improves lawyers' realism in making case predictions and achieving their objectives needs further investigation. However, the literature on motivated social cognition implies that the motivation to achieve a certain case outcome may lead lawyers to discount the assessment of the external party if it does not fit with their preferred belief (Kunda, 1990).

This study extended previous research on the judgment, decision making, and metacognitive realism of legal professionals. Our large sample of U.S. lawyers showed clear evidence of unrealistic litigation goals, and our experimental manipulation with the purpose of debiasing optimistic tendencies did not have the desired effect. Because accurate legal decision making might be in jeopardy as a function of lawyers' optimistic tendencies, further research ought to explore ways to enhance calibration to reach more realistic metacognitive judgments.

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