

A calculated risk?

Emily Campbell examines how to calculate the odds of winning a case



*Emily Campbell
is a barrister at
Wilberforce Chambers*

'There is no industry-standard system for evaluating prospects of success. Many lawyers may put themselves in the position of the judge and decide in the first instance whether the client wins or loses.'

Since I started practice in 1995, expressing prospects of success as a percentage has become a widespread practice in civil litigation. An early adopter of percentages was the Legal Aid Board when obtaining counsel's opinion on the merits of a case. Most clients now expect a number to be placed on the odds of winning a case.

Earlier, prospects of success were more typically expressed in words such as: 'I consider that this case has a reasonable prospect of success'. A disadvantage of words is that different lawyers use them to mean different things. By contrast, the use of numbers gives the impression of a universal scale. However, lawyers (unlike scientists) are not trained in the use of numbers and there is no systematic mathematical method used by the profession for calculating the prospects of success.

In this article, I hope to demonstrate that the use of percentage prospects of success does not amount to a probability assessment in the classical mathematical sense. Instead, it falls into the category known by theorists as 'subjective probability', which is particularly susceptible to bias such as the 'overconfidence effect'. The overconfidence effect is a commonly encountered bias, whereby a person's subjective confidence in their judgement exceeds the objective accuracy of that judgement. It is particularly problematic in individuals with a high degree of self-confidence. As such, the use of a percentage is no less ambiguous than the use of words.

What do we intend to convey by: 'In my view, this case has a 70% chance of success' anyway? Different lawyers may mean different things.

Clearly, we do not mean – in the language of combinatorics – that there

are ten possible and equally likely outcomes of the case, seven of which are favourable to the client.

Perhaps we mean that, if the trial took place ten times before the same judge, Groundhog Day-style, the client would win on seven occasions? Or perhaps we mean that, if the trial took place before ten different judges, seven of the judges would rule in favour of the client. Or perhaps we mean a mixture of these, ie if the trial took place ten times before ten different judges, the client would win on seven occasions. This very definitional uncertainty sits uncomfortably alongside the use of numbers, which are usually employed for their precision.

I will return to the question of what we mean by the use of percentages in the conclusion, after considering a number of practical examples.

Identifying the risks of litigation

It is relevant to consider what the uncertainties of trial actually are. They include:

- the different subjective approaches of different judges;
- the uncertainty of future events, such as a key witness dying the day before the hearing; and
- factors which, in reality, relate to the past or present, which are in the realm of 'known unknowns' (such as the credibility of the other side's witnesses) or 'unknown unknowns' (such as what the client may be not telling you).

One aspect of mathematical probability is that it is concerned with predictions about the future. However,

the third item on the list demonstrates that the uncertainty of the outcome of the trial is partly based on existing unascertained facts.

Another aspect of mathematical probability is that, where there are two mutually exclusive events, A and B, which are the only possible outcomes of a process, we have the following formula:

$$P(A) = P(\text{NOT } B) = 1 - P(B)$$

In other words, the probability of event A occurring is the same as the

establish liability, while the defendant can get off by winning either of those issues. In other words, the claimant must show an 'AND', while the defendant need only show an 'OR'. This ought to give the defendant a built-in advantage in addition to the burden of proof, but it is not my sense that there is any systematic disadvantage to the claimant in professional negligence claims. On the contrary, normally the claimant is taking action when something has gone wrong and they have suffered some loss. Here, there is plenty of room for

$\times 0.7 = 0.49$. So, the lawyer cannot give the claimant more than a 49% chance of success. This logic does not correspond with one's instinct or experience and does not represent the case in practice.

Scenario 2: Conditional probability – dependent events

Two events, A and B, are dependent if they are not independent. In negligence proceedings, for example, negligence and causation may depend partly on the same evidence or the credibility of the same witnesses. Mathematically, this is expressed as follows:

$$P(A \text{ AND } B) = P(A)P(B|A)$$

In other words, the probability of events A and B both occurring is the probability of event A occurring multiplied by the probability of event B occurring, given event A.

This approach then gives rise to further difficulty. If the claimant wins on negligence, how have they won? Has the judge worked through the issues methodically, or is extreme irritation with the defendant already evident? Have the defendant's witnesses been discredited? Has the judge been ruthlessly logical, or does the judge appear to be trying to look through problems to find a result favourable to the claimant in order to right what the judge sees as an injustice? It is therefore very difficult to establish the probability of event B given event A – it is very difficult to see what the expression 'given event A' means when a lawyer knows that there are a great many different ways of winning (or losing) on an issue.

How do we calculate the percentage anyway?

I have already mentioned that there is no industry-standard system for evaluating prospects of success. Many lawyers may put themselves in the position of the judge and decide in the first instance whether the client wins or loses. If the lawyer reaches a view favourable to the client, then the lawyer applies a discount for risk. The evaluation of this discount is very rudimentary, although there are probably a number of rules of thumb, for example:

- never give the client more than 70% (or perhaps 80%) prospects of success;

In many cases in practice which proceed beyond the very initial stages, both parties' lawyers will indeed find their client's case convincing.

probability of event B not occurring, ie being the difference between 1 and the probability of the event B occurring.

So, frequently in litigation, either the claimant will win or the defendant will win. The probabilities should therefore add up to 1. However, lawyers usually regard the uncertainties mentioned above as litigation downside risks which reduce the prospects of the client succeeding, especially if the client's case on the face of it appears otherwise convincing. And it is worthy of note that in many cases in practice which proceed beyond the very initial stages, both parties' lawyers will indeed find their client's case convincing. However, if both sets of lawyers make a discount for litigation risk, then a slice of chance is effectively going 'missing'.

This analysis already calls into question whether the use of percentage prospects of success has anything to do with mathematical probability.

Combining probabilities

Things only get worse when one considers how probabilities might combine in a case which turns on more than one issue. It is helpful here to take the example of advising in relation to a professional negligence claim, where there are two significant issues as to liability, ie negligence and a second issue (which might be, say, causation or limitation).

In the case of our example, the claimant must win on two issues to

non-scientific thinking to creep in: the judge may feel sorry for the claimant, especially in a 'David and Goliath' type of dispute.

Before proceeding further, I will set out the mathematical rules for combining the probabilities of two events occurring.

Scenario 1: Independent events.

Two events are independent if one does not convey any information about the other. A common example is two throws of a fair coin. Mathematically, if two events, A and B, are independent the probability of them both occurring is:

$$P(A \text{ AND } B) = P(A)P(B)$$

In other words, the probability of events A and B both occurring is the probability of event A occurring multiplied by the probability of event B occurring.

There are many situations in which two issues in a civil claim are logically independent, eg because they do not depend on the same evidence or the credibility of the same witnesses.

Here, however, we encounter a paradox. If the claimant must win on two independent issues, and typically no lawyer will give the prospects of persuading a court of any particular disputable proposition as greater than (say) 70%, then mathematically the claimant's prospects cannot exceed 0.7

- greater discounts are required in cases involving findings of fact, especially where there will be live evidence;
- avoid saying '50/50' if possible, as it is unhelpful to the client; and
- resolve any doubt in favour of the client (for example, 51% prospects of success rather than 50% or 49%). This last one may be an unconscious rule of thumb.

The evaluation of the discount is certainly not based on anything as scientific as the analysis of a bank of statistical data about materially similar cases, especially as cases are usually very fact-specific. Lawyers are unlike actuaries.

I would add that, as a matter of fact, artificial intelligence is currently being researched for use as part of the judicial process. Whatever algorithm a

robot lawyer would use, it is unlikely to bear much relationship to how lawyers actually consider cases.

Conclusion for practitioners

I have sought by the examples used to demonstrate that percentage prospects of success do not amount to the odds of winning a case. The use of a percentage is a measure of subjective probability and is more in the nature of a rating scale, ie a measure (on a scale of 0 to 100) of how strongly the lawyer agrees with the proposition that the client's case ought to succeed.

Is this properly understood by clients, especially as it lends an unjustified veneer of a scientific approach to the assessment of merits? Is the use of numbers capable of being misleading, possibly more so than the use of words? At the heart of this debate is how to communicate to clients the risks of litigation. Clients need to be aware that the risks of litigation are

very significant and to a great extent incapable of being 'calculated' in any mathematical sense.

The reader may recall the famous coin toss game at the beginning of *'Rosencrantz and Guildenstern are dead'* (Tom Stoppard, 1966), in which Rosencrantz successfully bets heads 92 times in a row and appears to sense nothing unusual. After he has lost a mere 76 times, Guildenstern comments: 'A weaker man might be moved to re-examine his faith, for nothing else at least in the law of probability.' Unlike Rosencrantz, clients will indeed tend to lose faith if the improbable occurs – in their lawyers in priority to the law of probability.

It must be understood that obtaining a lawyer's opinion on the merits may be no more than a procedural safeguard for a client who is seeking to minimise the risks of litigation, than a substantive attempt at looking into the crystal ball. ■