

SPIN DOCTORS: PROSECUTOR SOPHISTRY AND THE BURDEN OF PROOF

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Spin Doctor: “a person employed . . . to use spin in interpreting information or events so as to present them in a favorable light.”¹

Sophistry: “the use of fallacious arguments, especially with the intention of deceiving.”²

Prosecutors have developed several tactics to effectively lower the burden of proof in criminal trials. One such tactic is to argue to jurors that they should “search for the truth” of what they think happened. Some trial courts are complicit in this effort, and formally instruct jurors “not to search for doubt” but instead “to search for the truth.” Defense lawyers have objected to these truth-based arguments and instructions, as such language improperly lowers the burden of proof below the reasonable doubt standard. Prosecutors, however, have dismissed these objections as pure speculation.

In response to this apparent call for evidence, Dr. Lawrence T. White and I empirically tested the effect of these truth-based jury instructions on verdicts. In two recently published studies, mock jurors who received truth-based instructions convicted at significantly higher rates than those who were simply instructed on reasonable doubt. Jurors who received the truth-based instructions were also far more likely to mistakenly believe it was proper to convict even if they had a reasonable doubt about guilt.

Citing this empirical evidence, defense lawyers have been asking trial courts to remove truth-related language from their burden of proof jury instructions, and to prohibit prosecutors from making search-for-truth arguments to jurors. Prosecutors, however, have responded by attacking the validity of the two published studies.

This Article identifies and debunks these prosecutorial attacks. Its purpose is to assist defense lawyers and judges in recognizing and responding to invalid prosecutorial arguments, many of which are based on a gross misunderstanding of scientific research, blatant misrepresentations of fact or law, and, most significantly, logical fallacies. Debunking these prosecutorial arguments is a critical step in protecting every person’s right to remain free of conviction unless the state can prove guilt beyond a reasonable doubt.

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¹ *Spin Doctor*, Slang, COLLINS DICTIONARY, <https://www.collinsdictionary.com/us/dictionary/english/spin-doctor>.

² *Sophistry*, DICTIONARY, <https://www.google.com/search?q=Dictionary#dobs=sophistry>.

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INTRODUCTION

In theory, the prosecutor’s burden in a criminal case is to prove guilt beyond a reasonable doubt.³ However, prosecutors have developed numerous tactics to effectively lower this burden of proof. One common ploy is to argue to jurors that they should not focus on their doubts, but rather should search for the truth of what they think happened. Many courts recognize that this argument is improper, as it urges jurors to apply a mere preponderance of evidence standard. Other courts, however, take the opposite approach: they are complicit in the prosecutor’s burden-lowering effort by formally instructing jurors “not to search for doubt” but instead “to search for the truth.”⁴

Defense lawyers have long objected to this truth-related language in burden of proof jury instructions. Prosecutors responded that there was no evidence to support defense lawyers’ objections. Therefore, Lawrence T. White and I conducted and published two controlled experiments that tested the effect this truth-versus-doubt language on mock juror decision-making. Our findings demonstrated, among other things, that jurors who were told “not to search for doubt” but instead “to search for the truth” convicted at significantly higher rates than those who were properly instructed on reasonable doubt.⁵

In light of this empirical evidence, defense lawyers have asked trial judges to modify their burden of proof instructions by deleting the offending truth-versus-doubt language. But now that defense lawyers are providing the evidence that prosecutors previously claimed to want, prosecutors have shifted gears and instead are attacking the

³ See Part I.

⁴ See Part II.

⁵ See Part III.

empirical research in an effort to preserve the burden-lowering jury instructions on which they rely to win convictions.⁶

Some of these prosecutorial claims, criticisms, and arguments may have superficial appeal to a trial judge who is untrained in behavioral research. Therefore, this Article identifies and debunks the most recent prosecutorial spin regarding the published studies. This latest line of sophistry includes claims of experimenter and participant bias,⁷ criticisms of study design,⁸ misrepresentations regarding the studies' findings,⁹ outright fabrications about other aspects of the studies,¹⁰ and, most significantly, the reliance on several logical fallacies.¹¹

The Article then concludes by reminding courts of the big picture: even if there was no empirical research on this topic, the Constitution still requires jurors to examine the prosecutor's evidence for reasonable doubt. Therefore, courts must not adopt burden of proof instructions—or allow prosecutors to make closing arguments—that in any way suggest, or even hint, that jurors should apply a lower standard of proof.

I. GAMING THE BURDEN OF PROOF

Prosecutors have an ethical duty as a “minister of justice,” which includes ensuring that a defendant “is accorded procedural justice.”¹² And few things are as important to procedural justice as the burden of proof. In criminal cases, the Constitution protects a defendant from conviction unless the prosecutor proves the state's case “beyond a reasonable doubt.”¹³ The Supreme Court has equated this high level of proof with jurors having “a subjective state of near certitude” about the defendant's guilt.¹⁴ Yet, despite their ethical obligations, many prosecutors have gone to great lengths to lower or even shift the burden of proof, thus increasing their odds of winning a conviction.

The variations of this prosecutorial tactic are countless, but a few examples will demonstrate the point. Sometimes, prosecutors will trivialize the burden of proof, arguing to jurors that it is no different than the standard they use when making decisions in their everyday lives.¹⁵ Other times, prosecutors will present jurors with a false

⁶ See Part IV.

⁷ See Parts IV.A. and IV.B.

⁸ See Part IV.C.

⁹ See Part IV.D. and IV.E.

¹⁰ See Part IV.F.

¹¹ See, e.g., Parts IV.G. and IV.H. Logical fallacies are at the heart of most of the prosecutorial attacks on the published research.

¹² MODEL RULES OF PROF'L CONDUCT, R. 3.8, Cmt. 1, *Special Responsibilities of a Prosecutor* (AM. BAR ASS'N 2011). These model rules are adopted, often verbatim, in most states.

¹³ *In re Winship*, 397 U.S. 358, 364 (1970).

¹⁴ *Jackson v. Virginia*, 443 U.S. 307, 315 (1979).

¹⁵ See *People v. Nguyen*, 40 Cal. App. 4th 28, 35 (1995) (holding that the standard “you use every day in your lives when you make important decisions, [including] decisions about whether you want to get married,” is much lower than the reasonable doubt standard, as “33 to 60 percent of all marriages end in divorce.”).

dilemma by arguing that, in order to acquit, they would have to find that the state's witnesses—often police-officer witnesses—were intentionally lying under oath.¹⁶

In some cases, prosecutors will not just lower the burden of proof but will actually shift it to the defendant. Examples include arguing that the defendant is guilty because she decided not to testify,¹⁷ failed to call enough witnesses at trial,¹⁸ or did not present compelling evidence of innocence.¹⁹ In other cases, prosecutors will completely abandon all attempts at subtlety—and even the pretense that verdicts should be based on evidence—and will argue to the jury: “you have a *gut feeling* he's guilty, he's guilty.”²⁰

One of the most common prosecutorial ploys—and the one that is the subject of this Article—comes straight from the politician's playbook. To demonstrate, first consider an example from the national stage. When rushing to create legislation in 2001, politicians strained mightily to find ten words that could be strung together in a semi-intelligible way to create the acronym USA PATRIOT Act. The result of their efforts—or possibly their interns' efforts—was an awkward mouthful: “Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism.”²¹ Such branding allowed the Act's supporters to paint anyone opposing it as *unpatriotic*—even when such opposition was rooted in a concern for our constitutional rights, which is one of the most patriotic stances a politician could take.

At first blush, this political example might not seem analogous to prosecutorial tricks designed to lower the burden of proof. But just as politicians hijacked the word “patriot” to label objectors as unpatriotic, some prosecutors have used a similar tactic by hijacking the word “truth.” That is, by equating their quest for a conviction with a noble search for the truth, prosecutors not only align themselves with truth and justice,²² but

¹⁶ See *United States v. Vargas*, 583 F.2d 380, 387 (7th Cir. 1978) (even if jury thought the government's witnesses “probably were telling the truth and that [defendant] probably was lying . . . the evidence might not be sufficient to convict defendant beyond a reasonable doubt. To tell the jurors they had to choose between the two stories was error.”); *State v. Singh*, 793 A.2d 226, 238 (Conn. 2002) (“testimony may be in direct conflict for reasons other than a witness' intent to deceive”).

¹⁷ See *State v. Jackson*, 444 S.W.3d 554, 585 (Tenn. 2014) (prosecutor began rebuttal argument “by walking across the court room, facing Defendant, and declaring in a loud voice, while raising both arms to point at and gesture toward Defendant, ‘Just tell us where you were! That's all we are asking, Noura!’”).

¹⁸ See *Adams v. State*, 566 S.W.2d 387 (Ark. 1978) (prosecutor asked jury, “How many witnesses did the defense put on for your consideration?”).

¹⁹ See *United States v. Roberts*, 119 F.3d 1006, 1011 (1st Cir. 1997) (prosecutor argued to jury that “the defendant has the same responsibility [as the government] and that is to present a compelling case.”).

²⁰ *Randolph v. State*, No. 36080, 8 (Nevada, 2001) (emphasis added). This ethically-challenged prosecutor ascended to the bench where he encountered more ethics-related problems. See Mauricio R. Hernandez, *Vegas Judge Had Long History of Prosecutorial Misconduct*, THE IRREVERENT LAWYER (May 31, 2017), at <https://lawmrh.wordpress.com/2017/05/31/vegas-judge-had-long-history-of-prosecutorial-misconduct/>. A different prosecutor made a similar but more subtle argument: “We all know better in our heart of hearts exactly what went on here. And when you know inside your heart of hearts, you know we have met our burden of proof . . .” *People v. Max*, 980 N.E.2d 243, 253 (Ill. Ct. App. 2012).

²¹ USA PATRIOT Act, Public Law 107-56, GOVERNMENT PUBLISHING OFFICE (Oct. 26, 2001), at <https://www.gpo.gov/fdsys/pkg/PLAW-107publ56/pdf/PLAW-107publ56.pdf>.

²² Prosecutors are able to do this because, for a variety of reasons, they enjoy an unearned reputational advantage straight out of the gate. See Abbe Smith, *Can You be a Good Person and a Good Prosecutor?*, 14 GEO. J. LEGAL ETHICS 355, 355 (2001) (“Somehow, it is understood that prosecutors have the high ground. Most people simply assume that prosecutors are the good guys, wear the white hats, and are on the ‘right’ side.”).

simultaneously brand defense lawyers as obfuscators who are attempting to hide the truth by creating doubt.²³

II. FLYING THE TRUTH FLAG

“[T]ruth and doubt are two separate concepts: truth refers to a judgment about whether something happened; doubt refers to the level of certainty in that judgment.”²⁴ Therefore, in closing arguments to the jury, defense lawyers essentially argue that the prosecutor’s evidence does not rise to the level of proof beyond a reasonable doubt. Prosecutors, on the other hand, should be arguing—assuming that the evidence supports such an argument—that he or she *has* proved the defendant’s guilt beyond a reasonable doubt.

But rather than meeting their burden of proof head on, many prosecutors skirt their ethical obligations (and the defendant’s constitutional protections) by arguing that, instead of evaluating the evidence for reasonable doubt, the jury should dispense with the endeavor entirely. As one prosecutor explained it to a jury, “I ask that you search for the truth. When you go back into that jury room, you search for the truth, not a search for reasonable doubt.”²⁵ On appeal, the court condemned the prosecutor’s superficially-appealing argument:

A criminal trial may in some ways be a search for truth. But truth is not the jury’s job. And arguing that the jury should search for truth and not for reasonable doubt both misstates the jury’s duty and sweeps aside the State’s burden. The question for any jury is whether the burden of proof has been carried by the party who bears it. In a criminal case, the State must prove its case beyond a reasonable doubt. The jury cannot discern whether that has occurred without examining the evidence for reasonable doubt.²⁶

Or, as a different appellate court explained it, the phrase “‘seeking the truth’ suggests determining whose version of events is more likely true, the government’s or the defendant’s, and thereby intimates a *preponderance of evidence* standard.”²⁷ Such a low burden of proof, of course, falls well below the constitutionally-mandated standard for criminal cases.

But other courts disagree. And to make matters worse, some trial judges will even aid and abet prosecutors in their burden-lowering efforts. For example, after explaining the concept of proof beyond a reasonable doubt, one judge instructed jurors to

²³ Contrary to the general perception of prosecutors, defense lawyers suffer a disadvantage with regard to reputation. *See id.* at 356 (“In a social climate that exalts crime control over everything else, defenders are barely tolerated.”).

²⁴ Michael D. Cicchini & Lawrence T. White, *Truth or Doubt? An Empirical Test of Criminal Jury Instructions*, 50 U. RICH. L. REV. 1139, 1144 (2016) [hereinafter Cicchini & White, *Empirical Test*].

²⁵ *State v. Berube*, 286 P.3d 402, 411 (Wash. Ct. App. 2012).

²⁶ *Id.* (finding the prosecutor’s argument to be error but holding that, because “the impropriety was easily curable, especially in light of the court’s instructions,” defense counsel’s failure to object waived the issue).

²⁷ *United States v. Gonzalez-Balderas*, 11 F.3d 1218, 1223 (5th Cir. 1994) (emphasis added).

“[d]etermine what you think the truth of the matter is and act accordingly.”²⁸ Similarly, other judges have instructed jurors that, when reaching their verdict, they should “evolve the truth,”²⁹ “seek the truth,”³⁰ “search for truth,”³¹ or “find the truth.”³²

In some states, it is a handful of rogue judges who are acting as a “party to” this prosecutorial “crime.” But in other states, the problem is institutionalized. One statewide jury instruction committee—a committee that is comprised of sitting judges, nearly all of whom are former prosecutors³³—uses a pattern instruction that decimates the burden of proof. It caps off its already flawed discussion of reasonable doubt by specifically warning jurors: “you are *not* to search for doubt. You are to *search for the truth*.”³⁴

When defense lawyers have objected to this truth-related language—whether used in a prosecutor’s argument, an instruction from the trial judge, or both—the common prosecutorial rebuttal was that defense lawyers’ concerns were merely “personal opinion,” unsupported by evidence.³⁵ In response to this call for evidence, psychology professor Lawrence T. White and I decided to empirically test the truth-related language that prosecutors contend has no burden-lowering effect, yet—for reasons they cannot articulate—still fight vigorously to preserve.

III. THE EMPIRICAL EVIDENCE³⁶

In our first study, we recruited participants to serve as mock jurors in a hypothetical criminal case.³⁷ Each juror received the identical case summary materials that included the elements of the charged crime, a summary of the witnesses’ testimony, and the lawyers’ closing arguments.³⁸ Before rendering their verdicts, however, jurors were randomly assigned to three groups, each of which received a different instruction on the burden of proof.³⁹

We first hypothesized that truth and doubt were, in fact, two distinct concepts, and that jurors who were instructed only to search for the truth (“truth only”) would convict at

²⁸ State v. Dunkel, 466 N.W.2d 425, 430 (Minn. Ct. App. 1991).

²⁹ United States v. Pine, 609 F.2d 106, 108 (3rd Cir. 1979).

³⁰ *Gonzalez-Balderas*, 11 F.3d at 1223; *see also* State v. Weisbrode, 653 A.2d 411, 417 (Me. 1995) (“The court instructed the jury to seek truth”); State v. Aleksey, 538 S.E.2d 248, 251 (S.C. 2000) (“[I]nstructing the jury its ‘one single objective’ was ‘to seek the truth.’”); State v. Benoit, 609 A.2d 230, 231 (Vt. 1992) (“During jury instructions, the trial judge twice referred to a jury’s duty to ‘seek the truth.’”).

³¹ Commonwealth v. Allard, 711 N.E.2d 156, 159 (Mass. 1999); *see also* People v. Walos, 229 A.D.2d 953, 954 (N.Y. App. Div. 1996) (instructing the jurors that the trial was a “search for the truth”); State v. Needs, 508 S.E.2d 857, 866 (S.C. 1998) (instructing the jurors that they should be “in search of the truth”).

³² United States v. Gray, 958 F.2d 9, 13 (1st Cir. 1992).

³³ *See* Michael D. Cicchini, *The Battle over the Burden of Proof: A Report from the Trenches*, 79 U. PITT. L. REV. 61, 85-86, n. 131-36 (2017) [hereinafter Cicchini, *Report from the Trenches*].

³⁴ WIS. CRIM. JURY INSTRUCTIONS No. 140 (2017) (emphasis added). For the other three defects in the instruction, *see* Michael D. Cicchini, *Instructing Jurors on Reasonable Doubt: It’s All Relative*, 8 CALIF. L. REV. ONLINE 72 (2017).

³⁵ *See* State’s Trial Court Memorandum, Wisconsin v. Yusuf, No. 2015-CF-911 (Cir. Ct. Kenosha Cty. 2015) (on file with the author).

³⁶ This Part, including the footnotes and table, is reproduced from Cicchini, *Report from the Trenches*, *supra* note 33, at 68-70.

³⁷ Cicchini & White, *Empirical Test*, *supra* note 24 at 1150.

³⁸ *Id.* at 1151.

³⁹ *Id.* at 1152.

a higher rate than jurors who were properly instructed on reasonable doubt (“doubt only”).⁴⁰ This hypothesis was confirmed: jurors who received a truth-only instruction voted to convict 29.6% of the time, while jurors who received the legally proper doubt-only instruction voted to convict 16% of the time.⁴¹

Next, we hypothesized that jurors who were first properly instructed on reasonable doubt but then told “not to search for doubt” and instead “to search for the truth” (“doubt-and-truth”) would convict at a higher rate than jurors who received the legally proper doubt-only instruction.⁴² This hypothesis was also confirmed: the conviction rate for jurors who received the doubt-and-truth instruction jumped back up to 29%—a rate statistically identical to that of jurors who received no reasonable doubt instruction whatsoever.⁴³ This is more clearly conveyed in the following table:

<u>Burden-of-Proof Instruction</u>	<u>Conviction Rate</u>
A clearly unconstitutional “search for the truth” instruction with <i>no mention whatsoever</i> of beyond a reasonable doubt (truth only)	29.6%
A legally proper beyond a reasonable doubt instruction (doubt only)	16.0%
An otherwise legally proper beyond a reasonable doubt instruction that concludes with a mandate “not to search for doubt” but “to search for the truth” (doubt and truth)	29.0%

In our second study,⁴⁴ we conducted a conceptual replication⁴⁵ of the first study. In order to test the strength of our primary finding, we again hypothesized that the doubt-and-truth instruction would produce a higher conviction rate than a legally proper doubt-only instruction.⁴⁶ This hypothesis was again confirmed: in the second study, the two conviction rates were 33.1% (doubt-and-truth) and 22.6% (doubt only).⁴⁷

Next, we hypothesized that jurors who received the doubt-and-truth instruction would be more likely to mistakenly believe that conviction was proper even if they had a reasonable doubt about guilt.⁴⁸ This hypothesis—tested through a post-verdict

⁴⁰ Id. at 1150.

⁴¹ Id. at 1154.

⁴² Id. at 1150.

⁴³ Id. at 1155.

⁴⁴ Michael D. Cicchini & Lawrence T. White, *Testing the Impact of Criminal Jury Instructions on Verdicts: A Conceptual Replication*, 117 COLUM. L. REV. ONLINE 22 (2017) [hereinafter Cicchini & White, *Conceptual Replication*].

⁴⁵ Regarding the importance of replication, see Stefan Schmidt, *Shall We Really Do It Again? The Powerful Concept of Replication is Neglected in the Social Sciences*, 13 REV. GEN. PSYCHOL. 90, 91 (2009).

⁴⁶ Cicchini & White, *Conceptual Replication*, *supra* note 44, at 28.

⁴⁷ Id. at 30–31.

⁴⁸ Id. at 28.

question—was also confirmed: jurors in the doubt-and-truth group were nearly twice as likely as jurors in the doubt-only group to hold this mistaken belief (28% and 15%, respectively).⁴⁹ We also found that, regardless of the group to which jurors were assigned, jurors who held this mistaken belief were far more likely to convict than jurors who properly understood the burden of proof (54% and 21% respectively).⁵⁰

IV. SPIN CYCLE

The findings discussed above are strong evidence in support of defense lawyers' claim that telling jurors "not to search for doubt," but instead "to search for the truth," lowers the burden of proof below the constitutionally-mandated standard. In response, prosecutors have unleashed a torrent of criticisms aimed at discrediting the two studies. Their goal is to preserve the truth-based reasonable doubt instruction, which, in turn, permits them to exacerbate its burden-lowering impact by repeating its message in closing arguments to the jury.

When criticizing the published studies, many prosecutors have demonstrated skill in the art of sophistry. They are masters at subtly dropping multiple claims—claims that are always fallacious but sometimes superficially appealing—into only one or two short sentences. Unfortunately for defense lawyers, these criticisms are very much like landmines: they are easy to lay, but difficult and time-consuming to cleanup.

This Article will now debunk several prosecutorial criticisms of the published studies—studies that empirically demonstrate the burden-lowering effect of the mandate "not to search for doubt" but instead "to search for the truth."

A. *The Hypothesis Bias*

The first step in behavioral research is to formulate a hypothesis that can then be empirically tested. Yet, prosecutors have found a way to spin even this to the state's advantage. With regard to the first published study, one prosecutor argued that because it posited a hypothesis, it was biased from its inception. The prosecutor elaborated:

The first problem is that the entire premise of the [study] was biased from the start. The authors were not searching for the truth: they were not looking to see what effect various instructions might have in a mock trial situation. What they were searching for was evidence to back their contention that an instruction that urges jurors to search for the truth will lead to more convictions than an instruction that urges jurors to search for doubt.⁵¹

Before addressing the prosecutor's argument that the study was "biased from the start," it is important to recognize that he also misrepresented the substance of our work.

⁴⁹ Id. at 32.

⁵⁰ Id.

⁵¹ Decision Re: Motion for Reconsideration of Decision Modifying Burden of Proof Jury Instruction, *Wisconsin v. Linde*, No. 2016-CF-193 (Cir. Ct. Dodge Cty. 2017), at 2 (quoting the prosecutor) [hereinafter "Decision Re: Motion"] (on file with the author).

(This is an excellent example of a prosecutor subtly dropping multiple criticisms into a small space.) We did *not* compare an instruction that urges jurors to search for truth with one that “urges jurors to search for doubt.” Rather, one instruction in our study was the pattern instruction as it is given to jurors. The other instruction was *identical*, except that it deleted the last fourteen words: “you are not to search for doubt. You are to search for the truth.”⁵²

Neither of the instructions “urge[d] jurors to search for doubt.” To the contrary, both went to great lengths to warn jurors that, if they had a doubt, it was probably *not* a reasonable one and therefore should *not* be used to acquit. Specifically, the instructions both warned jurors that a doubt “based on mere guesswork or speculation,” or that arises “from sympathy or from fear to return a verdict of guilt,” or that is used “to escape the responsibility of a decision” is not a reasonable doubt.⁵³ In other words, both instructions “convey[ed] a message to the jurors: The judge would not have presented so many ways in which the juror’s doubts can be used improperly if this were not the main problem to avoid.”⁵⁴

Returning, then, to the prosecutor’s primary criticism: he argued that the study was “biased from the start” because we hypothesized that certain language would increase the conviction rate or, alternatively stated, would lower the burden of proof. In making this argument, he is likely attempting to redirect a criticism that is often aimed at police and prosecutors: confirmation bias. This phenomenon occurs when, for example, a government agent decides early on that the suspect (or suspect-turned-defendant) is guilty, and then seeks out information to confirm this preexisting belief while ignoring or minimizing information that contradicts it.⁵⁵

However, confirmation bias in an uncontrolled setting such as a police investigation is dramatically different from formulating a hypothesis and then empirically testing it in a double-blind controlled experiment.⁵⁶ The trial judge kindly gave the prosecutor the benefit of the doubt when he responded: “The State misunderstands research methodology.”⁵⁷

The judge then elaborated by explaining the concept of the null hypothesis. “The null hypothesis is that . . . conviction rates should be equal regardless of the instruction. Empirical proof must overcome the presumption that the null hypothesis is true before an alternative hypothesis can be accepted.”⁵⁸ The judge concluded as follows: “The posing of hypotheses is not bias, but is *the first step in scientific investigation*. The empirical results from sound methods are what inform. If the empirical difference . . . is

⁵² Cicchini & White, *Empirical Test*, *supra* note 24, at 1152-1154.

⁵³ *Id.* at 1153-54.

⁵⁴ Lawrence Solan, *Refocusing the Burden of Proof in Criminal Cases: Some Doubt About Reasonable Doubt*, 78 TEX. L. REV. 105, 144 (1999).

⁵⁵ See Mary Nicol Bowman, *Mitigating Foul Blows*, 49 GA. L. REV. 309, 329 (2015) (discussing the prosecutorial win-at-all-costs mentality and citing several sources of confirmation bias).

⁵⁶ Using online research platforms allows for double-blind studies that dramatically reduce, if not eliminate, participant and experimenter biases. See Matthew J. C. Crump, et al., *Evaluating Amazon’s Mechanical Turk as a Tool for Experimental Research*, 8(3) PLOS ONE e57410 2 (2013) (because “the experimenter never directly meets or interacts with the anonymous participants, it minimizes the chance the experimenter can influence the results.”) at, <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0057410>.

⁵⁷ Decision Re: Motion, *supra* note 51, at 3.

⁵⁸ *Id.*

statistically significant, the null hypothesis is rejected and the posited hypothesis is accepted.”⁵⁹

Given the way scientific investigation proceeds—by first stating hypotheses and then testing them—the prosecutor’s argument, if accepted, would also lead to an absurd conclusion: the mere existence of a study would be evidence of its bias. It would then follow that all of the findings from the social sciences (and the physical sciences, for that matter) should be discarded not because of any identifiable methodological flaws, but merely because they exist.

B. *Random Sampling and Biased Jurors*

Prosecutors sometimes do attempt to articulate specific methodological flaws in the studies. However, such attempts are often the product of scientific illiteracy or, in many cases, bad faith spin doctoring.

For example, one prosecutor argued that the studies are unreliable because we did not recruit test participants through “random sampling” which, the prosecutor claimed, “is the foundation of valid empirical research.”⁶⁰ However, the same prosecutor then complained that the studies were *also* unreliable because we failed to “weed-out those with preconceived ideas.”⁶¹

The prosecutor’s first mistake was that he threw two mutually exclusive complaints against the same metaphorical wall, hoping that at least one would stick. He first criticized the studies because the participants were not randomly selected; he then immediately shifted gears, claiming that the participants were randomly selected but shouldn’t have been. It is simply not possible to have both random sampling and nonrandom sampling in the same study. The trial judge responded:

The . . . argument of the State is that the samples used by [Cicchini & White] were not random. . . .⁶²

The State then argues that the sample that was used . . . should not have been random but the participants should have been screened through a voir dire process to weed-out those with pre-conceived ideas. If voir dire would have occurred, the sample would have been biased based on the subjective bias of the person(s) doing the voir dire (and striking possible study participants) resulting in the study’s validity being compromised by the subjectivity of those doing the voir dire.⁶³

In other words, the prosecutor can’t have it both ways. And his other mistake was even more fundamental: he shouldn’t have feigned concern about random sampling and participant bias to begin with. In so doing, he confused two types of studies: *surveys* and

⁵⁹ Id. at 3-4 (emphasis added). As discussed in both studies, the differences in conviction rates between test groups were statistically significant. Statistical significance is measured by a statistic called the *p*-value. The lower the *p*-value, the more confident we can be that the difference between two test groups did not occur by chance. See Cicchini & White, *Empirical Test*, *supra* note 24, at 1154-56.

⁶⁰ Decision Re: Motion, *supra* note 51, at 4 (quoting the prosecutor).

⁶¹ Id. at 5 (quoting the prosecutor).

⁶² Id. at 4.

⁶³ Id. at 5-6 (italics omitted).

experiments. A survey uses a sample to forecast the frequency of some characteristic—for example, support for marijuana legalization—in the larger population.⁶⁴ Therefore, it is very important that survey participants are selected randomly in order to be representative of the larger population.⁶⁵

Experiments, on the other hand, are designed to detect differences between two or more test conditions and seek to answer a different type of question. For example, in our jury-instruction experiments, we were interested in learning the answer to this research question: All else being equal, will mock jurors who receive instruction A vote guilty more often than those who receive instruction B?

Bias in experiments is still a concern, of course. But had the prosecutor simply read the study that he was condemning, he would have learned that participant bias in *experiments* (as opposed to surveys) is addressed through *random assignment* (as opposed to random sampling). As we explained in our original study:

The virtue of random assignment is that, when used with large numbers of study participants, it produces groups that are statistically equivalent to each other in all respects. Each group has roughly the same number of mock jurors, the same number of men and women, the same number of well-educated and poorly educated persons, and the same number of biased and unbiased individuals.

When test groups are statistically equivalent at the outset, receive different jury instructions, and then convict at different rates, we can be quite certain that the different conviction rates were produced by the different jury instructions and not by personal characteristics of the mock jurors in a particular group.⁶⁶

Because the prosecutor launched mutually exclusive criticisms at the same time, and did not even read the study he was condemning, this set of criticisms fails.

C. *The Case of the Missing Instructions*

One prosecutor took issue with the two published studies because of the way the mock jurors were instructed. He argued that the studies were not reliable because, in real-life trials, jurors “are repeatedly instructed not to convict unless the state has proved guilt beyond a reasonable doubt.”⁶⁷ Specifically, he argued, “[t]his admonition is given (1) when charges are announced, (2) after the enumeration of each element of the charged offense, (3) immediately preceding the text Cicchini objects to, and (4) in various

⁶⁴ See Beth Morling, RESEARCH METHODS IN PSYCHOLOGY: EVALUATING A WORLD OF INFORMATION 173 (2012) (discussing how sample selection is far more important for a survey, or “frequency claim,” than it is for controlled experiments that seek to detect “associations and causes”).

⁶⁵ See *id.*

⁶⁶ Cicchini & White, *Empirical Test*, *supra* note 24, at 1165. For further discussion of random assignment, see Morling, *supra* note 64, at 251-52 (Random assignment “creates a situation in which the experimental groups will become virtually equal . . .”).

⁶⁷ Michael Griesbach, *Meeting the Challenge to Wisconsin’s Criminal Jury Instruction 140*, WIS. L.J. (Nov. 22, 2017), at <https://wislawjournal.com/2017/11/22/meeting-the-challenge-to-wisconsins-criminal-jury-instruction-140/>.

additional instructions”⁶⁸ such as “self-defense,” “circumstantial evidence,” “where identification of defendant is in issue,” and “lesser included offense.”⁶⁹

To recast the prosecutor’s claim in more scientific terms, he is essentially arguing that the studies rated poorly in terms of “external validity,” i.e., they failed to properly mimic features in real-world criminal jury trials.⁷⁰ External validity is one of four interrelated validities that are used to evaluate controlled experiments.⁷¹ However, the prosecutor’s multi-part complaint, above, does not come close to establishing any deficiency in this criterion.

First, and in no particular order, the prosecutor argued that real-life juries would have also been reminded of the reasonable doubt standard in other instructions that we failed to include for our test subjects: “self-defense,” “circumstantial evidence,” “where identification of defendant is in issue,” and “lesser included offense.” However, the fact patterns used in our two experiments are discussed in great detail in the published studies.⁷² Both cases involved allegations of sexual touching. Not surprisingly, “self-defense” was therefore not an issue. Further, both cases hinged on direct evidence without any “circumstantial evidence” at all.⁷³ In neither case was the “identification of [the] defendant” an issue: the first case involved two people who knew each other, and the second case included a stipulation on identity. Finally, in neither case did the facts support a “lesser included offense”; therefore, no such instruction was provided to the mock jurors. Our test participants, therefore, did not receive these additional instructions because *real-life jurors would not have received them*.

Second, the prosecutor accurately states that the concept of reasonable doubt is explained in the jury instruction “immediately preceding the text Cicchini objects to.” This is true, but it is a red herring. Why? Because we tested the *entire* instruction, including the part that the prosecutor claims was omitted. This would have been obvious had the prosecutor merely skimmed the published study.⁷⁴

Third, the prosecutor argues that, in real-life jury trials, reasonable doubt is mentioned “after the enumeration of each element of the charged offense.” While such substantive instructions *do* state that the prosecutor must prove all of the crime’s

⁶⁸ Id. (enumeration added).

⁶⁹ Id., n. 6.

⁷⁰ See generally Thomas D. Cook & Donald T. Campbell, QUASI-EXPERIMENTATION: DESIGN & ANALYSIS ISSUES FOR FIELD SETTINGS 70-71 (1979).

⁷¹ See id. at 37-38.

⁷² See Cicchini & White, *Empirical Test*, supra note 24, at 1150-51; Cicchini & White, *Conceptual Replication*, supra note 44, at 28-29.

⁷³ Many prosecutors request the circumstantial evidence jury instruction even when a case is based entirely on direct evidence. This might be due to their failure to grasp the difference between direct and circumstantial evidence, or it could be yet another burden-lowering prosecutorial ploy. That is, prosecutors tend to like the instruction because, despite its reference to proof beyond a reasonable doubt, it may have its own type of burden-lowering effect when it informs the jury: “It is not necessary that every fact be proved directly by a witness or an exhibit.” WIS. CRIM. JURY INSTRUCTIONS No. 170 (2017).

⁷⁴ See Cicchini & White, *Empirical Test*, supra note 24, at 1152-54. Our second study was a conceptual replication of the first, and the changes included, among other things, a *different* discussion of reasonable doubt that immediately preceded the unconstitutional closing mandate. Despite this, we still observed a statistically significant, burden-lowering effect of the closing mandate. See Cicchini & White, *Conceptual Replication*, supra note 44, at 29-30.

elements beyond a reasonable doubt,⁷⁵ they do *not* do so after “each element,” as the prosecutor claims. And neither do such substantive instructions explain, discuss, or define reasonable doubt; rather, that is done, not surprisingly, in the burden of proof instruction (which was the entire purpose and focus of our experiment). Therefore, in the controlled experiments—which are necessarily abbreviated relative to a lengthy jury trial—we of course provided jurors with the elements of the charged crime. However, we identified the reasonable doubt standard in the burden of proof instruction where the phrase is also defined and explained.

Fourth, the prosecutor argues that real-life juries are also instructed on reasonable doubt at the *beginning* of the trial “when charges are announced,” and we did not include this type of introductory instruction for our test participants. But when a real-life judge discusses reasonable doubt at the beginning of trial, he or she does so by reading the *full* jury instruction on the burden of proof,⁷⁶ which *also* includes the offending truth-related language. This is, of course, the exact instruction that we tested. Had we included the instruction *twice* in such a relatively small space—a compressed case summary in a controlled experiment—it likely would have *exacerbated* its burden-lowering impact and the prosecutor would be complaining about that instead. For those of us old enough to remember, “As Roseanne Rosannadanna used to say, ‘If it’s not one thing, it’s another.’”⁷⁷

Amazingly, the prosecutor launched this multi-part criticism even though we had already addressed these issues. In our first study, we explained that our design was intentionally *conservative* and would probably *underestimate* the impact of the truth-related language in the jury instruction.

[J]urors were instructed only *once* on the burden of proof. Further, in order to hold the case summary constant across groups, the lawyers’ closing arguments did *not* include any reference to the . . . burden of proof instructions tested. This, however, is dramatically different than real-life trials where juries may be told as many as *five times* “not to search for doubt,” but instead “to search for the truth.” The burden of proof instruction is often given verbally before opening statements, again before closing arguments, and then in writing for the jury’s reference during deliberations. Even more harmful, during closing arguments a prosecutor may parrot the court’s instruction and argue to the jurors that they must search for truth, not doubt. And many prosecutors will do this both in their main argument and again in their rebuttal argument—thus leaving their “truth trumpet” ringing in the jury’s ears as they begin deliberations.⁷⁸

⁷⁵ See, e.g., WIS. CRIM. JURY INSTRUCTIONS No. 2110 (2018) (“If you are satisfied beyond a reasonable doubt that all five elements of this offense have been proved, you should find the defendant guilty.”).

⁷⁶ See WIS. CRIM. JURY INSTRUCTIONS No. 50 (2017) (listing preliminary instructions, including pattern jury instruction no. 140 on the burden of proof which is to be read right before the judge announces that “[t]he lawyers will now make opening statements.”).

⁷⁷ Matthew Stewart, *THE MANAGEMENT MYTH: DEBUNKING MODERN BUSINESS PHILOSOPHY* 197 (W.W. Norton & Co., 2009) (describing how the consulting industry of the 1990s was always shifting the goalposts with its stream of never-ending and constantly changing theories).

⁷⁸ Cicchini & White, *Empirical Test*, *supra* note 24, at 1157.

This prosecutorial closing argument to the jury—the inevitable piling-on to the jury instruction’s mandate “not to search for doubt” but “for the truth”—greatly exacerbates an already serious problem. One trial judge, a former prosecutor, explains:

During closing arguments, the defense attorney often argues the burden of proof instruction . . . and then the prosecutor, on rebuttal, says “Defense counsel read you only part of the jury instruction on reasonable doubt. What counsel left out were these two lines: ‘you are not to search for doubt. You are to search for the truth.’”

Prosecutors make this argument because they know that the [jury instruction] prohibiting the search for doubt diminishes the beyond a reasonable doubt burden of proof and makes it easier for the State to obtain a conviction. I have had these lines used against me as a defense attorney, and *mea culpa, mea culpa*, I have used them against defense counsel as district attorney.⁷⁹

In sum, to the extent our studies do not precisely mirror real-life jury trials—and no controlled experiment does—they probably *underestimated* the burden-lowering effect of the jury instruction’s closing mandate.

D. *Attacking the Straw Man*

A common prosecutorial trick for nearly any situation is to create an unpersuasive argument, attribute that argument to the defense lawyer, and then attack the argument. To illustrate this, consider the trial defense that the police were *mistaken* in their identification of the defendant as the perpetrator. One prosecutor responded to this defense by arguing to the jury: “While defense attorneys try and say, well, we’re not saying the police are lying; *what else are they saying?* There’s no other reasonable explanation, and it kind of frustrates me knowing and working in this field and knowing these officers; and you know them now too.”⁸⁰

What the defense lawyer was saying, of course, was perfectly clear: the police were *mistaken*. On appeal, the court explained it this way: the prosecutor was expressing his “self-imposed frustration at *his own proposed suggestion* that testifying police officers may have lied.”⁸¹ In reality, as the court recognized, the “defense was mistaken identity,” not police perjury.⁸²

Prosecutors have also pulled this straw-man tactic out of their bag of tricks when attacking the two published studies on the burden of proof. For example, one prosecutor argued that, based on the studies, I was making the following claim: Wisconsin’s reasonable doubt instruction “makes it *twice as likely* for jurors to convict defendants.”⁸³ The prosecutor then added, “It is—well—reasonable to doubt Cicchini’s claims,” and

⁷⁹ Hon. Steven Bauer, *Why Wisconsin's Criminal Burden of Proof Instruction Had to be Changed*, TO SPEAK THE TRUTH (Oct. 24, 2017) (internal footnote, questioning the ethics of this prosecutorial argument, omitted), at <http://bauersteven.blogspot.com/2017/10/why-wisconsins-criminal-burden-of-proof.html>.

⁸⁰ State v. Smith, 671 N.W.2d 854, 858 (Wis. Ct. App. 2003) (emphasis added).

⁸¹ Id. at 859.

⁸² Id.

⁸³ Griesbach, *supra* note 67.

proceeded to attack the claim he had just attributed to me.⁸⁴ However, in trying to make my position appear untenable, the prosecutor misstated the studies' findings and my claims about them.

First, in the controlled studies, the conviction rates did not double. In the original study, the conviction rate *nearly* doubled when jurors were told to disregard doubt in favor of a search for the truth.⁸⁵ In the conceptual replication—a study that included stronger evidence of the defendant's guilt and larger sample sizes of participants—the conviction rate increased by nearly *fifty percent* among jurors who received the truth-related mandate.⁸⁶ Although the differences were not as great as the prosecutor's strategic exaggeration portrayed them to be, both were “statistically significant.”⁸⁷

But second, and more importantly, I have not claimed, nor do the studies purport to show, that the offending language in the jury instruction “makes it twice as likely for jurors to convict defendants.”⁸⁸ There is an important distinction to be made here. Once again, it centers on a prosecutor's confusion between experiments and surveys. Experiments, such as our two published studies, do not attempt to generalize from a sample to predict the frequency of a characteristic in the larger population.⁸⁹ We even explained this in the first study that the prosecutor now mischaracterizes. We wrote: “while our findings allow us to conclude that truth-related language diminishes the burden of proof in criminal cases, we cannot know the *extent* to which this effect will also be observed in other cases with different fact patterns.”⁹⁰

In other words, in real-life cases that have very *strong* evidence of guilt, jurors are likely to convict regardless of their burden of proof instruction. Conversely, in real-life cases that have very *weak* evidence of guilt, jurors are likely to acquit regardless of the instruction. And some cases are so weak that jurors would acquit even if the judge told them that the burden of proof was on the defense to prove innocence, rather than on the state to prove guilt.⁹¹

Therefore, although we can conclude that the truth-related language we tested diminishes the state's burden of proof, precisely how that lower burden of proof will translate into a higher conviction rate depends significantly on the types of cases being tried. It is simply not possible to forecast the extent to which a jury instruction—even an obviously defective one—will affect real-world conviction rates for future trials involving yet-to-be-known fact patterns.

Some prosecutors already understand this important distinction, and therefore spin the facts in the opposite direction. One prosecutor, for example, seized upon the language from our first study—that “we cannot know the *extent* to which this effect will also be observed in other cases”⁹²—and then argued that the judge should disregard the

⁸⁴ Id.

⁸⁵ See Part III.

⁸⁶ See id.

⁸⁷ Cicchini, *Report from the Trenches*, *supra* note 33, at 75-76.

⁸⁸ Greisbach, *supra* note 67.

⁸⁹ See Part IV.B.

⁹⁰ Cicchini & White, *Empirical Test*, *supra* note 24, at 1161.

⁹¹ This strength of evidence effect has also been observed in numerous controlled studies. For a review, see Dennis J. Devine et al., *Jury Decision Making: 45 Years of Deliberating Groups*, 7 PSYCHOL., PUB. POL. & L. 622 (2001).

⁹² Cicchini & White, *Empirical Test*, *supra* note 24, at 1161.

studies because “[e]ven the authors acknowledge that the results could be different in a case where there is more evidence of guilt.”⁹³

Surprisingly, the prosecutor missed the opportunity to label our acknowledgment an “admission” or a “concession.” But regardless, the prosecutor’s claim is yet another red herring. It is true, as explained above, that the instruction could have a greater or smaller effect (or no effect) depending upon the strength of the evidence in a given case. But that is certainly *not* a justification for improperly instructing jurors on reasonable doubt, only to hope they will view the evidence as falling near one of the two extremes on the strength-of-evidence spectrum (thus rendering the defective burden of proof instruction irrelevant to verdict choice). Rather, the court’s duty is to properly instruct the jury in the first place.⁹⁴

E. *The Printed Page*

As the criticisms pile up, it becomes obvious that prosecutors are not carefully reading the studies they are condemning. As yet another example, prosecutors argue that asking mock jurors to make “a decision about guilt or innocence from nothing more than a few words on a printed page”—i.e., the written case summary method we used in both studies—“ensures unreliable results.”⁹⁵

First, this complaint is ironic, given that this same prosecutor’s office has no problem convicting real-life defendants by reading “a few words on a printed page” into the record at trial, in lieu of a live witness.⁹⁶ Second, the written case summaries we used were far more than “a few words,” and are described in detail in each of the studies. And third, this prosecutorial complaint once again demonstrates willful blindness and intentional spin doctoring.

As we explained in our first study, not only is the *written* case summary method common in controlled experiments, but it also has tremendous advantages when a researcher is testing the impact of *written* jury instructions—as opposed to, say, the physical attractiveness bias, racial bias, or some other phenomenon—on verdict choice.⁹⁷ We previously explained:

First, researchers who use the case summary method can eliminate extrajudicial factors, including race and ethnicity, which may have an

⁹³ State’s Reply to Defendant’s Motion to Modify Jury Instruction 140, *Wisconsin v. Avery*, No. 2016-CF-382 (Cir. Ct. Kenosha Cty. 2016), at 5 [hereinafter “State’s Reply”] (on file with the author).

⁹⁴ See, e.g., *State v. Neumann*, 832 N.W.2d 560, 584 (Wis. 2013) (“A circuit court must, however, exercise its discretion in order to fully and fairly inform the jury of the rules of law applicable to the case and to assist the jury in making a reasonable analysis of the evidence.”).

⁹⁵ State’s Reply, *supra* note 93, at 5.

⁹⁶ See, e.g., *State v. Stuart*, 2005 WI 47, ¶ 14-15. In *Stuart*, the prosecutor’s office filed a mid-trial “emergency petition for review” to permit it to read a preliminary hearing transcript into evidence at trial. The office won its petition and convicted the defendant at trial based in large part on “a few words on a printed page”—the very thing it now condemns in the context of controlled experiments. Fortunately for the real-life defendant in *Stuart*, his conviction was eventually reversed for a confrontation clause violation.

⁹⁷ For a discussion and citation to numerous studies, see Cicchini & White, *Empirical Test*, *supra* note 24, at 1160-61. See also Michael D. Buhrmester, et al., *An Evaluation of Amazon’s Mechanical Turk, Its Rapid Rise, and Its Effective Use*, 13 PERSPECTIVES ON PSYCHOLOGICAL SCI. 149, 149 (2017) (“thousands of social scientists from seemingly every field have conducted research using the platform.”).

impact on jurors’ decision-making processes. Second, the more abbreviated case summary method compresses events in time, thereby reducing the pernicious effect of forgetting, which can also affect jurors’ decision-making processes. Third, the case summary method allows researchers to test the impact of a specific component of a trial—in our study, a particular jury instruction—that may get lost in the clutter of a more complex trial simulation.⁹⁸

Or, as one trial judge recently put it, this prosecutorial criticism of the written case summary method is yet another red herring.

[I]t is a red herring because in no way does not using live witnesses undermine the validity of [the study]. One could have presented live witnesses, but that would have been a different study. *As long as the variable of the story told in the study was consistent among groups, how the story is told makes no difference*—the differences between groups would not be biased.⁹⁹

And as explained earlier, in a controlled experiment (as opposed to a survey) it is this difference *between* test groups that is informative.

F. *Misrepresentations and Mystery Flaws*

As demonstrated in Part IV.D. on straw man arguments, one of the simplest ways for prosecutors to attack the burden of proof studies is simply to misrepresent their findings. Making misrepresentations—whether about the findings or some other aspect of the studies—has two advantages for prosecutors. First, because misrepresentations are, at best, only loosely tethered to the facts, they are incredibly easy for prosecutors to generate but especially time-consuming for defense lawyers to rebut. And second, when repeated enough times, a misrepresentation—no matter how far removed from reality—will eventually be accepted as true.

A common prosecutor misrepresentation and argument is this: the studies have not been peer reviewed, i.e., replicated, and, therefore, the judge should continue to use the closing mandate that jurors should search for truth instead of doubt.¹⁰⁰ This prosecutor ploy is flawed in three ways.

First, peer review and study replication are not the same thing and should not be confused. Peer review simply means that, before a journal extends an offer of publication, the editors will send the article to one or more anonymous “peers” outside of the journal who provide comments. This process has been the subject of much criticism, and the quality of peer review depends, of course, on the knowledge and effort of the

⁹⁸ Cicchini & White, *Empirical Test*, *supra* note 24, at 1161.

⁹⁹ Decision Re: Motion, *supra* note 51, at 6 (emphasis added).

¹⁰⁰ See State’s Reply, *supra* note 93, at 5.

anonymous reviewers.¹⁰¹ (Prosecutors—a group that has launched a steady stream of *ad hominem* attacks against me since the studies were published¹⁰²—would be alarmed to learn that *I* have been invited to be a reviewer for a peer-reviewed journal on police practices.¹⁰³) On the other hand, study replication means that a study has been reproduced—either directly or conceptually—in a subsequent study, and the findings of the original study have been confirmed.¹⁰⁴

Second, it is true that, while the University of Richmond journal that published our original study uses a competitive selection process, it likely did not solicit peer comments before offering to publish our work. (However, other journals may have done so. Law review articles are submitted to multiple journals simultaneously, and we also received offers to publish our study from the *American Criminal Law Review*, the *Florida Law Review*, and the *NYU Law Review Online*, among others.¹⁰⁵) On the other hand, the Columbia University journal that published our replication study is not only highly selective, but *does* solicit peer comments.¹⁰⁶ Contrary to prosecutors' claims, our second study *was* peer reviewed¹⁰⁷—for whatever that is worth. Further, as is obvious from our article's subtitle—"a conceptual replication"—the study did replicate the results of our original work.¹⁰⁸

Third, based on these two misrepresentations of fact regarding study replication and peer review, the prosecutor then claims that judges should preserve the pattern instruction's truth-related closing mandate. But even if the prosecutor's first two claims were true—i.e., if the Richmond study was not replicated and the Columbia study was not peer reviewed—these claims still would not lead to the conclusion that the court should maintain the pattern instruction in its current form. Rather, the prosecutor is committing the fallacy known as "denying the antecedent."¹⁰⁹

This type of logical fallacy resonates with some judges. For example, in a recent case a defense lawyer cited the two published studies in support of his motion to modify

¹⁰¹ See Richard Smith, *Peer Review: A Flawed Process at the Heart of Science and Journals*, 99 J. ROYAL SOCIETY OF MEDICINE 178 (2006); Steven Lubet, *Law Review v. Peer Review: A Qualified Defense of Student Editors*, 2017 U. ILL. L. REV. ONLINE 1 (2017).

¹⁰² See Cicchini, *Report from the Trenches*, *supra* note 33, at 77-79.

¹⁰³ E-mail from Robert D. Hanser, Ph.D., Associate Managing Editor, POLICE PRACTICE AND RESEARCH: AN INTERNATIONAL JOURNAL (Feb. 3, 2015, 11:04 a.m. C.S.T.) ("I would be grateful if you would kindly agree to act as a reviewer") (on file with author).

¹⁰⁴ Study replication is highly desirable, but relatively rare. See Benedict Carey, *Many Psychology Findings Not as Strong as Claimed, Study Says*, N.Y. TIMES (Aug. 27, 2015), at <https://www.nytimes.com/2015/08/28/science/many-social-science-findings-not-as-strong-as-claimed-study-says.html>.

¹⁰⁵ Several offers of publication are on file with the author.

¹⁰⁶ COLUM. L. REV., SUBMISSION INSTRUCTIONS: PEER REVIEW ("Because peer review of articles and essays improves the *Columbia Law Review's* selection process and helps to verify piece originality, the *Review* strongly prefers subjecting submitted pieces to peer review, contingent on piece-selection timeframes and other extenuating circumstances."), at <http://columbialawreview.org/submissions-instructions/>.

¹⁰⁷ E-mail from Shu-en Wee, Former Editor, COLUM. L. REV. ONLINE (July 11, 2017, 08:28 a.m. CST) ("your piece was reviewed by one professor before an offer was extended.") (on file with author).

¹⁰⁸ See Part III. Further, we conducted a conceptual replication, rather than a direct replication, in part to address the prosecutorial criticism that the results could be different in cases involving more evidence of the defendant's guilt. See Part IV.D.

¹⁰⁹ See D.Q. McInery, *BEING LOGICAL: A GUIDE TO GOOD THINKING* 104-05 (Random House: 2004).

the pattern jury instruction. After oral argument, the judge in that case said he was not persuaded by the studies and, therefore, was denying the motion.¹¹⁰ The judge then added, “Frankly, Mr. [defense lawyer], I think you can just ask [to modify the jury instruction] without going through the statistical stuff, I would probably be more inclined to grant it.”¹¹¹ This is fallacious reasoning. As my coauthor and I explained:

It is clearly illogical to assert that an argument has merit *per se* but will be rejected because the meritorious argument is also supported by empirical data. Even if the studies had contained some methodological weaknesses . . . none of that should cause a judge to pivot 180-degrees and deny a motion he would otherwise be inclined to grant.¹¹²

Finally, when prosecutors are unable to fabricate a specific flaw in the studies, they simply resort to unidentifiable mystery flaws. For example, as discussed in Part IV.A., one prosecutor claimed our studies were biased because we formulated a hypothesis. He then claimed that “[t]his initial bias likely affected both the way the study was conducted and the way the results were construed.”¹¹³ Fortunately, the trial judge in that case explained the flaw in the prosecutor’s thinking.

The State’s statement that[] ‘[t]his initial bias likely affected both the way the study was conducted and the way the results were construed’ is less than persuasive. The State provides [neither] evidence nor argument of how bias affected how the study was conducted or the presentation of the results. The study was apparently biased because the State says it was biased. The Court is generally highly skeptical of ipse dixit arguments and refuses to accept it on this topic.¹¹⁴

Worse yet, some prosecutors take these unidentified mystery flaws to the next level. After our first published study, I notified my state’s jury instruction committee of our findings, and requested that it delete the truth-related closing mandate from the burden of proof instruction.¹¹⁵ That way, the lengthy instruction would simply conclude: “It is your duty to give the defendant the benefit of every reasonable doubt.”¹¹⁶

The committee—which, at that time, had ten active members and was comprised of seven former prosecutors and two former government attorneys in other capacities¹¹⁷—declined to change the instruction. So now, when defense lawyers cite the

¹¹⁰ The judge actually made several factual and logical errors en route to denying the defense lawyer’s motion. See Motion Hearing Transcript, *Wisconsin v. Soppa*, No. 16-CM-940 (Cir. Ct. Eau Claire Cty. 2016) (on file with the author).

¹¹¹ *Id.* at 18.

¹¹² Michael D. Cicchini & Lawrence T. White, *Educating Judges and Lawyers in Behavioral Research: A Case Study*, 53 GONZAGA L. REV. 101, 122 (2017-18) [hereinafter Cicchini & White, *Case Study*].

¹¹³ Decision Re: Motion, *supra* note 51, at 2.

¹¹⁴ *Id.* at 3-4.

¹¹⁵ Michael D. Cicchini, Letter to Jury Wisconsin Instruction Committee (June 7, 2016), at http://www.cicchinilawoffice.com/uploads/JI_com_letter.pdf (last visited June 11, 2018).

¹¹⁶ *Id.*

¹¹⁷ Cicchini, *Report from the Trenches*, *supra* note 33, at 85-87.

study to persuade individual trial-court judges to modify the instruction on a case-by-case basis, prosecutors have responded: “That study has very serious flaws in it, flaws that recently led the Jury Instruction Committee to reject the proposed change” to the instruction.¹¹⁸ However, the prosecutors who make this claim never identify any of the “very serious flaws” that purportedly led to the committee’s decision. This is because the committee never identified a single flaw, serious or otherwise, in the studies.¹¹⁹

These prosecutor arguments sound superficially appealing even though they have no basis in reality and, further, are often contradicted by the known facts. Once again, much like landmines, such claims are easy to lay, but difficult to cleanup.

G. Appeals to Authority

As discussed in the previous Part, prosecutors urge trial judges to defer to the jury instruction committee because, although the committee offered no criticisms of the studies, it still denied my request to delete the instruction’s truth-related mandate. In their attempts to build-up the credibility of the committee—which, as far as I can tell, operates in a black box and answers to no one¹²⁰—prosecutors have made some additional misrepresentations.

Much like the prosecutor who complained that the studies simultaneously used, and did not use, random sampling, other prosecutors are once again throwing inconsistent (and false) claims against the same metaphorical wall. For example, one prosecutor urged a trial court to use the pattern jury instruction because the committee that drafted it was comprised of “a cross-sector [sic] of the legal bar.”¹²¹ Another prosecutor, however, urged the trial court to follow the committee’s lead because it is comprised of specialists—“an eminently qualified committee of legal experts.”¹²² Both claims, as it turns out, are false.

The committee, in its 2018 iteration, is comprised of eleven judges.¹²³ Eight of the eleven members are former prosecutors, and many were career-long prosecutors until they took the bench.¹²⁴ Four of them *each* have more than twenty years of experience

¹¹⁸ State’s Reply, *supra* note 93, at 5.

¹¹⁹ See E-mail from David Schultz, Reporter, Wisconsin Criminal Jury Instructions Committee (June 29, 2017, 11:19 a.m. CST), at http://www.cicchini.lawoffice.com/uploads/Letter_from_JI_Committee.pdf (last visited June 11, 2018) (stating only that “[t]he committee’s reasoning . . . is reflected in footnote 5 in the attached version of JI 140”); WIS. CRIMINAL JURY INSTRUCTIONS No. 140 (2017), n. 5 (offering no comment on, or criticism of, the studies, but concluding that, “[a]fter careful consideration, the Committee decided not to change the text of the instruction.”).

¹²⁰ See Cicchini, *Report from the Trenches*, *supra* note 33, at 85-87.

¹²¹ Letter to Trial Court Judge, *Wisconsin v. Griesbach*, No. 16-CM-630 (Cir. Ct. Milwaukee Cty. 2016) (on file with the author). As far as I can tell, the prosecutor meant to write “cross-section” instead of “cross-sector.”

¹²² State’s Reply, *supra* note 93, at 4.

¹²³ WISCONSIN JUDICIAL CONFERENCE OFFICERS AND STANDING COMMITTEES, WISCONSIN COURT SYSTEM (Nov. 16, 2017), at <https://www.wicourts.gov/courts/committees/docs/judconflist.pdf>.

¹²⁴ The website www.ballotpedia.org has “an editorial staff of over 60 writers and researchers” to collect and report information on elected officials, including the elected trial court judges that are subsequently appointed to Wisconsin’s Criminal Jury Instruction Committee. It reports that Judges Boyle, Dallet, Eagon, Hanrahan, Horne, Metropulos, Reynolds, and Rothstein are all former prosecutors, with many of them being career-long prosecutors before taking the bench and joining the committee. (This is not to say that every single one of the committee’s former prosecutors necessarily opposed the change. Members of the

putting citizens behind bars; another three of them *each* boast more than a decade’s worth of such experience.¹²⁵ Of the three committee members who haven’t worked as prosecutors, all three have worked as government lawyers in other capacities, including quasi-prosecutorial positions.¹²⁶ While two of the eleven members have also reported working in “private practice” at some point, it is not clear whether they have ever defended a person against the government.¹²⁷

Quite obviously, this is not a cross-section of the bar. Unlike other states, it does not include any defense lawyers, criminal law professors, or anyone else from any other part of the legal community.¹²⁸ More importantly, it is not an “eminently qualified committee of legal experts.” Rather, it is a group of former prosecutors. In fact, according to the litmus test set by the prosecutor who claimed they are “eminently qualified,” these judges should be completely *disqualified* from drafting a burden of proof instruction.

More specifically, the prosecutor, like many prosecutors, urged the judge to reject the two published studies on the burden of proof because I am a criminal defense lawyer. The prosecutor wrote: “The State objects to this court’s reliance on a biased study commissioned, designed, and executed by a criminal defense attorney.”¹²⁹ Similarly, another prosecutor wrote: “the fact it was conducted by a criminal defense attorney seriously calls into question the validity of [the] study.”¹³⁰ Attacking me is, by far, the most common prosecutorial criticism of the published research. And if my employment is a disqualifying factor, then the jury instruction committee members, as former prosecutors, should also be disqualified.¹³¹

I have explained elsewhere that this amateurish prosecutorial attack on my profession is an invalid form of argument known as the *ad hominem* fallacy.¹³² So instead of criticizing the committee because it is comprised almost entirely of former

defense bar have reported to me that judges Hanrahan and Metropulos have, in their courtrooms, each modified the pattern jury instruction in one or more cases at the request of defense counsel.)

¹²⁵ Id. Judges Eagon, Horne, Metropulos, and Rothstein each have twenty or more years of experience stripping citizens of their liberty. (Again, members of the defense bar have reported to me that judge Metropulos has, in his courtroom, modified the pattern jury instruction in one or more cases at the request of defense counsel.)

¹²⁶ Id. Judge Rosa, for example, worked in “child support enforcement.”

¹²⁷ Id. Judges Ehlers and Reynolds have experience in “private practice”; Reynolds was also a former prosecutor.

¹²⁸ In the state of Washington, for example, the “pattern instructions are drafted and approved by a committee that includes judges, law professors, and practicing attorneys.” *State v. Bennett*, 165 P.3d 1241, 1243 (Wash. 2007).

¹²⁹ State’s Reply, *supra* note 93, at 5.

¹³⁰ This quotation is taken from a prosecutor’s written opposition to a defense lawyer’s motion to modify the burden of proof jury instruction. However, the defense attorney that gave me the document has not given me permission to cite the source. Arguably, that defense attorney would be required to first obtain consent to do so from the former client, even though the source is a public document. See Michael D. Cicchini, *On the Absurdity of Model Rule 1.9*, 40 VERMONT L. REV. 69 (2015) (discussing the absurdity of the ethics rule that arguably prohibits attorneys from discussing or sharing even the *public* aspects of their closed cases).

¹³¹ I realize the distinction between current employment and former employment. However, I have no doubt that if I were to retire from practicing law but continued to publish, prosecutors would still criticize my yet-to-be-published work as being written by a *former* criminal defense attorney.

¹³² See Cicchini, *Report from the Trenches*, *supra* note 33, at 77-79; Cicchini & White, *Case Study*, *supra* note 112, at 107-08.

prosecutors, we must instead look to the committee's *reasons* for its decision. However, as explained in the previous Part, the committee has not offered a single criticism of the studies and has not given a single reason why they should be rejected. Rather, all this group of former prosecutors has done is cite two very old, off point cases.¹³³

The problem with the committee's response is this: jury instruction committees are "charged with providing trial courts with instructions that are concise, understandable and accurate."¹³⁴ They are not charged with blindly following or desperately clinging to old case law. And both cases they cite predate the published research by several decades—one case is nearly a *century* old and has nothing to do with the burden of proof jury instruction,¹³⁵ and the other is nearly twenty-five years old.¹³⁶

Further, the two court cases cited by the committee have not held that the truth-related language in the jury instruction is accurate or even desirable, let alone required. Rather, these cases have merely upheld defendants' convictions because, the courts claimed, the offending truth-related language probably did not lower the burden of proof when considered in the context of the entire instruction.¹³⁷ But such dated commentary has now (twice) been empirically tested and debunked.¹³⁸

The prosecutors' deference to the jury instruction committee is therefore flawed in two ways. First, the committee members are not experts. Second, even if they were experts, they have offered no reasons in support of their decision to preserve the instruction's burden-lowering closing mandate. By contrast, my coauthor—a research psychologist with a Ph.D.—and I have conducted and published two empirical studies. We offer data, analysis, and arguments to support our conclusions. This is important, of course, because "[t]he strongest kind of expert evidence incorporates the *reasons* the experts advance for holding a certain position."¹³⁹

Prosecutors, on the other hand, are urging judges to accept the decision of a group of former prosecutors because this group is allegedly "eminently qualified." Such reliance on expertise—even in situations that involve actual experts—is another form of fallacious reasoning. The prosecutors are merely saying this: the committee members are experts, we like the committee members, so "[d]on't ask any questions, just do as we say."¹⁴⁰

From the perspective of individual trial judges, not only is this unsound reasoning, but it conflicts with every trial judge's duty to exercise his or her own discretion in properly instructing the jury on the burden of proof. As one trial judge wrote, even though the pro-state, pattern jury instruction has been blessed by a committee:

¹³³ See WIS. CRIMINAL JURY INSTRUCTIONS No. 140 (2017), n. 5.

¹³⁴ Model Crim. Jury Instructions, MICHIGAN COURTS: ONE COURT OF JUSTICE, <http://courts.mi.gov/courts/michigansupremecourt/criminal-jury-instructions/pages/default.aspx> (last visited June 13, 2018). I can find no such charge for Wisconsin's committee, which appears to have no accountability to anyone, but I suspect even the former prosecutors that comprise the committee would have to concede that this should be their objective.

¹³⁵ See *Manna v. State*, 192 N.W. 160 (1923). This case does not involve the burden of proof instruction, but rather the court's instruction to the jury on how to resolve disputes of fact when conflicting evidence is presented. For further discussion, see Cicchini, *Report from the Trenches*, *supra* note 33, at 99-100.

¹³⁶ See *State v. Avila*, 532 N.W.2d 423 (1995).

¹³⁷ *Id.* at 423. The other cited case, *Manna*, did not even involve a burden of proof jury instruction.

¹³⁸ See Part III.

¹³⁹ McInery, *supra* note 109, at 117 (emphasis added).

¹⁴⁰ *Id.*

The Court can't close its eye to the fact that people have been wrongfully convicted [and then] later exonerated after serving many years in prison. The Court can't close its eye to empirical evidence that may help the criminal justice system be more accurate in discerning guilt from innocence, and be more faithful to the stricture of the Constitution of the United States requiring a criminal charge *to be proven beyond a reasonable doubt*.¹⁴¹

Fortunately, at least twenty other trial court judges have agreed with him and have made some modification to the defective burden of proof jury instruction.¹⁴²

H. *Equivocation*

The last piece of prosecutor spin does not concern the two published studies *per se*, but rather the broader concept of the burden of proof. One prosecutor recently argued that the jury instruction's closing mandate "not to search for doubt" but instead "to search for the truth" is preferable because "it directs the jury to a *neutral* objective, finding the truth, rather than directing them to look for evidence that supports the position of either of the parties—the position of the State to find guilt or the position of the defendant to find doubt."¹⁴³ This argument is flawed in two ways.

First, there is nothing neutral about a jury's job. The Constitution requires jurors to presume the defendant's innocence, which "is not a mere slogan but an essential part of the law that is binding upon you."¹⁴⁴ Then, only after deliberations and upon a unanimous finding that the evidence eliminated all reasonable doubt may the jurors convict. That is, "Proof beyond a reasonable doubt is proof that fully satisfies or entirely convinces you of the defendant's guilt."¹⁴⁵ The prosecutor's "neutral objective" argument completely ignores these constitutional imperatives. The prosecutor doesn't realize it, but by making this argument—that the instruction points the jury to a neutral objective instead of ordering it to scrutinize the state's case for reasonable doubt—she is literally conceding that the closing mandate lowers the state's burden of proof.

Second, aside from this constitutional issue, the prosecutor is committing the fallacy of equivocation: she is "employ[ing] words with multiple meanings for the purpose of deception."¹⁴⁶ Her "neutral objective" argument portrays the "search for the truth" as a middle-of-the-road alternative to which neither party lays claim. But in reality, the jury instruction and prosecutorial closing argument uses the phrase "search for the truth" in a dramatically different and one-sided way. After the defense lawyer argues that there *is* doubt about guilt, the prosecutor argues (parroting the judge's instruction) that the jury must *not* search for doubt, but for the truth. The prosecutor then, of course, equates "truth" with a finding of guilt. As one court recognized, telling the jury to search

¹⁴¹ Decision Re: Motion, *supra* note 51, at 1-2 (emphasis added).

¹⁴² See WIS. J.I. 140 RESOURCE PAGE FOR LAWYERS, http://www.cicchinilawoffice.com/Wis_JI_140.html (listing judges and linking to public court records, a written order, and a written decision).

¹⁴³ State's Reply, *supra* note 93, at 6 (emphasis added).

¹⁴⁴ HAW. CRIM. JURY INSTRUCTIONS No. 3.02 (2014).

¹⁴⁵ N.C. CRIM. JURY INSTRUCTIONS No. 101.10 (2008).

¹⁴⁶ McInery, *supra* note 109, at 107.

for truth instead of doubt is not neutral, but rather it “impermissibly portray[s] the reasonable doubt standard *as a defense tool for hiding the truth*.”¹⁴⁷

By arguing that the truth-not-doubt mandate provides the jury with a neutral option, and then asserting that this allegedly neutral option passes constitutional muster, prosecutors are demonstrating that their sophistry knows no limits when a conviction is at stake.

I. *Other Spin Revisited*

When it comes to the burden of proof, prosecutorial spin is unrelenting. The arguments debunked in this Article are just the latest—although arguably the most interesting—in the constant stream of sophistry that began before the studies were even published.

Previously debunked prosecutor arguments include other misstatements regarding legal authority,¹⁴⁸ claims based on the language of the jury instruction,¹⁴⁹ misrepresentations about the purpose of the modern jury trial,¹⁵⁰ and other attacks on the published studies.¹⁵¹ Defense counsel who challenges truth-related language in a burden of proof instruction, or in a prosecutor’s closing argument, should become familiar with all of these versions of prosecutor spin.

V. THE BIG PICTURE

Proof beyond a reasonable doubt is the highest burden of proof recognized in the American legal system, and constitutional due process requires its application in cases where a defendant’s life, liberty, and property are in jeopardy. It has long been obvious—from the standpoint of linguistics, logic, and commonsense—that when a judge instructs jurors on reasonable doubt but then tells them to search for the truth (or, worse yet, not to search for doubt), such tacked-on language will only *lower* the burden of proof below the constitutionally-mandated standard.

As one former prosecutor, now a judge, has stated: prosecutors love the truth-versus-doubt language “because they know that the [jury instruction] prohibiting the search for doubt diminishes the beyond a reasonable doubt burden of proof and makes it easier for the State to obtain a conviction.”¹⁵² This is why prosecutors are fighting so

¹⁴⁷ *State v. Berube*, 286 P.3d 402, 411 (Wash. Ct. App. 2012) (emphasis added); *see also* Avila, 532 N.W.2d at 429 (defendant argued that the instruction would lead the jury to believe “that finding doubt would mean not finding the truth”). A more common example of equivocation is when prosecutors toy with the word “reasonable.” For example, a prosecutor may first use it to discuss “reasonable doubt,” but then subtly shift gears and use it *improperly* to argue that because the state’s theory of guilt is “reasonable,” conviction is proper or even required. *See* Bobby Green, *Reasonable Doubt: Is it Defined by Whatever is at the Top of the Google Page?*, 50 J. MARSHALL L. REV. 933, 944-45 (2017) (discussing *People v. Cole*, 2015 IL App (3d) 120992-U at ¶ 27, and arguing that the prosecutor in that case “was trying to play on the word ‘reasonable’”).

¹⁴⁸ *See* Cicchini, *Report from the Trenches*, *supra* note 33, at 80-87.

¹⁴⁹ *Id.* at 88-93.

¹⁵⁰ *Id.* at 93-102.

¹⁵¹ *Id.* at 71-80; Cicchini & White, *Case Study*, *supra* note 112.

¹⁵² Hon. Steven Bauer, *supra* note 79.

vigorously to preserve the offending language. If the closing mandate did *not* lower the burden of proof, they would not oppose its deletion.

The burden-lowering effect of this truth-versus-doubt language is not only intuitive, but has now been demonstrated empirically. Consider the second of two published studies—the peer-reviewed, conceptual replication study.¹⁵³ Now consider the simplicity of its design: (1) mock jurors in Group 1 received a standard reasonable doubt instruction; and (2) mock jurors in Group 2 received the identical instruction but with the tacked-on, closing mandate “not to search for doubt” but “to search for the truth.”¹⁵⁴

Now consider its two simplest findings. When asked in a post-verdict multiple choice question to describe their jury instruction, mock jurors in Group 2 were nearly *twice* as likely (28% compared to 15%) to mistakenly believe that conviction was proper even if they had a reasonable doubt about the defendant’s guilt.¹⁵⁵ Further, jurors who held this mistaken belief, regardless of the instruction they received, convicted the defendant at a rate *nearly 2-1/2 times* (54% compared to 21%) that of those who correctly understood the burden of proof.¹⁵⁶

This is clear, simple, and *unsurprising* empirical evidence in a peer reviewed study. Yet, as this Article has demonstrated, prosecutors continue to spin (and even fabricate) information and make outlandish arguments in an effort to preserve the burden-lowering language on which they rely to win convictions. In so doing they have demonstrated—contrary to their duties as ministers of justice¹⁵⁷—that they have no regard for the truth, while at the same time demanding inclusion of that word in the reasonable doubt jury instruction.

When linguistics, logic, commonsense, and empirical evidence align, judges can no longer use burden-lowering language in their jury instructions, and neither should they permit prosecutors to use such language in their closing arguments to the jury. And if prosecutorial spin creates confusion about the empirical research, judges should focus on the big picture using these three simple steps.

First, even if the empirical evidence was flawed—or even if the studies did not exist at all—the constitutionally-mandated burden is still proof beyond a reasonable doubt. Second, the jury’s duty, therefore, is to examine the evidence for reasonable doubt in order to determine if the state has met its high burden. And third, any jury instruction language or prosecutorial argument that directs jurors to do otherwise—or implies or even hints that they should do otherwise—is constitutionally defective and must not be tolerated.

CONCLUSION

Empirical evidence now demonstrates that truth-related language in reasonable doubt jury instructions diminishes the burden of proof below the constitutionally-

¹⁵³ Cicchini & White, *Conceptual Replication*, *supra* note 44.

¹⁵⁴ *Id.* at 29-30.

¹⁵⁵ *Id.* at 32. This difference is statistically significant, $p = 0.01$, which means we can be 99% certain [1- p] that this difference did not occur by chance.

¹⁵⁶ *Id.* With $p < .001$, we can be even more confident that this difference did not occur by chance.

¹⁵⁷ See MODEL RULES OF PROF’L CONDUCT, R. 3.8, Cmt. 1, *Special Responsibilities of a Prosecutor* (AM. BAR ASS’N 2011).

mandated standard.¹⁵⁸ Prosecutors, however, have shifted their spin machines into high gear to discredit the published studies and preserve the truth-based instructions on which they rely.¹⁵⁹ This Article has identified and debunked eight new prosecutorial arguments regarding the published research and the burden of proof.

First, formulating a hypothesis that truth-related language will increase conviction rates is not bias. Rather, hypothesis formulation is the first step in scientific inquiry. Another step is testing the hypothesis. The null hypothesis—that conviction rates will *not* be affected—must be overcome by statistically significant evidence before the alternative hypothesis is accepted. And in both published studies, mock jurors who were told “not to search for doubt” but “to search for the truth” convicted at significantly higher rates than those who were properly instructed on reasonable doubt.¹⁶⁰

Second, random *sampling* is important for surveys. However, in controlled experiments, researchers control for participant bias (among other things) by using random *assignment* of participants to test groups. This creates groups that are statistically equivalent to each other in all respects, thus allowing researchers to conclude that observed differences are attributable to the variable being tested—in our case, jury instruction language—rather than the personal characteristics of the test participants.¹⁶¹

Third, with regard to the number of “truth” and “doubt” references in the test materials, participants were instructed almost exactly as real-life jurors would have been. Further, as we explained in our first study, our design was intentionally conservative and, therefore, probably *underestimates* the burden-lowering effect of telling jurors “not to search for doubt” but instead “to search for the truth.”¹⁶²

Fourth, in real-life cases involving very *weak* or very *strong* evidence of guilt, the truth-related language in the burden of proof instruction may have a little or no effect on verdicts, i.e., jurors will acquit or convict regardless of the instruction. However, this is not a reason to reject the studies’ findings. Judges are duty-bound to properly instruct jurors on the burden of proof. They must not provide a defective instruction and then hope that the evidence falls near one of the two extremes on the strength-of-evidence spectrum, thus rendering the instruction moot.¹⁶³

Fifth, our experiments used the case summary method, i.e., participants read a *written* case summary, rather than watching a video, before rendering their verdicts. However, this method is commonly used in the published research and is especially well-suited for testing *written* jury instructions. Further, as long as the different test groups received the same information in the same format—regardless of whether it was print or video—it is the difference between groups that is informative. In other words, *all else being equal*, did participants who received instruction A convict at a higher rate than those who received instruction B?¹⁶⁴

Sixth, prosecutors frequently claim that the studies have not been peer reviewed, i.e., replicated. However, peer review is not the same as study replication. Further, contrary to prosecutors’ claims, the findings of the first study were replicated by the

¹⁵⁸ See Part III.

¹⁵⁹ See Part IV.

¹⁶⁰ See Part IV.A.

¹⁶¹ See Part IV.B.

¹⁶² See Part IV.C.

¹⁶³ See Part IV.D.

¹⁶⁴ See Part IV.E.

second study, and this second study was also peer reviewed. But even if the first study had not been replicated in a subsequent, peer reviewed study—or even if the studies had some other unidentified flaws—it would be a logical fallacy (known as “denying the antecedent”) to use this to conclude that the burden-lowering, truth-related language should be preserved.¹⁶⁵

Seventh, prosecutors frequently commit the *ad hominem* fallacy by attacking the studies’ author, and then arguing that the studies are therefore invalid. Prosecutors compound this logical error with a second fallacy: an appeal to authority. They claim the truth-related language should be persevered because it was approved by an eminently qualified committee of experts. However, this committee of former prosecutors has no particular expertise. More importantly, the committee offers no reasons for its decision and no criticisms of the studies. To invoke this committee as an authority on the matter is merely to plead, “[d]on’t ask any questions, just do as [they] say.”¹⁶⁶

Eighth, prosecutors claim that judges *should* instruct jurors to search for the truth instead of doubt because that is a *neutral* objective. Not only does this violate the presumption of innocence and the burden of proof, but it incorporates yet another logical fallacy: equivocation. That is, when making this argument *to the trial judge*, prosecutors claim that “search for the truth” is neutral; however, when arguing *to the jury*, prosecutors use “search for the truth” to paint the reasonable doubt standard “as a defense tool for hiding the truth.”¹⁶⁷

Finally, empirical evidence aside, judges should always keep the big picture in mind. The Constitution requires the state to prove guilt beyond a reasonable doubt. Any language—whether in a jury instruction or the prosecutor’s closing argument—that suggests or even hints otherwise is a blatant constitutional error.¹⁶⁸

¹⁶⁵ See Part IV.F.

¹⁶⁶ See Part IV.G.

¹⁶⁷ See Part IV.H.

¹⁶⁸ See Part V.