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ARTICLE

The *Brady* Materiality Standard

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Abstract. The *Brady* doctrine requires prosecutors to disclose all favorable and *material* evidence to the defense. To effectuate that rule, the U.S. Supreme Court has defined materiality as a "reasonable probability" that the evidence would have affected the outcome at trial. But apart from that definition, the Court has resisted offering any further guidance to lower courts. While far too little is known about how *Brady* materiality claims are actually adjudicated, there is strong evidence that courts often reject *Brady* claims involving withheld evidence on the grounds that the evidence was not significant enough to be material.

To examine how *Brady* materiality questions are decided, we utilize a unique database of five years of *Brady* rulings in state and federal courts. We analyze over 100 recent rulings in which courts rejected *Brady* claims because the withheld evidence, while favorable to the defendant, was not material. We also compare these rejected *Brady* claims to dozens of cases in which courts found evidence to be material and thus a *Brady* violation. Our data indicates that while the *Brady* doctrine covers both exculpatory and impeachment evidence, courts frequently reject evidence that would have been used to impeach a witness on materiality grounds. We also document that many courts correctly state the legal standard for materiality, but they then apply it incorrectly. Rather than conducting an evidence-based analysis that focuses on the value of the withheld evidence, courts often engage in guilt-based reasoning that improperly focuses on the strength of the evidence presented at trial.

To improve the reliability of judicial rulings in *Brady* cases, we propose that courts focus on empirical evidence of how reasonable jurors actually weigh evidence in criminal trials. We further suggest statutory reforms to the federal habeas corpus rules. For too long, materiality standards in the *Brady* context, and in other constitutional criminal procedure and post-conviction contexts, have been applied inconsistently and contrary to established doctrine. A renewed focus on how judges apply the *Brady* materiality standard is long overdue.

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Introduction

In its landmark constitutional criminal procedure ruling in *Brady v. Maryland*, the U.S. Supreme Court ruled that "the suppression by the prosecution of evidence favorable to an accused . . . violates due process where the evidence is material either to guilt or to punishment, irrespective of the good faith or bad faith of the prosecution."[1] One unanswered question in the *Brady* ruling was how important the evidence must be to be considered "material." The materiality standard largely defines whether *Brady* claims result in relief or not. Yet no one has studied how judges actually decide what is material and what is not. In this Article, we study materiality rulings in a large body of *Brady* cases to uncover how materiality is assessed in practice. While judges often apply the *Brady* standard correctly, we find ample cause for concern that the materiality standard undermines the sound enforcement of constitutional rights.[2]

At the time that *Brady* was decided in 1963, harmless error rules in constitutional criminal procedure had not been defined with any precision. That was soon to change, and the Justices defined *Brady*, along with a range of other doctrines, to focus on outcome tests, asking that judges themselves decide whether the error could have changed the outcome at trial.[3] The Supreme Court initially defined materiality using several different formulations[4] before settling on a "reasonable probability" standard: The prejudice to the accused must have created "a reasonable probability that the suppressed evidence would have produced a different verdict."[5] This materiality test is more demanding than the typical harmless error rule. Still, commentators have focused on the demands of the materiality test as one of the many reasons why the *Brady* rule inadequately

1. 373 U.S. 83, 87 (1963).

2. *See infra* Part III.B.

3. For a brief overview of the rise of these doctrines, see Brandon L. Garrett, *Validating the Right to Counsel*, 70 WASH. & LEE L. REV. 927, 936-37 (2013).

4. *See generally, e.g.*, Kyles v. Whitley, 514 U.S. 419, 437 (1995) ("[T]he prosecution, which alone can know what is undisclosed, must be assigned the consequent responsibility to gauge the likely net effect of all such evidence and make disclosure when the point of 'reasonable probability' is reached."); United States v. Bagley, 473 U.S. 667, 678 (1985) ("[A] constitutional error occurs, and the conviction must be reversed, only if the evidence is material in the sense that its suppression undermines confidence in the outcome of the trial."); United States v. Agurs, 427 U.S. 97, 108 (1976) ("But to reiterate a critical point, the prosecutor will not have violated his constitutional duty of disclosure unless his omission is of sufficient significance to result in the denial of the defendant's right to a fair trial."). The standard used in ineffective assistance of counsel claims, or *Strickland* claims, would in turn adopt a similar standard. *See* Strickland v. Washington, 466 U.S. 668, 694 (1984) ("[T]he appropriate test for prejudice finds its roots in the test for materiality of exculpatory information not disclosed to the defense by the prosecution . . . ." (citing *Agurs*, 427 U.S. at 104, 112-13)).

5. Strickler v. Greene, 527 U.S. 263, 281-82 (1999).

remedies, much less deters, prosecutorial misconduct.[6] More broadly, commentators have described how difficult the *Brady* rule is to administer, even when violations come to light, because of the potential ambiguities in the materiality standard.[7] After all, the Court has given no clear guidance on how to apply the standard. And *Brady* is an awkward after-the-fact guide to prosecutors. As John G. Douglass pointed out, "It seems curious, to say the least, that a prosecutor has a constitutional obligation before trial to disclose a category of information that cannot be defined until after trial."[8] As a result, scholars have argued that *Brady*'s materiality standard should be reconsidered.[9]

The "favorable but not material" category of *Brady* cases has long been the subject of concern. As Justice Thurgood Marshall explained early in the standard's development, the materiality standard "invites a prosecutor, whose interests are conflicting, to gamble, to play the odds, and to take a chance that evidence will later turn out not to have been potentially dispositive."[10] In such cases, we know that the prosecution failed to turn over a piece of evidence that could have helped the defendant at trial. Thus, the main point of the *Brady* doctrine—to put the defendant on equal footing with the prosecution—has been defeated. Yet appellate courts—through an ex-post analysis and without being in the courtroom or observing the witnesses—may conclude that the outcome would not have changed had the evidence been properly disclosed before trial. Accordingly, Justice Marshall and other critics offer a dark picture of how the materiality prong can undermine justice.[11]

In this Article, we ask the question of what the "favorable but not material" cases look like in practice. To do that, we draw on a novel dataset consisting of five years of *Brady v. Maryland* rulings from 2015 to 2019.[12] We analyze a subset

6. *See, e.g.*, Scott E. Sundby, Essay, *Fallen Superheroes and Constitutional Mirages: The Tale of* Brady v. Maryland, 33 MCGEORGE L. REV. 643, 645-46 (2002) ("Thus, while the breadth of *Brady*'s coverage may have expanded to cover matters like impeachment evidence, that expansion is somewhat illusory because the compass of impeachment evidence that actually would qualify as material under *Brady* is now so circumscribed."); *Bagley*, 473 U.S. at 702 (Marshall, J., dissenting) ("Apparently anxious to assure that reversals are handed out sparingly, the Court has defined a rigorous test of materiality.").

7. *See, e.g.*, Sundby, *supra* note 6, at 648.

8. John G. Douglass, *Fatal Attraction? The Uneasy Courtship of* Brady *and Plea Bargaining*, 50 EMORY L.J. 437, 471 (2001) (emphasis omitted).

9. *See, e.g.*, Riley E. Clafton, *A Material Change to* Brady*: Rethinking* Brady v. Maryland*, Materiality, and Criminal Discovery*, 110 J. CRIM. L. & CRIMINOLOGY 307, 330-31 (2020).

10. *Bagley*, 473 U.S. at 701 (Marshall, J., dissenting).

11. *Cf. id.* (emphasizing the "impossible task" and the "gamble" caused by the materiality standard).

12. *See generally The* Brady *Database*, WILSON CTR. FOR SCI. & JUST. AT DUKE UNIV. SCH. L., https://perma.cc/C2UY-THS8 (archived Nov. 10, 2025) (collecting prior *Brady* rulings). In a prior study, we described the overall features of the 808 cases in that dataset. *See* Brandon L. Garrett, Adam M. Gershowitz & Jennifer Teitcher, *The* Brady *Database*, 114 J. CRIM. L. & CRIMINOLOGY 185, 202-04 (2024).

of over 100 state and federal rulings in which favorable evidence was withheld and not disclosed to the defense, but where courts concluded that the evidence was nevertheless not material or outcome determinative. As a point of contrast, we also examine 81 other rulings from the same timeframe in which courts found that favorable evidence *was* material and where *Brady* relief was granted. Our focus is on how courts explain materiality standards, what types of evidence they describe, and how they reason when conducting materiality analysis.

In analyzing the "favorable but not material" cases in our dataset, we ask whether these are cases that involve directly exculpatory evidence or cases that "only" involve impeachment evidence. Do appellate courts agonize over whether the withheld evidence was material, or do they summarily dispose of cases as "no big deal?" To the extent that courts are conducting an analysis of the withheld evidence, what type of analysis are they doing? Are they just rehashing the defendant's guilt by assessing whether the defendant was "overwhelmingly guilty" such that no withheld evidence could even matter? Or are courts carefully analyzing how the withheld evidence could have been used at trial had the government turned it over?

Our findings shed new light on how courts typically implement the materiality test. First, we found that in 77% of the "favorable but not material" cases, the evidence was "only" impeachment evidence. By contrast, more than half of cases involving a *Brady* violation (which by definition means courts found the evidence material) involved exculpatory evidence.[13] Courts have long talked about exculpatory and impeachment evidence in the same breath when discussing favorable *Brady* evidence.[14] Yet our data suggests that courts are less willing to find materiality (and thus *Brady* violations) when the withheld evidence is "only" impeachment evidence.[15]

Second, in digging into the types of evidence involved in *Brady* claims, we found that the evidence is not what one would expect. When one thinks of prosecutors holding back evidence, the first thing that comes to mind might be smoking guns such as fingerprints, DNA, the murder weapon, or other physical evidence. Yet we found that fewer than 10% of the "favorable but not material" cases involved forensic evidence (which includes physical evidence tested by laboratories and reports and testimony from lab analysts).[16] And fewer than 10%

13. *See* Garrett et al., *supra* note 12, at 226 tbl.13. The study found *Brady* violations in 81 of 808 cases. *See id.* Of the 81 cases, 28 involved exculpatory evidence, 39 involved impeachment evidence, 15 involved both types of evidence, and in 5 cases it was unclear. *Id.* Some cases had more than one piece of evidence, which explains how the total numbers exceed 81. *See id.*

14. *See, e.g.*, State v. Anderson, 410 N.W.2d 231, 233 (Iowa 1987) ("Anderson complains of a suppression of impeachment evidence. For purposes of the *Brady* rule, however, it makes no difference; it applies to both exculpatory and impeachment evidence.").

15. *See infra* Table 1.

16. *See infra* Table 2.

involved other physical evidence.[17] Instead, the majority of withheld evidence related to witnesses—prior convictions, secret plea deals, prior inconsistent statements, and other reasons to distrust witness testimony.[18]

Troublingly, we found that courts brushed away compelling evidence on materiality grounds. We found 5 cases of payments to witnesses, more than 20 cases of undisclosed plea agreements, 24 cases of undisclosed prior witness statements, 16 cases where prior convictions of key witnesses were withheld, 18 cases where the government suppressed other evidence that could have been used to impeach prosecution witnesses, and 16 cases where criminal activity or other alleged misconduct of a police officer was withheld.[19] In short, we found a plethora of compelling impeachment evidence related to witnesses but which courts found not to be material. Our data suggests that courts are often willing to dismiss significant impeachment evidence on the grounds that there is no reasonable probability of a different outcome. These cases involved troubling conduct, and yet none of them were labeled a *Brady* violation.

Third, when further examining the cases and looking at their actual reasoning, we observed troubling patterns about how courts conduct *Brady* analysis. A handful of courts conducted conclusory analysis and offered practically no reasoning to justify why the evidence was immaterial.[20] Another handful of cases disposed of serious *Brady* allegations with "bare-bones" analysis that offered *some* reasoning but was still extremely thin.[21]

Most courts conducted a detailed analysis. Yet there were significant differences in the type and quality of analysis that courts utilized. Many courts correctly conducted "evidence-based" analysis.[22] This means that courts considered the evidence the prosecution withheld from the defendant and analyzed it in the context of what was presented at trial. For instance, if the prosecution failed to disclose how a police officer offered to help a witness, the court considered how the jury might have discounted that witness's testimony had the jury known of the withheld impeachment evidence. If the factfinder had already heard lots of evidence impeaching that witness—for instance, the witness had prior convictions or their story had been contradicted by other witnesses—the value of the officer's promised assistance would be low and thus immaterial. But if the witness had gone unchallenged at trial, the withheld impeachment evidence about promises of leniency would have been very important. In other words, evidence-based analysis correctly focuses on the withheld evidence and the value of that evidence given the surrounding context.

17. *See infra* Table 2.

18. *See infra* notes 127-34 and accompanying text.

19. *See infra* Table 2; *infra* notes 142-43, 150, 173 and accompanying text.

20. *See infra* Part II.D.2.a.

21. *See infra* Part II.D.2.b.

22. *See infra* Part II.D.3.

By contrast, numerous courts *incorrectly* conducted "guilt-based" analysis, famously criticized by then-D.C. Circuit Chief Judge Harry Edwards,[23] that focused on how guilty the defendant appeared to be and how convincing the evidence of guilt was at trial.[24] In the most extreme cases, courts took shortcuts by using terms like "overwhelming,"[25] "mountain,"[26] "large,"[27] or "compelling"[28] to talk about how guilty the defendant seemed. In more subtly guilt-based opinions, courts didn't use such magic words, instead focusing their analysis on the evidence presented at trial, and not focusing on the withheld evidence and how it would have been used by the defendant.[29]

Courts often used guilt-based analysis to supplement evidence-based analysis.[30] But in nearly 10% of cases, courts exclusively relied on guilt-based analysis,[31] which is a deeply problematic abdication of their responsibilities under the *Brady* doctrine. In short, it is not just the outcomes of some cases but also the legal reasoning employed for those outcomes that points to problems with the materiality prong.

This Article offers an on-the-ground picture of how courts are applying the materiality standard in *Brady* cases. Part I describes the *Brady* materiality standard and prior empirical research examining how courts apply the *Brady* doctrine in post-conviction cases.

In Part II, we take a deep dive into our sample of more than 100 cases in which courts found evidence to be favorable but not material. Part II begins by documenting how more than three-quarters of cases finding favorable evidence immaterial involved "only" impeachment evidence as opposed to exculpatory evidence. Even though the *Brady* doctrine has long applied to both exculpatory and impeachment evidence, our sample suggests that, in practice, courts treat impeachment evidence with skepticism in materiality inquiries.

Part II then goes into deeper detail about the types of evidence courts find immaterial. A relatively small share of "favorable but not material" cases involved physical evidence, confessions, or forensic evidence. By contrast, many cases of immateriality involved evidence that could have been used—had it been

23. *See* Harry T. Edwards, *To Err Is Human, But Not Always Harmless: When Should Legal Error Be Tolerated?*, 70 N.Y.U. L. REV. 1167, 1192-94 (1995).

24. *See infra* notes 222-29 and accompanying text.

25. Commonwealth v. Natividad, 200 A.3d 11, 32-33 (Pa. 2019).

26. Gibson v. Beard, 165 F. Supp. 3d 286, 304 (E.D. Pa. 2016), *aff'd sub nom.*, Gibson v. Sec'y Pa. Dep't of Corr., 718 F. App'x 126 (3d Cir. 2017).

27. United States v. Christensen, 624 F. App'x 466, 485 (9th Cir. 2015).

28. State v. Wayerski, 922 N.W.2d 468, 483 (Wis. 2019).

29. *See infra* Part II.D.3 (discussing cases employing such "guilt-based" analysis).

30. *See, e.g.*, *Wayerski*, 922 N.W.2d at 483 (describing one such case).

31. *See infra* Part II.D.3; *infra* Table 5.

disclosed—to impeach witnesses, such as undisclosed prior statements, secret plea deals, prior convictions, and even cash payments.

Part II also considers the type of analysis courts conduct in *Brady* cases. We explore how some cases use conclusory reasoning, brushing aside *Brady* claims with little or no analysis. We then document how some courts utilize "guilt-based" reasoning that focuses on the evidence presented at trial, rather than "evidence-based" reasoning that focuses on how impactful the withheld evidence would have been had it been disclosed.

Part III uses our findings to draw big-picture conclusions about current judicial practice implementing the *Brady* doctrine. We explain that improper application of the materiality prong undermines deterrence of intentional prosecutorial misconduct, and it fails to seriously grapple with the poor communication between police and prosecutors that leads to *Brady* violations. Flawed application of the materiality prong also results in some very viable *Brady* claims being rejected, and it permits courts to conduct "guilt-based" analysis that places too little focus on the impact that the suppressed evidence would have had on the jury.

In Part IV, we discuss two solutions to this problem. The first solution is internal. We describe what it would look like for judges to make empirically informed decisions about whether the suppressed evidence was material or not. We propose that judges look to research on how jurors make decisions, rather than their own subjective assessments concerning a "reasonable probability" that the evidence would have affected the outcome. Attending more carefully to how jurors weigh the strength of evidence will also lead judges themselves to focus on the strength of evidence, thus avoiding the temptation to engage in improper guilt-based analysis.

A second solution is external and more structural. In recent years, the Supreme Court has ruled several times on *Brady* claims, often focusing on materiality.[32] It is clear that if a state court fails to properly conduct the *Brady* analysis regarding materiality, then it should not receive deference under the Anti-Terrorism and Effective Death Penalty Act (AEDPA).[33] However, related Supreme Court doctrines make it challenging to develop facts in state proceedings that would support a successful federal habeas review of a *Brady* claim. As a result, for federal courts to effectively remedy *Brady* violations and

32. *See, e.g.*, Wearry v. Cain, 577 U.S. 385, 392 (2016) (per curiam) (finding a *Brady* violation and stating that "[b]eyond doubt, the newly revealed evidence suffices to undermine confidence in Wearry's conviction"). For a ruling denying relief and focusing on the materiality requirement, see *Turner v. United States*, 582 U.S. 313, 324-25 (2017).

33. *See* 28 U.S.C. § 2254(d) (precluding the grant of federal habeas unless the state court decision was "contrary to, or involved an unreasonable application of, clearly established Federal law, as determined by the Supreme Court of the United States" or unless it "resulted in a decision that was based on an unreasonable determination of the facts in light of the evidence presented in the State court proceeding").

ensure that the doctrine is applied correctly, statutory reforms to AEDPA will be needed.

I. The *Brady* Materiality Standard

A. Judicial Definitions of the *Brady* Materiality Standard

When the Supreme Court decided *Brady v. Maryland* in 1963, the Justices ruled that the prosecution's suppression of material evidence violates the Due Process Clause of the Fourteenth Amendment.[34] However, the Court did not initially define how strong the evidence must be to be "material."[35]

Decades later, in *United States v. Bagley*, the Court adopted a "reasonable probability" test for materiality.[36] The prosecution must "gauge the likely net effect of all [undisclosed] evidence and make disclosure when the point of 'reasonable probability' is reached."[37] Courts then apply the standard to ask whether the undisclosed evidence could have impacted the factfinders.[38] If there is a reasonable probability that the withheld evidence would have caused the factfinder to reach a different result, the evidence is material and the conviction should be reversed.[39] Thus, as the Court explained in *United States v. Agurs*, "[I]f the omitted evidence creates a reasonable doubt that did not otherwise exist, constitutional error has been committed."[40]

The materiality standard is more demanding than the ordinary harmless error test on appeal.[41] However, the materiality standard resembles the test that the Court adopted for examining harmless error in the context of federal habeas

34. 373 U.S. 83, 86-87 (1963).

35. *See* Strickler v. Greene, 527 U.S. 263, 298 (1999) (Souter, J., concurring in part and dissenting in part) ("*Brady* itself did not explain what it meant by 'material' (perhaps assuming the term would be given its usual meaning in the law of evidence)." (citation omitted)).

36. *See* 473 U.S. 667, 682 (1985) (plurality opinion).

37. Kyles v. Whitley, 514 U.S. 419, 437 (1995).

38. For an example of a court discussing materiality in evidence law in such a way as to suggest an impact on the factfinder, see *Weinstock v. United States*, 231 F.2d 699, 701-02 (D.C. Cir. 1956) ("'Material' when used in respect to evidence is often confused with 'relevant', [sic] but the two terms have wholly different meanings. To be 'relevant' means to relate to the issue. To be 'material' means to have probative weight, i.e., reasonably likely to influence the tribunal in making a determination required to be made.").

39. *See Kyles*, 514 U.S. at 434 ("*Bagley*'s touchstone of materiality is a 'reasonable probability' of a different result, and the adjective is important.").

40. 427 U.S. 97, 112 (1976).

41. *See* Chapman v. California, 386 U.S. 18, 23-24 (1967) (comparing the application of the materiality standard to the application of the harmless error standard).

corpus petitions challenging state convictions.[42] Federal habeas review makes it difficult for the petitioner to prevail because, under AEDPA, the federal judge must ask whether the application of the harmless error standard by the state court is itself "unreasonable,"[43] resulting in "doubly deferential" review of materiality and prejudice.[44] In short, AEDPA interacts with *Brady* claims to incorporate a harmless error test into the constitutional claim itself, and it is a moderately demanding standard.[45]

While we know that the *Brady* materiality test is challenging, that is where the guidance ends. The Supreme Court has not explained in any detail how a court should go about determining whether a withheld piece of evidence would lead a factfinder to reach a different result.[46] What a reasonable probability consists of is in the eye of the judicial beholder. If the prosecution withheld evidence that a witness changed her story, but disclosed the witness's prior criminal convictions, how much weight should the prior statement receive? If the prosecution withheld very valuable impeachment evidence, but there was overwhelming evidence of the defendant's guilt (imagine five eyewitnesses) how should the court weigh the withheld evidence?

While the Supreme Court obviously cannot offer guidance ex ante about every possible *Brady* scenario, the Court has both affirmed and reversed lower court *Brady* rulings in recent years.[47] In doing so it has provided some general guidance on the proper application of the materiality standard. However, to date, we are aware of no further specific guidance the Court has given beyond the "reasonable probability" test to lower courts on how to decide what evidence is material.

What the Court has done is warn against guilt-based analysis that avoids the actual doctrinal question—whether the error contributed to the outcome. Thus, the Court has remained clear that such guilt-based reasoning is improper. For example, in the harmless error (not *Brady*) context the Court has stated that the

42. For the Court's discussion of how so-called *Kotteakos* errors are "less onerous" than *Chapman* errors, see *Brecht v. Abrahamson*, 507 U.S. 619, 623 (1993).

43. *See, e.g.*, Fry v. Pliler, 551 U.S. 112, 119 (2007).

44. Cullen v. Pinholster, 563 U.S. 170, 190 (2011) (quoting Knowles v. Mirzayance, 556 U.S. 111, 123 (2009)).

45. For a discussion of this general phenomenon, see Brandon L. Garrett, *Innocence, Harmless Error, and Federal Wrongful Conviction Law*, 2005 WIS. L. REV. 35, 62.

46. For scholarship discussing the practical effects on the lack of guidance, see, for example, R. Michael Cassidy, *Plea Bargaining, Discovery, and the Intractable Problem of Impeachment Disclosures*, 64 VAND. L. REV. 1429, 1479 (2011) ("[P]rosecutors need more concrete guidance and direction with regard to impeachment evidence than a vague 'materiality' standard can provide."); and Jennifer E. Laurin, *Rights Translation and Remedial Disequilibration in Constitutional Criminal Procedure*, 110 COLUM. L. REV. 1002, 1063 (2010) ("The materiality standard is arguably such a [conduct-based decision] rule, because it provides ex ante guidance—albeit obliquely so . . . .").

47. *See infra* notes 48-53; *infra* Part I.

proper analysis is "whether the guilty verdict actually rendered in this trial was surely unattributable to the error," rather than to "hypothesize a guilty verdict."[48] Unfortunately, while the Justices have warned against guilt-based analysis, in some instances, they have themselves misapplied harmless error and engaged in guilt-based reasoning.[49]

Take *Smith v. Cain*, in which the only witness linking the defendant to a murder had, in undisclosed police reports, failed to identify the defendant.[50] In a 2012 ruling, Chief Justice John Roberts, writing for the Court, emphasized that the statements were "plainly material," because they undermined the only witness at trial.[51] But the Chief Justice also stated, "We have observed that evidence impeaching an eyewitness may not be material if the State's other evidence is strong enough to sustain confidence in the verdict."[52] That is not the correct standard. By contrast, the Court got it right more recently in *Wearry v. Cain*, noting that the petitioner "must show only that the new evidence is sufficient to 'undermine confidence' in the verdict."[53]

The dangers of guilt-based harmless error or materiality analysis are well known. Then-Chief Judge Edwards warned that such tests raise a concern that a judge may invert the analysis and subvert its ostensible focus on whether a constitutional violation caused a trial-level harm.[54] His article focused on the harmless error doctrine, of which the *Brady* materiality doctrine is an example, and counseled that courts should avoid a "guilt-based" assessment of the evidence.[55] Then-Chief Judge Edwards warned that the evidence supporting a defendant's guilt should not be the starting place for the analysis, because in practice it could then become the only factor that courts consider.[56] Courts should not simply ask whether there was sufficient untainted evidence to convict. If they did, a "no harm, no foul" standard would, in effect, make constitutional rights irrelevant.

In examining how judges apply a range of harmless error tests, Gregory Mitchell found that in the 1990s, in the wake of inconsistent or unclear rulings

48. Sullivan v. Louisiana, 508 U.S. 275, 279 (1993) (emphasis omitted).

49. For an additional perspective on the Court's misuse of guilt-based analysis, see Linda E. Carter, *Harmless Error in the Penalty Phase of a Capital Case: A Doctrine Misunderstood and Misapplied*, 28 GA. L. REV. 125, 134-35 (1993). There, Linda Carter notes that "[i]n some cases, the Supreme Court has focused on whether the erroneously included or excluded evidence 'contributed' to the verdict. In other cases, the Court has emphasized whether the properly admitted evidence was 'overwhelming.'" *Id.* (footnote omitted).

50. 565 U.S. 73, 74-75 (2012).

51. *Id.* at 76.

52. *Id.*

53. 577 U.S. 385, 392 (2016) (per curiam) (quoting Smith v. Cain, 565 U.S. 73, 75 (2012)).

54. *See* Edwards, *supra* note 23, at 1182-83.

55. *See id.* at 1187-88, 1192.

56. *See id.* at 1187.

by the Supreme Court, appellate judges often applied guilt-based analysis—including finding error harmless because evidence of guilt was "overwhelming."[57] One of the Authors has examined such rulings in the context of cases brought by people later exonerated by DNA evidence. That study found that judges often conducted guilt-based analysis, finding error harmless due to powerful or even overwhelming evidence of guilt, although DNA testing later provided powerful evidence of innocence in those same cases.[58] However, as recently as the 2024 Supreme Court term, petitioners have asked the Court to clarify that guilt-based harmless error or materiality analysis is improper,[59] but the Justices have declined to do so.[60]

Rather than conduct "guilt-based" analysis, courts are supposed to, in following the materiality standard, conduct an outcome-based analysis. We call this "evidence-based" analysis, in contrast to the erroneous guilt-based approach that then-Chief Judge Edwards highlighted so well.[61]

Under a correct application of the materiality standard, courts do not ignore the evidence actually presented at trial suggesting the defendant was guilty. But they must think counterfactually about the withheld evidence that was not introduced. If the favorable withheld evidence had been part of the trial, what would have happened? How would it have landed with the jury? Only with that evidence in mind can a judge then consider whether the jury would have convicted the defendant anyway. As we explain below, some courts fail to conduct this type of analysis. As a result, they fail to properly apply the materiality doctrine and ignore *Brady* violations.

B. Prior Research on *Brady* Rulings

In the decades since *Brady*, a few scholars have attempted the herculean task of studying a large number of *Brady* claims. Stephanos Bibas examined 210 *Brady*

57. Gregory Mitchell, Comment, *Against "Overwhelming" Appellate Activism: Constraining Harmless Error Review*, 82 CALIF. L. REV. 1335, 1346-50 & n.88 (1994).

58. Brandon L. Garrett, *Judging Innocence*, 108 COLUM. L. REV. 55, 107-08 (2008).

59. *See, e.g.*, Reply Brief of Petitioner at 5, Rimlawi v. United States, 145 S. Ct. 518 (2025) (No. 24-23), 2024 WL 5183880.

60. *Rimlawi*, 145 S. Ct. at 518 (mem.) (denying certiorari).

61. A decision from the Sixth Circuit also offers a clear contrast between the two types of reasoning:

> [T]he district court rejected [the] argument that the suppressed evidence of Jackson's receipt of $750 from the FBI was material because "there was substantial evidence linking Thomas to the crime, other than Jackson's testimony" and because Jackson's testimony in both the state and federal cases was consistent. To the extent that these reasons appear to deny relief because there was sufficient evidence to support Thomas's conviction, they mischaracterize the materiality inquiry under *Brady*. The dispositive question, instead, is whether the guilty verdict entered against Thomas is worthy of confidence in the absence of the suppressed evidence.

Thomas v. Westbrooks, 849 F.3d 659, 663 (6th Cir. 2017) (internal citations omitted).

allegations decided in 2004 and found that almost 12% were successful claims.[62] Bibas also examined several decades of successful *Brady* claims and noted only a "small universe of successful cases."[63]

Most recently, Jennifer Mason McAward created a dataset of 386 federal and state cases in which courts found *Brady* violations, over a nearly two decade period.[64] Also in 2024, we, along with Jennifer Teitcher, published a study of five years of *Brady* claims.[65] We considered more than 800 *Brady* claims and found 81 cases (or roughly 10%) where courts found *Brady* violations.[66] The database used in this Article arose from that prior research; our focus here, as described further in the next Part, is on a subset of cases in the database where courts found evidence favorable but not material.

More generally, scholars have also examined *Brady* claims as part of broader inquiries into prosecutorial misconduct. In 1994, the National Center of State Courts found that prosecutorial misconduct claims were found in 11% of state post-conviction petitions and in 16% of federal petitions.[67] While claims of failure to disclose evidence were the most common specific prosecutorial misconduct claim, they were made less often than general claims of prosecutorial misconduct.[68] The following year, the Bureau of Justice Statistics published a study of a sample of federal habeas corpus petitions from eighteen district courts, indicating that prosecutorial misconduct claims (which included, but were not limited to *Brady* claims) were present in 6% of the sample.[69]

62. Stephanos Bibas, Brady v. Maryland*: From Adversarial Gamesmanship Toward the Search for Innocence?, in* CRIMINAL PROCEDURE STORIES 129, 144-45 (Carol S. Steiker ed., 2006) ("Empirical evidence confirms that most *Brady* and *Giglio* claims involve not smoking guns but ambiguous evidence, which prosecutors can easily overlook.").

63. *Id.* at 145-46.

64. *See* Jennifer M. McAward, *Understanding* Brady *Violations*, 78 VAND. L. REV. 875, 878-79, 901 (2025).

65. *See* Garrett et al., *supra* note 12, at 189, 202-204.

66. *See id.* at 190.

67. *See* VICTOR E. FLANGO, NAT'L CTR. FOR STATE CTS., HABEAS CORPUS IN STATE AND FEDERAL COURTS 45 (1994).

68. *See id.* at 53-54 (noting that "failure to disclose" claims amounted to fewer claims, 5% of federal and 4% of state petitions).

69. ROGER A. HANSON & HENRY W.K. DALEY, BUREAU OF JUST. STAT., NCJ-155504, FEDERAL HABEAS CORPUS REVIEW: CHALLENGING STATE COURT CRIMINAL CONVICTIONS iv-v, 14 (1995). In an interesting 2007 study, Vanderbilt and the National Center for State Courts examined post-conviction litigation in 2,384 non-capital cases and found, inter alia, that *Brady* claims were more common in capital than non-capital petitions. *See* NANCY J. KING, FRED L. CHEESMAN II & BRIAN J. OSTROM, FINAL TECHNICAL REPORT: HABEAS LITIGATION IN U.S. DISTRICT COURTS 28, 62 (2007), https://perma.cc/K55Q-4WRS; *see also* Joseph L. Hoffmann & Nancy J. King, Essay, *Rethinking the Federal Role in State Criminal Justice*, 84 N.Y.U. L. REV. 791, 811 (2009) (describing the number of cases in the study).

A study by the Quattrone Center at Penn Carey Law School examined prosecutorial misconduct claims in Pennsylvania from 2000 to 2016 and found that *Brady* claims were the most commonly litigated type of prosecutorial misconduct.[70] Recently, the National Registry of Exonerations found that concealed exculpatory evidence "contributed to the convictions of 44% of exonerees," making it the most frequent type of official misconduct.[71] Similarly, one of us studied litigation by DNA exonerees and found that exculpatory evidence of innocence often came to light years later. Yet it was not discovered during traditional post-conviction litigation but instead due to the work of journalists or civil rights lawyers who had access to federal discovery.[72]

In the death penalty context, James Liebman, Jeffrey Fagan, and Valerie West found in the *Broken System* studies that the second most common claim resulting in state capital conviction reversals (after ineffective assistance of counsel claims) involved prosecutorial suppression of evidence of innocence or ineligibility for the death penalty.[73] A study by the Death Penalty Information Center found withholding of favorable evidence to be "the most common" type of misconduct in death penalty cases.[74]

In sum, scholars and research groups have done important work documenting and unpacking the causes of *Brady* violations. These scholars have detailed the high prevalence of *Brady* claims and the relatively modest percentage of *successful Brady* claims. Outside of wrongful convictions and

70. *See* QUATTRONE CTR. FOR FAIR ADMIN. JUST., UNIV. PA. SCH. L., HIDDEN HAZARDS: PROSECUTORIAL MISCONDUCT CLAIMS IN PENNSYLVANIA, 2000-2016, at 10 (2021), https://perma.cc/FJ29-23KT.

71. SAMUEL GROSS ET AL., NAT'L REGISTRY OF EXONERATIONS, GOVERNMENT MISCONDUCT AND CONVICTING THE INNOCENT: THE ROLE OF PROSECUTORS, POLICE AND OTHER LAW ENFORCEMENT xvi, 81 (2020), https://perma.cc/Y3EC-GSCN. Previously, in a 2012 report, the National Registry of Exonerations highlighted that 42% of exonerations involved official misconduct. *See* SAMUEL R. GROSS & MICHAEL SHAFFER, NAT'L REGISTRY OF EXONERATIONS, EXONERATIONS IN THE UNITED STATES, 1989-2012, at 67 (2012).

72. *See* BRANDON L. GARRETT, CONVICTING THE INNOCENT: WHERE CRIMINAL PROSECUTIONS GO WRONG 202-03 (2011) (documenting post-conviction litigation by the first 250 DNA exonerees in the United States and describing how 29 of 165 exonerees with written rulings had brought *Brady* claims). An earlier study of the first 200 such cases found that 16% or 21 out of 133 exonerees with written rulings in their cases had brought *Brady* claims, of which three were granted. *See* Garrett, *supra* note 58, at 110; *see also* Jon B. Gould, Samantha L. Senn, Belén Lowrey-Kinberg & Linda Phiri, *Mapping the Path of* Brady *Violations: Typologies, Causes & Consequences in Erroneous Conviction Cases*, 71 SYRACUSE L. REV. 1061, 1090-91 (2021).

73. *See* James S. Liebman, Jeffrey Fagan & Valerie West, *A Broken System: Error Rates in Capital Cases, 1973-1995*, at 5 (Columbia L. Sch. Pub. L. & Legal Theory Working Paper Group, Paper No. 15, 2000).

74. *DPIC Analysis Finds Prosecutorial Misconduct Implicated in More than 550 Death Penalty Reversals or Exonerations*, DEATH PENALTY INFO. CTR. (updated Mar. 14, 2025), https://perma.cc/QMK3-WVVS.

capital cases, prior research studies have indicated that roughly 90% of *Brady* claims have proven unsuccessful.[75]

While there is important and detailed scholarship about *successful Brady* claims,[76] to date there has been little scholarship on *failed Brady* claims. Of course, many failed *Brady* cases involve frivolous claims where the government did not suppress evidence or where the claimed evidence was not favorable at all. But a number of failed *Brady* cases involve credible challenges where courts found the evidence to be favorable but rejected the claims on materiality grounds.[77] In these cases, courts grappled with compelling favorable evidence—confessions, police misconduct, prior convictions of witnesses, police reports identifying eyewitnesses, and much more—before ultimately rejecting the *Brady* claims because there was no reasonable probability that the outcome would have been different.

To truly understand how courts are adjudicating *Brady* claims and the flaws with the current *Brady* doctrine, we must understand the "favorable but not material" cases.

II. Studying Materiality Rulings

In our earlier *Brady* database study, we assembled and analyzed a set of five years of reported rulings on *Brady* claims, involving more than 800 cases.[78] We focused on several features of these rulings: the small minority of successful claims, the forum, the length of time, the types of crimes at issue, whether police or prosecutors withheld evidence, and whether judges commented on who was responsible for the misconduct and if they should face any consequences.[79] In this Article, we focus exclusively on the concept of materiality, which is typically the most fundamental question in *Brady* cases.

As detailed below, we found that the "favorable but not material" cases typically involved impeachment evidence, rather than exculpatory evidence—a difference from *Brady* violation cases. Notably, we determined that most "favorable but not material" claims involved witness statements and witness credibility; a relatively small number of cases were based on forensic evidence, physical evidence, or police misconduct. And in analyzing the cases, courts often included guilt-based analysis that focused on the strength of the evidence against the defendant, rather than relying exclusively on evidence-based analysis that counterfactually assessed how the withheld evidence would have affected the factfinder's analysis.

75. *See supra* notes 62-66 and accompanying text.

76. *See generally, e.g.*, McAward, *supra* note 64 (surveying *Brady* claims).

77. *See* Garrett et al., *supra* note 12, at 229.

78. *See id.* at 202-03.

79. *See id.* at 202-36.

A. Overview of "Favorable but Not Material" Rulings Studied

In order to study *Brady* claims, we needed to narrow down the universe of cases. In an effort to reverse their convictions on direct appeal or post-conviction review, petitioners frequently cite the *Brady* doctrine. Some of the *Brady* allegations are simply frivolous, but many raise at least plausible allegations of government withholding of evidence. Courts are therefore called upon to seriously consider thousands of *Brady* cases and they issue many published and unpublished decisions each year. It would be simply infeasible for any study to analyze all of the *Brady* claims that have been brought in the more than sixty years since *Brady* was decided.[80]

To understand how the *Brady* doctrine operates in practice—including both unsuccessful claims and unusual ones where courts find a *Brady* violation—we designed an earlier study that focused on five years of *Brady* claims.[81] We began coding data in 2020 and used the most recent five-year period: 2015 to 2019.[82] In an effort to identify the largest universe of published and unpublished cases, we used the Westlaw Key Number System.[83] Our initial dataset included 1,340 federal and state cases.[84] We then removed cases that the Key Number System had erroneously included and that did not discuss *Brady*.[85] Thereafter, we eliminated non-paradigmatic cases—those which discussed the *Brady* doctrine, but in which the case did not involve a challenge to the non-disclosure of favorable evidence.[86] This winnowing process yielded a sample of 808 cases from the five-year period.[87] We then coded each case for forty-nine variables, including type of crime, state versus federal prosecution, procedural default, prosecutor versus police withholding, intentional versus accidental misconduct, and numerous other considerations.[88] Our initial article provided an overview of the big-picture findings.[89]

80. Indeed, even the most expansive study of *Brady* violations, as opposed to *Brady* claims, had to be limited to an eighteen-year period. *See* McAward, *supra* note 64, at 899, 901 (explaining that "eighteen years of violations" would constitute "the largest-ever set of *Brady* adjudications" (capitalization altered)).

81. *See* Garrett et al., *supra* note 12, at 202.

82. *See id.*

83. Specifically, we utilized Westlaw Key Number search "SY,DI(110XXXI(D)2)," which covers the topic of "Criminal Law; Counsel; Duties and Obligations of Prosecuting Attorneys; Disclosure of Information." The SY,DI function searches both the synopsis and the digest fields of opinions.

84. *See* Garrett et al., *supra* note 12, at 202.

85. *See id.* at 202-03.

86. *See id.* at 203.

87. *See id.*

88. *See id.* at 247-48.

89. For an initial overview, see *id.* at 190.

In this Article, we focus on the cases from our original data in which courts found evidence to be favorable but not material. Those cases were identified through Westlaw searches of state and federal cases; however, we again note that state post-conviction rulings are often not published, and therefore these cases only represent the published rulings that could be identified.[90] We identified 110 cases from 2015 to 2019 where courts found that prosecutors withheld favorable evidence but ultimately rejected the *Brady* claim on materiality grounds. In reviewing the data, we identified seven "delayed disclosure" cases from our sample in which the government disclosed favorable evidence before or during trial, albeit late.[91] Because these were not paradigmatic cases where the defendant was denied the ability to use favorable evidence, we excluded them from our analysis. Our dataset thus amounted to 103 cases where prosecutors withheld "favorable but not material" evidence.[92]

The cases in our sample were nearly evenly split between state (50) and federal (53) rulings.[93] They included appellate post-conviction rulings, and state supreme court rulings, as well as federal district and courts of appeals rulings. Often the cases discussed a number of other post-conviction claims. And some cases involved multiple separate *Brady* theories regarding distinct pieces of evidence alleged to have been suppressed. As we develop below, judges variably discussed these claims and theories. And particularly for the federal rulings, judges engaged with detailed procedural rules that regulate when and whether federal judges may consider a claim like a *Brady* claim on the merits and what level of deference they must pay to state courts' factual and legal determinations.[94]

We coded each case for the type of evidence that was withheld, whether it was impeachment or exculpatory evidence, whether the court cited the correct

90. *See* Garrett et al., *supra* note 12, at 202 & n.93. We do note that "in most cases in which a petitioner raised a viable, or at least plausible, *Brady* claim, we expect that the court would provide reasoning and designate the decision as publishable. We would expect that the bulk of unpublished decisions would be summary denials of relief." *Id.* at 202 n.93.

91. These cases included all paradigmatic cases in the *Brady* Database, in which evidence was found to have been both favorable and to have been undisclosed. Cases meeting those criteria resulted in 110 cases. In the seven cases that we did not include in this analysis, the courts concluded that, even though the evidence should have been turned over earlier, the defense did have a full opportunity to utilize the evidence at trial and thus suffered no prejudice from the late disclosure. All 103 cases are available on the *Brady* Database website in an online format where they can be sorted across a range of criteria, *see generally* The *Brady* Database, *supra* note 12.

92. *See* The *Brady* Database, *supra* note 12.

93. *See Brady* Database Coding Document of Favorable but Not Material Cases (on file with authors).

94. *See, e.g.*, *supra* note 33 and accompanying text (discussing AEDPA deference).

materiality standard, whether the court's analysis was conclusory, and whether the court used guilt-based or evidence-based reasoning.[95]

In the Subparts that follow, we consider not just whether most "favorable but not material" cases involve impeachment or exculpatory evidence but also how that breakdown differs from successful *Brady* claims. We then take a deep dive into the types of evidence asserted in "favorable but not material" cases, including, inter alia, physical evidence, confessions, forensic evidence, witness statements, benefits afforded to witnesses, prior convictions of witnesses, other reasons to distrust witness, and police misconduct. Finally, we analyze the types of analysis courts employ in order to reach the conclusion that evidence was immaterial. In particular, we discuss cases where courts engage in conclusory analysis, slightly more robust "bare-bones" analysis, as well as cases that improperly use "guilt-based" analysis and cases that correctly use "evidence-based" analysis.

We note throughout this Article that, because these cases are not randomly selected, our sample size is not sufficiently large. And because these 103 cases are not being compared to some other pool of cases, our findings are only descriptive. We cannot draw definitive conclusions about how courts in general conduct these *Brady* materiality analyses. Our goal is to describe this set of cases in which courts found that *Brady* evidence was favorable but not material as a window into this type of judicial decisionmaking.

B. Impeachment vs. Exculpatory Evidence

The Supreme Court has long recognized that favorable evidence includes both exculpatory evidence and impeachment evidence.[96] One key question is whether courts are more skeptical of *Brady* claims based on impeachment evidence that undermines the credibility of a witness, as opposed to exculpatory evidence that suggests a defendant is innocent. In other words, are courts more willing to reject *Brady* claims when the withheld evidence involves impeachment? In our sample of cases, the answer is yes. To understand this problem, we begin by defining exculpatory and impeachment evidence.

95. All cases were initially coded by the same team, including a post-doctoral fellow and research assistants, that produced the *Brady* Database. However, this Article conducts more detailed materiality analysis that was not part of the original coding. In this Article, we consider guilt-based and evidence-based analysis, as well as more detailed categories about the types of evidence that was withheld in the cases where courts found evidence to be favorable but not material. This additional coding, which is the primary focus of this Article, was conducted exclusively by the two Authors.

96. *See* Giglio v. United States, 405 U.S. 150, 150-51, 154 (1972).

Exculpatory evidence tends to show that the defendant is innocent of the crime charged.[97] For example, if an eyewitness originally failed to identify the defendant in a lineup (or, worse yet, if they identified someone other than the defendant), that would be exculpatory information. Forensic evidence can also be exculpatory, as when the defendant lacks one or more of the genetic markers of the perpetrator. Alibi evidence can be exculpatory, as can anything suggesting the defendant did not match the description of the perpetrator—such as hair or eye color, body weight, or height.

Impeachment evidence does not directly prove a defendant's innocence, but instead suggests that a witness is not being truthful or should not be believed.[98] Impeachment evidence includes benefits to the government's witnesses—such as dropping certain charges, sentencing reductions, or promises that a witness will not be charged at all.[99] Impeachment evidence can also include a witness's prior criminal convictions, prior drug use, informant status, and a multitude of other circumstances that might lead a jury to be skeptical of their testimony.[100]

Sometimes withheld evidence can be both exculpatory and impeachment evidence. For instance, imagine that a witness testifies at trial that the defendant robbed the bank. However, the government failed to disclose that shortly after the crime the police conducted a lineup where the same witness identified someone else as the perpetrator. The earlier lineup would be exculpatory because the witness pointed to someone else as the perpetrator. And that same identification would be impeachment evidence because it shows inconsistency with the witness's testimony. This is what occurred in *Smith v. Cain*, where the single eyewitness had failed to identify the defendant in earlier undisclosed statements and the Court affirmed the reversal of the defendant's conviction.[101]

In our earlier study, we found that defendants raised *Brady* claims involving impeachment evidence more often than claims involving exculpatory

97. *See, e.g.*, Cynthia E. Jones, *A Reason to Doubt: The Suppression of Evidence and the Inference of Innocence*, 100 J. CRIM. L. & CRIMINOLOGY 415, 423-24 (2010) ("Evidence is deemed to be exculpatory if it tends to negate guilt, diminish culpability, support an affirmative defense (duress, self-defense), or if the evidence could potentially reduce the severity of the sentence imposed." (footnote omitted)).

98. *See, e.g.*, *id.* at 425 ("Impeachment evidence encompasses a broad range of information that would expose weaknesses in the government's case or cast doubt on the credibility of government witnesses.").

99. *See, e.g.*, *id.* at 426.

100. *See, e.g.*, Cassidy, *supra* note 46, at 1431 ("[Impeachment evidence] includes promises, rewards, and inducements made by the prosecution to its witnesses that might establish the witness's bias in favor of the government; prior statements inconsistent with the witness's trial testimony that could be used on cross-examination to show fabrication or mistake; acts or conduct showing the witness's motive of ill will or hostility toward the defendant; past misconduct of the witness showing character for dishonesty; and medical, mental health, or addiction issues that might cloud the witness's ability to perceive, remember, or narrate.").

101. 565 U.S. 73, 74-77 (2012).

evidence.[102] Courts also found more *Brady* violations involving impeachment claims. Table 1 sets out data from the 808 cases—all *Brady* claims for a five-year period—that we reviewed in our initial study.

Table 1

Categories of Evidence Among *Brady* Claims[103]

Outcome	Exculpatory Only	Impeachment Only	Both Types	Neither Type	Not Stated
Successful *Brady* Claims	28	39	15	0	5
Unsuccessful *Brady* Claims	138	211	34	143	227
Favorable but Not Material Claims	13	79	11	N/A	N/A
Other Not Material Claims	125	132	23	N/A	N/A
Total *Brady* Claims	166	250	49	143	232

Notice that while there were both more overall claims and successful claims involving impeachment evidence, the number of cases involving exculpatory evidence was not much lower. Of the 81 successful *Brady* violation cases in our database, 28 involved solely exculpatory evidence, and another 15 involved cases with both exculpatory and impeachment evidence.[104] In that same time period, 39 cases involved solely impeachment evidence and as noted, 15 cases involved both exculpatory and impeachment evidence. As such, 54 (or 66%) of the 81 cases involved impeachment evidence. In sum, impeachment claims were slightly more prevalent in our sample of *successful Brady* violations.

What about cases in which the prosecution withheld favorable evidence, but the court rejected the *Brady* claim because the evidence was not significant enough to be material?

Notably, the "favorable but not material" cases involved far fewer claims based on exculpatory evidence and far more claims based on impeachment evidence. Of the 103 "favorable but not material" cases in our dataset, the vast

102. *See* Garrett et al., *supra* note 12, at 226.

103. This Table draws from Garrett et al., note 12 above, at 226. "[N]umbers in [the Table] add up to more than 808 *Brady* claims and more than 81 *Brady* violations. The reason is that some cases involved multiple pieces of evidence." *Id.* at 226 n.184.

104. Thus, of the 81 successful *Brady* violations we found in a five-year period, 43, or 53% of the 81 cases, involved exculpatory evidence.

majority of cases—79 of them—involved purely impeachment evidence, and 11 additional cases involved both impeachment and exculpatory evidence.[105] As such, 90 of 103 "favorable but not material" cases (or 87%) involved some impeachment evidence.[106]

One key finding of our study is therefore that exculpatory evidence was present much more often in cases involving *Brady* violations than in cases in which *Brady* claims were rejected on materiality grounds.

Of the 103 cases where courts found evidence to be favorable but not material, only 23% involved some type of exculpatory evidence.[107] By contrast, in the 81 cases where courts found the withheld evidence was material and thus a *Brady* violation, 53% involved some type of exculpatory evidence.[108] This suggests courts may be more persuaded by exculpatory evidence. Or to frame it differently, courts may be reluctant to find materiality solely based on impeachment evidence. When we examine the type of evidence present in "favorable but not material" cases, this phenomenon becomes more apparent.

C. Types of Evidence

To date, we know relatively little about the types of evidence that lead to *Brady* claims. To better understand what is happening on the ground, we coded the type of evidence in each case in our initial study of over 800 cases. For purposes of this Article, we took an even deeper dive into the cases where courts found the evidence to be favorable but not material. The results reveal that in our sample, most *Brady* claims involved witness statements and witness credibility and that few deal with forensic evidence, physical evidence, or even police misconduct. We begin with the "favorable but not material" cases and then compare the types of evidence in those cases to the types of evidence present in cases where courts found a *Brady* violation.

1. "Favorable but not material" cases

As we detail in this Subpart, the "favorable but not material" cases that we studied overwhelmingly involved impeachment, not exculpatory, evidence. And very little of the withheld evidence was physical evidence. Instead, many cases involved withheld witness statements or reasons to distrust the truthfulness of a witness. Our data indicates that courts are often very skeptical of impeachment evidence related to a witness's testimony when assessing *Brady* claims.

105. *See Brady* Database Coding Document of Favorable but Not Material Cases, *supra* note 93.

106. *Id.*

107. *Id.*

108. *See* Garrett et al., *supra* note 12, at 226. Table 1 above thus summarizes these findings.

To analyze our dataset, we first coded each "favorable but not material" case for the type of evidence at issue. We then broke those cases down into big-picture categories of physical evidence, confessions, witness statements, confessions, forensic evidence or testimony about the forensic evidence, deals or benefits for witnesses, prior convictions of witnesses, various other reasons to distrust witness testimony, issues with police, and miscellaneous other scenarios. Table 2 below shows the breakdown of cases.

Table 2

Descriptions of Evidence Among Successful Brady Claims and Unsuccessful Brady Claims Involving "Favorable but Not Material" Evidence[109]

	Unsuccessful "Favorable but Not Material" *Brady* Claims	**Successful *Brady* Claims**
Physical Evidence	9 (7%)	5 (5%)
Confessions	2 (2%)	2 (2%)
Forensic Evidence and Related Testimony	10 (8%)	12 (13%)
Witness Statements	24 (20%)	18 (19%)
Deals or Benefits for Witnesses	20 (16%)	15 (16%)
Prior Convictions or Investigations of Witnesses	16 (13%)	2 (2%)
Other Reasons to Distrust Witnesses	18 (15%)	16 (17%)
Issues with Police	16 (13%)	16 (17%)
Miscellaneous	8 (7%)	7 (8%)
Total	123	N/A

The first thing that stands out from the data is that very few cases involved physical evidence. When the average person thinks of prosecutors or police failing to turn over favorable evidence, they likely think of "smoking guns." This might include blood-stained clothing, murder weapons, or incriminating documents. There was very little physical evidence in cases where courts found the withheld evidence to be favorable but not material. One case involved tax

109. The data for this Table is drawn from *Brady* Database Coding Document of Favorable but Not Material Cases, *supra* note 93; and *Brady* Database Coding Document of *Brady* Violation Cases, *infra* note 146. Numbers in this chart add up to more than 103 cases (the number of cases in our sample) because some involved more than one piece of evidence.

records.[110] There were two cases with favorable phone records.[111] Three cases involved favorable photos or videos of the crime scene.[112] A few other cases involved miscellaneous pieces of physical evidence.[113] All told though, physical evidence was rarely present in the cases where courts found the withheld evidence to be favorable but not material. Specifically, only 9 of 123 pieces of evidence, or 7%, involved physical evidence.

Confessions and forensic evidence—both of which are highly significant to juries[114]—were also in short supply in our dataset of "favorable but not material" cases. We identified only two cases where confessions were suppressed and only ten cases where forensic evidence or something related to forensic evidence was suppressed.[115] Moreover, the forensic cases were not what one would suspect. Only two cases involved DNA evidence.[116] The others involved, for instance, forensic analysis of other technology-based evidence.[117] The bulk of the forensic cases (6 of the 10) involved impeachment evidence related to the qualifications and reliability of the forensic experts themselves.[118] Some of these cases, however, involved serious problems—such as forensic experts who had engaged in misconduct, failed proficiency tests, or made errors in other cases—which raised real reliability concerns about their work. Such evidence, as we will discuss in Part IV, can greatly impact jurors.[119]

110. *See* United States v. Bitterman, 654 F. App'x 112, 116 (3d Cir. 2016).

111. *See* United States v. Isaac, 627 F. App'x 160, 161-63 (3d Cir. 2015); Blakeney v. State, 236 So. 3d 11, 26-27 (Miss. 2017).

112. For one such case, see *Burdick v. State*, 474 S.W.3d 17, 26 (Tex. App. 2015) (video).

113. For one such case, see *Bogle v. State*, 213 So. 3d 833, 844 (Fla. 2017) (per curiam) (pants).

114. *See infra* Part IV.

115. The cases that involved forensic evidence were *United States v. Mathison*, 731 F. App'x 41, 44 (2d Cir. 2018) (DNA); *United States v. Smith*, 706 F. App'x 241, 243 (6th Cir. 2017) (forensic analysis of cell phone); *United States v. Straker*, 800 F.3d 570, 602 (D.C. Cir. 2015) (per curiam) (x-ray report); *Sutton v. Carpenter*, 617 F. App'x 434, 438-39 (6th Cir. 2015) (forensic analyst under investigation for improper practices); *Overton v. Jones*, 155 F. Supp. 3d 1253, 1278 (S.D. Fla. 2016) (DNA collection problems); *Commonwealth v. Hernandez*, 113 N.E.3d 828, 834 (Mass. 2019) (proficiency test failure of forensic expert); *Commonwealth v. Sullivan*, 85 N.E.3d 934, 940 (Mass. 2017) (proficiency test failure of forensic expert); *Bogle*, 213 So. 3d at 845 (DNA notes); and *State v. Davila*, 357 P.3d 636, 643 (Wash. 2015) (en banc) (termination of forensic analyst for incompetence). The confession cases were *Commonwealth v. Natividad*, 200 A.3d 11, 21, 23 (Pa. 2019) (third-party confession); and *Bolin v. State*, 184 So. 3d 492, 501-02 (Fla. 2015) (confession and impeachment of forensic expert).

116. *See Mathison*, 731 F. App'x at 43; *Bogle*, 213 So. 3d at 845.

117. *See, e.g.*, *Smith*, 706 F. App'x at 243-44 (forensic analysis of a cell phone); *Straker*, 800 F.3d at 602, 605 (x-ray report).

118. *See, e.g.*, *Hernandez*, 113 N.E.3d at 834 (proficiency test failure of a forensic expert).

119. *See, e.g.*, Sarah Tanford & Michele Cox, *Decision Processes in Civil Cases: The Impact of Impeachment Evidence on Liability and Credibility Judgments*, 2 SOC. BEHAV. 165, 178 (1987) (discussing how character evidence revealing dishonesty or prior convictions creates

footnote continued on next page

While initially it might be surprising that there were so few cases involving physical evidence, confessions, or forensic evidence, the paucity of those cases make sense upon reflection. We are drawing from a pool of cases where courts found the evidence not to be material—in other words, not compelling enough to create a reasonable probability of a different outcome. If there were compelling exculpatory or impeachment evidence involving confessions, forensic evidence, or physical evidence, courts would likely find it to be material. Thus, the paucity of these major categories of evidence suggests that, while favorable, the evidence was of very limited significance.

The other category where one might expect to see a lot of *Brady* claims is police misconduct. For example, police officers might have engaged in theft, so-called "testi-lying," brutality, or other misconduct that would affect their reliability as witnesses.[120] To be sure, there were a few such cases. In one case, a sheriff lied about his credentials.[121] In another case, a police officer was under investigation for theft.[122] In yet another, a detective who took a key witness's statement was having a romantic affair and got into a physical altercation as a result.[123] In one shocking case, an investigating FBI agent had an improper relationship with a former Russian mobster.[124] And then there was a more mundane case of prosecutors failing to turn over the disciplinary record of an officer who had taken fingerprints from the crime scene.[125] Finally, in multiple cases the government failed to disclose police reports with favorable evidence.[126] While there were some noteworthy police misconduct cases, they accounted for a relatively small part of our sample. Only 16 of the 123 pieces of evidence, or roughly 13%, involved police misconduct.

The bulk of the evidence withheld in the "favorable but not material" cases involved witnesses. These cases broke down into two major categories: (1) witness statements and (2) reasons to distrust a witness's testimony. First, we found 24 instances (20% of our sample) in which the government simply failed

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negative impressions of the defendant and affects liability judgements*); see also infra* notes 351-54 and accompanying text.

120. The list of scenarios is endless and, unfortunately, it is not clear what constitutes law enforcement impeachment evidence and what does not. *See* Thomas P. Hogan, *An Unfinished Symphony:* Giglio v. United States *and Disclosing Impeachment Material About Law Enforcement Officers*, 30 CORN. J.L. & PUB. POL'Y 715, 717 (2021) ("Despite the fact that *Giglio* has been settled precedent for almost 50 years, there is still a massive amount of confusion among prosecutors and police in the United States about law enforcement impeachment evidence.").

121. *See Ex parte* Lalonde, 570 S.W.3d 716, 726 (Tex. Crim. App. 2019).

122. *See* State v. Serfrere, 267 So. 3d 407, 408 (Fla. Dist. Ct. App. 2019).

123. *See* State v. Vickers, 560 S.W.3d 3, 22 (Mo. Ct. App. 2018).

124. *See* United States v. Bryant, 780 F. App'x 738, 740-41 (11th Cir. 2019).

125. *See* United States v. Lawson, 810 F.3d 1032, 1043-44 (7th Cir. 2016).

126. *See, e.g.*, Bales v. Bell, 788 F.3d 568, 574 (6th Cir. 2015).

to produce the statement of a relevant witness. These cases included prior grand jury testimony,[127] affidavits,[128] a video recording of victims' statements,[129] and statements in police reports.[130]

Far and away, though, the largest category of evidence in "favorable but not material" cases involved reasons to distrust witnesses—i.e., classic impeachment evidence. In 16 cases, the government failed to notify the defense that a witness, victim, or informant had a prior conviction or was the subject of a prior criminal investigation.[131] Many of these cases involved convictions for serious crimes. Just as shockingly, we found 20 cases where prosecutors failed to disclose deals or benefits to witnesses. For example, we identified 8 cases where witnesses had a (potential) plea deal with the government that was not disclosed.[132] In other cases, the prosecutor failed to disclose benefits that were conferred without an official agreement, such as the dismissal of misdemeanor charges against a witness.[133] Finally, we uncovered 5 cases in which the government failed to disclose that police had paid a witness.[134]

Witnesses can be impeached in other ways besides prior convictions or deals with the government. We found other such impeachment evidence in 18 cases that the government failed to disclose. These included cases where a witness was involved in a prior murder,[135] stole drugs,[136] asked for a benefit in exchange for cooperation,[137] said they felt threatened to testify,[138] was coached before trial,[139] had accused another individual of sexual assault in a rape case,[140] and had been ordered to undergo a mental health evaluation,[141] to name only some of the scenarios. Once again, recall that in each of these cases the courts found the evidence to be favorable but not material. That means that courts

127. *See* Andrews v. United States, 179 A.3d 279, 289 (D.C. 2018).

128. *See* Morris v. State, 530 S.W.3d 286, 291 (Tex. Ct. App. 2017).

129. *See* People v. Werkheiser, 171 A.D.3d 1297, 1305 (2019).

130. *See* Hill v. Wetzel, 279 F. Supp. 3d 550, 564 (E.D. Pa. 2016).

131. *See, e.g.*, People v. Pettie, 16 Cal. App. 5th 23, 71 (2019).

132. *See, e.g.*, Rosario v. Roden, 809 F.3d 73, 74 (1st Cir. 2015).

133. *See, e.g.*, United States v. Vigil, 632 F. App'x 893, 895 (9th Cir. 2015).

134. *See, e.g.*, State v. Butler, 263 So. 3d 195, 197 (Fla. Dist. Ct. App. 2019).

135. *See* Reis-Campos v. Biter, 832 F.3d 968, 972 (9th Cir. 2016).

136. *See* France v. Lucas, 836 F.3d 612, 630 (6th Cir. 2016).

137. *See* United States v. Mujahid, 611 F. App'x 402, 403 (9th Cir. 2015).

138. *See* Snow v. Pfister, 240 F. Supp. 3d 854, 881-82 (N.D. Ill. 2016), *aff'd*, 880 F.3d 857 (7th Cir. 2018).

139. *See* Lincoln v. Cassady, 517 S.W.3d 11, 18 (Mo. Ct. App. 2016).

140. *See* State v. Phillips, 125 A.3d 280, 281, 287 (Conn. App. Ct. 2015).

141. *See* Gibson v. Beard, 165 F. Supp. 3d 286, 303 (E.D. Pa. 2016), *aff'd sub nom.*, Gibson v. Sec'y Pa. Dep't of Corr., 718 F. App'x 126 (3d Cir. 2017).

reached the conclusion that the suppressed evidence did not create a reasonable probability of a different outcome.

How did courts conclude that impeachment evidence about witnesses was not material? They did so by contextualizing or minimizing the value of the impeachment evidence. For instance, in one case, while it surely looked bad for the police to pay a witness, a court suggested that the payments were only a small amount of money and were (ostensibly) not in exchange for testimony.[142] In another case, officers gave a witness bus fare to get out of town before he had to be a witness at trial.[143] There, the court focused on the small amount of the payment and the positive intentions of law enforcement.[144] In many other cases, courts pointed to the effective cross-examination of the witness at trial.[145] So even though witness payments or cooperation agreements should have been turned over, the fact that the witness was impeached in other ways convinced the courts that the withheld evidence could not have changed the outcome.

While the facts of each case are unique, we can draw at least one big-picture conclusion from the data and from courts' reasoning in this sample of cases: Courts are quite willing to find compelling impeachment evidence related to a witness's testimony to be immaterial. Although the Supreme Court has long included exculpatory and impeachment evidence in the same breath as potential causes of *Brady* violations, our data suggests that courts have shown a great deal of skepticism to the materiality of impeachment evidence.

2. Type of evidence when *Brady* violations were found

In Part II.C.1 above, we described the types of evidence in cases in which courts rejected *Brady* claims on materiality grounds. In this Subpart, we compare the "not material" cases to those cases in which courts found *Brady* violations. In other words, as a point of comparison, we explore here whether there are any differences in the type of evidence at issue when courts find withheld evidence to be material and thus a *Brady* violation.

This descriptive data shows four main findings about cases in which judges find *Brady* violations. First, and surprisingly, few *Brady* violations involve smoking gun forensic evidence, other physical evidence, or confessions that were withheld from defendants. Cumulatively, only 20% of *Brady* violations involved such evidence. Second, as in the cases where courts found evidence to be immaterial, the vast majority of *Brady* violation cases involved witness statements, witness deals, and other reasons to distrust witnesses. The evidence

142. *See* People v. Tyler, 39 N.E.3d 1042, 1082 (Ill. App. Ct. 2015) (minimizing the effect of the payments by citing the witness's statement that "[i]f I was going to be bought, I'd be bought [by] a little bit more than a first month's rent").

143. State v. Butler, 263 So. 3d 195, 197 (Fla. Dist. Ct. App. 2019).

144. *See id.* at 197-98.

145. *See, e.g.*, People v. Smith, 138 A.D.3d 1418, 1420 (2016).

in more than half of the *Brady* violation cases involved witnesses who testified at trial. Third, the frequency of different types of evidence in *Brady* violation cases was nearly identical to the frequency of such evidence types in failed *Brady* cases. For instance, 19% of *Brady* violation cases involved withheld witness statements. And 20% of cases where courts found evidence to be favorable but not material involved withheld witness statements. Finally, while a substantial number of courts found prior convictions to be "favorable but not material" evidence, almost none of the *Brady* violation cases involved withholding evidence related to a witness's criminal activity. Our sample was not large enough to test for statistical significance and therefore we cannot draw any definitive conclusions about courts' treatment of prior convictions. But our data suggests that courts may have a blind spot with respect to prior convictions that causes them to undervalue the significance of prior convictions for materiality purposes. Table 3 documents the types of evidence at issue in cases where courts found *Brady* violations.

Table 3

Types of Evidence in Cases of Successful *Brady* Claims[146]

Group	Total Instances of Withheld Evidence	Percentage
Physical Evidence	5	5%
Confessions	2	2%
Forensic Evidence and Related Testimony	12	13%
Witness Statements	18	19%
Deals or Benefits for Witnesses	15	16%
Prior Convictions or Investigations of Witnesses	2	2%
Other Reasons to Distrust Witnesses	16	17%
Police Misconduct	16	17%
Miscellaneous	7	8%
Total	93	N/A

As we noted in Part II.C.1, the *Brady* doctrine often leads one to think of prosecutors or police hiding smoking gun evidence in a drawer where no one would ever find it. So one might expect *Brady* violations to involve ironclad forensic evidence, other physical evidence, and confessions that exculpate the

146. For the underlying dataset, see *Brady* Database Coding Document of *Brady* Violation Cases (on file with the authors). Numbers in this Table add up to more than 81 cases (the number of cases in our sample) because some involved more than one piece of evidence.

defendant. Yet these types of evidence represented a relatively small fraction of *Brady* violations. Indeed, the number of pieces of withheld forensic evidence was actually lower in *Brady* violation cases than in cases where courts found favorable evidence to be immaterial. Thus, our first observation of note is that in this sample, most *Brady* violations did not involve exculpatory DNA evidence, other physical evidence, or confessions by third parties.

Instead, most *Brady* violation cases involved witness statements, witness deals, and other reasons to distrust witnesses.[147] In total, over half of the pieces of evidence in *Brady* violation cases involved information related to witnesses. A few of these cases involved statements by witnesses who remained hidden from the defense, who never testified at trial, and who could have exonerated the defendant.[148] More commonly, though, the withheld evidence was impeachment evidence that the defense could have used to weaken a witness on cross-examination. This includes prior inconsistent statements of witnesses,[149] benefits to witness (such as cash payments[150] and secret plea deals[151]), and other

147. The prevalence of witness statements is consistent with other scholars' analysis of *Brady* violations. For instance, in an extensive recent study of 386 *Brady* violations over an eighteen-year period, McAward found that "the largest category of suppressed evidence is witness statements (27%), which are typically recorded." McAward, *supra* note 64, at 919. Similarly, in a study of twenty-three wrongful convictions containing *Brady* violations, Jon Gould and colleagues found that "the vast majority of evidence constituted either witness statements (49%) or police reports (25%), with the remainder spread thinly between criminal records, expert reports, informants, log or time records, anonymous tips, or improper procedures." Gould et al., *supra* note 72, at 1080.

148. *See, e.g.*, People v. Rong He, 135 N.E.3d 1081, 1082 (N.Y. 2019) (describing a witness's statement that he saw two people—rather than one—thus, suggesting someone other than the defendant could have been the person to strike the blow); Haskins v. Superintendent Greene SCI, 755 F. App'x 184, 186 (3d Cir. 2018) (per curiam) (describing a letter from a witness saying that someone else committed the crime); Dennis v. Sec'y, Pa. Dep't of Corr., 834 F.3d 263, 276-77 (3d Cir. 2016) (en banc) (describing a withheld tip from a jailhouse informant that someone else confessed to the killing).

149. *See, e.g.*, *Dennis*, 834 F.3d at 276 (describing a witness's statement to police that another individual had said that she recognized the assailant, in turn contradicting that individual's earlier statement that she'd never seen him before); State v. Serigne, 193 So. 3d 297, 318 (La. Ct. App. 2016) (describing a victim's prior inconsistent grand jury testimony in rape case that she had never had sex with defendant), *rev'd*, 232 So. 3d 1227 (La. 2017).

150. *See, e.g.*, McClendon v. State, 820 S.E.2d 167, 170-71 (Ga. Ct. App. 2018) (describing a witness paid by police, including hotel expenses paid for by the prosecution); Thomas v. Westbrooks, 849 F.3d 659, 661 (6th Cir. 2017) (describing an FBI payment of $750 to a key witness).

151. *See, e.g.*, Birano v. State, 426 P.3d 387, 408 (Haw. 2018) (explaining how an unwritten agreement existed between a codefendant and the prosecutor that the codefendant would testify at the defendant's trial in exchange for the prosecutor's recommendation of sentencing as a youth); State v. Lankford, 399 P.3d 804, 831-32 (Idaho 2017) (failing to disclose that the prosecutor promised the key witness to provide an effort to get him out of prison, obtain probation, and confer with the relevant office handling the witness's probation case).

reasons to distrust witnesses.[152] In one remarkable case, prosecutors failed to disclose that a witness only identified the defendant after being hypnotized.[153]

The frequency of "witness evidence" was remarkably similar between *Brady* violations and the "favorable but material" cases. As Table 4 shows below, a nearly identical percentage of evidence in *Brady* violation cases and "favorable but not material" cases—19% and 20% respectively—involved withheld witness statements.

Table 4

Comparison of *Brady* Violations and Cases with "Favorable but Not Material" Evidence

Group	***Brady* Violations**	**"Favorable but Not Material" Cases**
Physical Evidence	5%	7%
Confessions	2%	2%
Forensic Evidence and Related Testimony	13%	8%
Witness Statements	19%	20%
Deals or Benefits for Witnesses	16%	16%
Prior Convictions or Investigations of Witnesses	2%	13%
Other Reasons to Distrust Witnesses	17%	15%
Issues with Police	17%	13%
Miscellaneous	8%	7%

Indeed, the data in Table 4 shows remarkable similarities between the frequency of multiple different types of evidence in *Brady* violation cases and instances where courts rejected *Brady* claims on materiality grounds. This, in turn, suggests that *Brady* claims fail on materiality grounds not because courts tend to dismiss a particular type of impeachment evidence but rather because of the high materiality standard.

However, one type of evidence merits further attention. As Table 4 demonstrates, there is a disparity between *Brady* violations and "favorable but not material" cases for evidence about prior convictions and investigations of witnesses. Notably, we did not find a single case where a court found a *Brady*

152. *See, e.g.*, People v. Giuca, 158 A.D.3d 642, 644 (2018) (explaining how a prosecutor appeared on behalf of a witness in his criminal case to inform the court of his cooperation and discussed with a caseworker the possibility of getting the witness back into a drug treatment program which he had failed out of), *rev'd*, 128 N.E.3d 655 (N.Y. 2019).

153. *See* Sims v. Hyatte, 914 F.3d 1078, 1084 (7th Cir. 2019).

violation because the prosecution failed to disclose a witness's prior criminal conviction. And we only identified two cases in which courts based a *Brady* violation on the prosecution's failure to disclose that a witness was the subject of a law enforcement investigation. One case involved a white-collar prosecution in which the SEC (rather than a more traditional law enforcement agency) was investigating a witness.[154] The other case was a more traditional drug trafficking prosecution in which the prosecutor encouraged the police to wait until after trial to arrest the witness for a crime.[155]

The fact that no *Brady* violations were based on withheld prior convictions of witnesses (and only two cases involved law enforcement investigation into witnesses) is notable when compared to our sample of cases where courts rejected *Brady* claims on materiality grounds. Our sample included sixteen cases where courts found that the prosecutor's failure to disclose a witness's prior conviction was favorable but not material. Thus, prior convictions and law enforcement investigations of witnesses amounted to 13% of our "favorable but not material" sample, compared to only 2% of our *Brady* violation sample.

In some cases, the disparity is easily explainable. If the prosecutor turned over multiple prior convictions of a witness, but missed one, a court might find the withheld evidence to be of little additional value. Or if defense counsel did a stellar job of impeaching the witness with other damaging evidence, the single missing conviction might seem insignificant. Additionally, as noted above, our sample was not large enough to assess statistical significance or to draw any definitive conclusions about courts' responses to prior convictions. Nevertheless, our data suggests that courts may have a blind spot that unduly minimizes the importance of prior convictions. Further research into this question may prove illuminating.

D. Types of Reasoning

Understanding whether courts are more willing to find *Brady* violations for exculpatory, as opposed to impeachment, evidence helps to show the picture of how courts decide *Brady* cases. But looking only at outcomes and types of evidence does not provide a full picture. To truly grasp how *Brady* materiality claims are decided in practice, it is important to understand the type of reasoning courts are employing.

The first question we explore in this Subpart is whether courts are applying the correct legal standard. Second, we consider whether courts are conducting thorough reasoning or whether they are quickly disposing of cases in a perfunctory fashion. Third, when courts do dig into the *Brady* claims and thoroughly analyze them, we explore what kind of analysis they are using. We

154. *See* United States v. Parker, 790 F.3d 550, 557-58 (4th Cir. 2015).

155. *See* State v. Sandy, 788 S.E.2d 200, 203 (N.C. Ct. App. 2016).

explain that some courts incorrectly focus on the guilt of the defendant (guilt-based analysis), while other courts correctly conduct an "evidence-based" analysis that focuses on how the jury would have been influenced by the withheld evidence in the context of the rest of the evidence.

1. Utilizing the correct legal standard

The *Brady* materiality standard provides that courts should only find a violation if they conclude the withheld, favorable evidence creates "a reasonable probability that, had the evidence been disclosed to the defense, the result of the proceeding would have been different."[156] A "reasonable probability" of a different result is shown when the government's evidentiary suppression "undermine[s] confidence in the outcome" of the trial.[157] This means the defendant must show "that the favorable evidence could reasonably be taken to put the whole case in such a different light as to undermine confidence in the verdict."[158]

The appellate courts in our sample did a good job of enunciating the governing legal test under *Brady*. Of the 103 cases where courts rejected *Brady* claims on materiality grounds, 93 correctly stated the test. In 9 cases, the courts never stated that the governing standard is a "reasonable probability" of a different outcome.[159]

Only a single court incorrectly stated the legal test for finding a *Brady* violation. In *State v. Kilgore*, the defendant was on trial for attacking his tenant.[160] On the morning of trial, the prosecution added a witness and told the defendant that the witness had a prior conviction for drunk driving.[161] Only after the case went to the jury did the defense discover (without being told by the prosecution) that the witness had multiple other prior convictions, including leaving the scene of an accident and stealing, which may have been useful information on cross-examination relevant to the witness's veracity.[162] On appeal, the Missouri Court of Appeals erroneously increased the burden that Kilgore had to meet to demonstrate a *Brady* violation. The court stated that "the evidence was not material . . . because even if the State had conducted the background check and produced the felony background information to defense counsel, we cannot say with *certainty* it would have made a difference in the

156. United States v. Bagley, 473 U.S. 667, 682 (1985) (plurality opinion).

157. *Id.* (quoting Strickland v. Washington, 466 U.S. 668, 694 (1984)).

158. Kyles v. Whitley, 514 U.S. 419, 435 (1995).

159. *See Brady* Database Coding Document of Favorable but Not Material Cases, *supra* note 93 (to locate, navigate to column E, labeled "Never Mentioned Standard").

160. 505 S.W.3d 362, 364 (Mo. Ct. App. 2016).

161. *See id.* at 365.

162. *Id.* at 366.

trial's outcome."[163] But "certainty," of course, is not the *Brady* standard. A defendant must demonstrate a "reasonable probability" that the outcome would be different, a far lower standard. Fortunately, the *Kilgore* court's application of the incorrect legal standard stood alone in a sample of more than 100 cases. Unfortunately, as we discuss below, some courts cite the correct legal standard only to sidestep it by using an inadequate or incorrect analysis.

2. Depth of analysis

Reciting the correct legal standard is only the beginning of a court's job in assessing a *Brady* claim. The court must engage with the facts in order to analyze the merits of the claim. Because the *Brady* standard is a high burden for the defendant to meet, there is a temptation for courts to quickly say that the evidence was not material and to quickly reject the *Brady* claim. In analyzing each "favorable but not material" case, we unfortunately found several cases where courts took unacceptable shortcuts.

This Subpart considers three common worrisome approaches that courts utilized. First, some courts used "conclusory analysis," in which they simply identified the withheld evidence and then said it would not create a reasonable probability of a different outcome. In these cases, courts did not engage in any legal reasoning; they simply stated a conclusion. Second, a few courts went a step beyond conclusory analysis to at least offer some explanation of why they found the withheld evidence to be immaterial. Still, these courts used legal reasoning that was so thin as to be no more than a "bare-bones analysis." Third, an even larger number of courts offered more robust analysis but leaned heavily on labels such as "overwhelming," "extensive," "large," "compelling," "substantial," "significant," or a "mountain of evidence" to find withheld evidence to be immaterial.[164]

a. Conclusory analysis

Reflecting the summary nature of many post-conviction rulings, we found four cases with entirely "conclusory" analyses. The legal reasoning in each was nearly nonexistent and amounted to the court saying, "trust us." We offer a few examples to demonstrate what flawed conclusory analysis looks like.

In a New York case, the defendant contended that the prosecution failed to disclose a witness's prior conviction for petty larceny.[165] The court did not discuss the evidence presented at trial, the witness's testimony, or anything else that might determine whether the witness's prior conviction would have been significant to a jury. Instead, the court's discussion amounted to a single

163. *Id.* at 368 (emphasis added).

164. *See, e.g.*, *supra* notes 25-28 and accompanying text (discussing some of these cases).

165. People v. Taylor, 148 A.D.3d 1607, 1609 (2017).

conclusory sentence: "[W]e conclude that there is no 'reasonable possibility' that the information 'would have changed the result of the proceedings.'"[166]

The Florida Supreme Court used similarly thin "analysis" in response to a defendant's claim that the prosecution failed to disclose an FBI file about DNA testing.[167] The court simply said that "[a]fter carefully reviewing the record, we conclude that even if the FBI file was suppressed and favorable to the defense, the materiality prong under *Brady* has not been met."[168] The court also discussed efforts by the defense to impeach an FBI agent who served as a hair examiner, and it discussed a *Brady* claim regarding the notes of that FBI hair examiner.[169] The prosecution did not disclose that the work of the hair examiner had been found to be scientifically improper, that the FBI itself had confessed error in his cases, or that the FBI had agreed to a national audit of all hair examination work by the entire unit that the former agent had supervised.[170] Multiple pieces of evidence were found not to raise *Brady* issues, even though the forensics in the case may have been tainted by erroneous testimony.[171]

In Louisiana, a decision by the state supreme court also failed to offer an adequate explanation for finding suppressed police reports to be immaterial.[172] The undisclosed police reports indicated that pliers allegedly used by the defendant did not match cuts made at two crime scenes.[173] The court explained away the withheld police reports, though, without discussing the importance of the pliers at trial or what the undisclosed police reports said about the pliers.[174]

b. Bare-bones analysis

In addition to the four cases with entirely conclusory analysis, we also found cases in which the courts offered *some* analysis but were still extremely perfunctory in their explanation for finding the evidence to be immaterial.

166. *Id.* (quoting People v. Fuentes, 907 N.E.2d 286, 289 (N.Y. 2009)).

167. For the Supreme Court of Florida's discussion, see *Bogle v. State*, 213 So. 3d 833, 844-45 (Fla. 2017) (per curiam).

168. *Id.* at 845.

169. *See id.* at 844.

170. *See id.* at 839 n.3 (noting the receipt of a letter from the U.S. Department of Justice concerning a review of the agent's testimony in hair cases). For an overview of the FBI hair audit, see Brandon L. Garrett, *Bad Hair: The Legal Response to Mass Forensic Errors*, LITIG., Summer 2016, at 33-35.

171. *See Bogle*, 213 So. 3d at 844; *see also FBI Testimony on Microscopic Hair Analysis Contained Errors in at Least 90 Percent of Cases in Ongoing Review*, FBI (Apr. 20, 2015), https://perma.cc/MJ2Y-22TM ("[T]he FBI has concluded that the examiners' testimony in at least 90 percent of trial transcripts the Bureau analyzed as part of its Microscopic Hair Comparison Analysis Review contained erroneous statements.").

172. *See* State v. Blank, 192 So. 3d 93, 102 (La. 2016) (per curiam).

173. *See id.*

174. *See id.*

These cases are what we might think of as "conclusory plus" or "bare-bones" analysis.

The Ninth Circuit's decision in *United States v. Mujahid*[175] is an example of bare-bones analysis. Mujahid was charged with being a felon in possession of a firearm.[176] The government failed to disclose impeachment evidence related to an important witness.[177] Specifically, "[t]he evidence not furnished by the prosecution related to ongoing investigations into the Witness's criminal and civil wrongdoing, his cooperation with the government's investigation of Mujahid, and his attempts to avoid prosecution in other matters in exchange for his cooperation."[178] The court found the evidence immaterial, and offered only the barest of reasoning:

> Using other evidence disclosed by the prosecutor, Mujahid was able sufficiently to impeach the Witness, and the jury was instructed to view his testimony with caution. Even if the Witness's credibility had been further undermined and substantive evidence of his criminal activity had been presented, we are confident that the jury would have convicted Mujahid, in light of the very strong evidence that he knowingly possessed a firearm. Accordingly, despite the government's failure to disclose certain pieces of evidence, Mujahid received a "trial resulting in a verdict worthy of confidence."[179]

The court did not explain what criminal and civil investigations were ongoing against the witness. It offered no details on the level of cooperation and whether the witness received any benefits for his cooperation. And while the court acknowledged that the witness "attempt[ed] to avoid prosecution in other matters,"[180] the court offered no details about that very salient fact.

On the other side of the ledger, the court said the witness's credibility was undermined,[181] but it never explained how. Most importantly, the court never offered a counterfactual assessment of how the jury might have grappled with the withheld evidence. Instead, the court leaned heavily on the blanket statement that there was "very strong evidence" against the defendant.[182] The court's analysis was thus bare bones and affords no opportunity to see how the court reached its conclusion.

A Missouri court used similarly thin reasoning in a burglary and sexual assault case. The prosecution failed to disclose that a witness named Kelley "testified while facing a felony check charge filed by the same prosecutor's

175. 611 F. App'x 402 (9th Cir. 2015).

176. *Id.* at 403.

177. *See id.*

178. *Id.*

179. *Id.* (quoting United States v. Olsen, 704 F.3d 1172, 1185 (9th Cir. 2013)).

180. *Id.*

181. *Id.*

182. *Id.*

office."[183] The defense lawyer learned of the pending charges from seeing Kelley in court several weeks later.[184] The withheld impeachment evidence was favorable because the prosecution portrayed Kelley "as a pillar of the community, which the defense could have assailed had it known Kelley had a charge pending."[185] The court's materiality analysis was limited to a single paragraph.[186] The court noted that the victim identified the defendant's clothing.[187] But it minimized Kelley's importance by saying, inter alia, that "some (perhaps much) of Kelley's testimony was cumulative," and that its "confidence in the verdict [was] not shaken by non-disclosure of a charge against Kelley involving two $20 checks."[188]

The court's analysis was bare bones. It failed to explain what testimony Kelley provided, thus making it impossible to understand whether Kelley was an important witness. While the court said that some of Kelley's testimony was cumulative,[189] it did not say which parts. The court also did not discuss the circumstances of the check fraud charge,[190] leaving us to guess at the level of Kelley's alleged dishonesty. Perhaps Kelley was a minor witness with no significant testimony, but the court failed to support such a conclusion.

A third example of bare-bones analysis can be found in a Ninth Circuit bribery case, *United States v. Vigil*.[191] The prosecution at trial relied on a witness named Gillis.[192] The court never provided Gillis's full name or explained what kind of testimony Gillis offered. The prosecution did not disclose some information relating to the dismissal of misdemeanor charges against Gillis, nor did it disclose any information related to Gillis's medical condition and use of OxyContin.[193] The court found the withheld information immaterial because there were undercover recordings and "an extensive paper trail" and "[a] few questions about Gillis's medical conditions would not likely have changed the outcome."[194]

Once again, the court failed to engage with the facts of the case and the significance of the withheld evidence. We have no idea what the undercover recordings showed or how well the "paper trail" linked the defendants to the

183. State v. Henderson, 468 S.W.3d 422, 426 (Mo. Ct. App. 2015).

184. *Id.*

185. *See id.* (describing the witness using Henderson's argument).

186. For the court's one-paragraph analysis, see *id.*

187. *See id.*

188. *Id.*

189. *Id.*

190. *See id.*

191. 632 F. App'x 893, 895-96 (9th Cir. 2015).

192. *See id.* at 895.

193. *See id.* at 895-96 (discussing the basis of the *Brady* claim).

194. *Id.* at 896.

crime. The court did not tell us whether Gillis was the key witness, one of many key witnesses, or a minor figure in the trial. And we have no idea whether the withheld information would have led a jury to question everything Gillis told them. In short, while the court offered some "bare-bones" reasoning, it failed to offer adequate *Brady* analysis.

c. Reliance on labels such as "overwhelming evidence"

In 21 of the 103 cases in our sample (or roughly 20%), courts used powerful adjectives to describe the strength of the evidence against the defendant.[195] Courts described the evidence as "overwhelming," "extensive," "large," "compelling," "substantial," "significant," and a "mountain" of evidence.[196] There is both an appropriate and inappropriate way for courts to use such labels.

First, courts can use labels like "overwhelming evidence" as a vehicle to reject *Brady* claims without any substantive analysis, in effect sidestepping the question of whether the suppressed evidence would have had a reasonable probability of affecting the outcome at trial. In other words, "overwhelming evidence" could simply serve as a label for courts to lean on in rejecting *Brady* claims without truly analyzing the withheld evidence. That is the guilt-based analysis, occasionally pointed out to be incorrect by the U.S. Supreme Court and carefully dissected and critiqued by then-Chief Judge Edwards.[197]

For example, in *United States v. Mujahid*, which we discussed above as a "bare-bones" analysis case, the prosecution failed to disclose impeachment evidence about a criminal investigation of a witness and the witness's attempt "to avoid prosecution in other matters in exchange for his cooperation."[198] In addition to ruling in a highly summary or "bare-bones" fashion, the court also failed to conduct a proper materiality analysis. It did not explain the criminal investigation or offer details on the degree of cooperation and any benefits the witness sought. Instead, the court brushed aside the withheld evidence "in light of the very strong evidence"[199] that the defendant was guilty. The phrase "very strong evidence" did a lot of work in the court's opinion. It was not the conclusion to a cogent analysis—it was the only analysis.

The Ninth Circuit used a similarly flawed approach in *United States v. Vigil*, the bribery case discussed above.[200] There, the prosecutor failed to turn over

195. *See Brady* Database Coding Document of Favorable but Not Material Cases, *supra* note 93.

196. *See, e.g.*, *supra* notes 25-28 and accompanying text (discussing some of these cases).

197. *See* Edwards, *supra* note 23, at 1194-95.

198. *See* 611 F. App'x 402, 403 (9th Cir. 2015).

199. *Id.*

200. 632 F. App'x 893, 895-96 (9th Cir. 2015).

evidence about a witness's use of OxyContin.[201] The court found that the evidence was not material because the "government had a strong case."[202] The court followed that conclusion with only two sentences of reasoning in which it claimed (without elucidation) that audio recordings and a "paper trail" ensured the outcome would not be different.[203]

Not all courts that used language like "overwhelming evidence" over-relied on those strong adjectives, however. Indeed, most courts that used adjectives like "overwhelming" did so with much greater care. These courts spoke about the "overwhelming" or "compelling" or "substantial" nature of the evidence only as a concluding thought after analyzing the evidence.

For example, in *Commonwealth v. Natividad*, the prosecution failed to disclose evidence of a confession by a third party.[204] At the outset of its discussion, the Supreme Court of Pennsylvania acknowledged that the materiality question was a "close call" but concluded "the Commonwealth's evidence against appellant was so overwhelming [that] there is no reasonable probability that if the Commonwealth had turned over the relevant evidence the result of the trial would have been different."[205] If the court had stopped there, its analysis would have been conclusory and inappropriate. But the court then spent a half-dozen pages analyzing the evidence presented at trial and carefully considering how the withheld evidence would not have undermined the trial evidence.[206] In particular, the court observed that the withheld evidence did not overcome the trial evidence that the defendant was present at the scene of the carjacking of which he was convicted.[207] Instead, the most the defendant could offer was amorphous speculation he might have had a different, unspecified defense had the withheld evidence been turned over.[208]

In another case, *State v. Wayerski*, the Supreme Court of Wisconsin commented on the "compelling evidence" of the defendant's guilt.[209] The court used the "compelling evidence" label as a supplement, not as its primary analysis. There, the government failed to disclose a witness's pending criminal charges.[210] However, the court noted that the defense impeached the witness with his "20 prior convictions."[211] And the court explained that the jury heard testimony

201. *See id.* at 895.

202. *Id.*

203. *See id.* at 895-96.

204. *See* 200 A.3d 11, 29-30 (Pa. 2019).

205. *Id.* at 32-33.

206. For the court's discussion, see *id.* at 33-38.

207. *See id.* at 36.

208. *See id.* at 37-38.

209. 922 N.W.2d 468, 483 (Wis. 2019).

210. *Id.*

211. *Id.*

from multiple other witnesses, and that the chance of the DNA found in the defendant's apartment belonging to anyone but the victim was "one-in-28-quintillion."[212] Thus, the reference to the "compelling evidence" was a summary of the court's reasoning, not a substitute for the reasoning itself.

In sum, while a few courts over-relied on labels like "overwhelming evidence" to avoid explaining why evidence was immaterial, most courts were more careful. In most cases, courts conducted a legitimate assessment of the evidence and used strong adjectives as a summary after their analysis.

3. Guilt-based vs. evidence-based analysis

In the majority of cases, courts conducted detailed analysis when assessing the materiality of withheld evidence. But the quantity of the analysis is not the only relevant inquiry. The quality of a court's analysis is also important. And some courts improperly used "guilt-based" analysis that focused on how guilty the defendant appeared to be, rather than on the actual application of the materiality standard. Guilt-based analysis focuses on the evidence against the defendant at trial rather than the withheld evidence and how the defendant would have used it.[213] Guilt-based analysis is problematic, as then-Chief Judge Edwards explained well, because it allows courts to emphasize the trial evidence without accounting as much, or at all, for the evidence that was withheld.[214]

By contrast, other courts conducted what we coin "evidence-based" analysis—as demanded by the *Brady* doctrine. These courts analyzed the withheld evidence and explored the counterfactual of how the factfinder might have considered that evidence and whether, in the context of all the evidence, the outcome would have been different. Evidence-based analysis focuses upon the constitutional question: What is the withheld evidence and what effect would it have had in the context of the full case?[215]

Examples of evidence-based analysis show why this analysis effectuates a court's correct *Brady* inquiry. Consider *People v. Pettie*, an attempted murder case from California, where the victim's mother testified at trial.[216] Because she was a last-minute witness, prosecutors failed to check and disclose her prior misdemeanor convictions.[217] The court explained that the evidence was favorable to the defense because it was impeachment evidence.[218] But the withheld evidence about prior convictions wasn't material because the victim's

212. *See id.*

213. *See supra* note 23 and accompanying text.

214. *See* Edwards, *supra* note 23, at 1170-71.

215. *See supra* note 22 and accompanying text.

216. 16 Cal. App. 5th 23, 71 (2017).

217. *See id.* at 72.

218. *See id.* at 72-73.

mother was a minor witness and because the convictions were from decades earlier.[219]

The court's focus in *Pettie* was on what the jurors would have done with the prior conviction evidence had they been able to consider it. The court noted that while the witness "provided corroboration for some of [the victim's] statements to police, [the witness] was secondary to the prosecution's case."[220] The court also explained that "the prosecution could have proven all the charges without her beyond a reasonable doubt."[221] The court's analysis was therefore evidence based because it considered what the withheld evidence would have added to the defendant's case. It was not limited to analyzing the evidence presented at trial.

Now, let us contrast evidence-based analysis with the more concerning guilt-based analysis that focuses on the defendant's guilt based on what was presented at trial. A recent federal habeas decision provides a straightforward picture of the problem. In *Hill v. Wetzel*, a double murder case, the defendant suffered from "cognitive impairment, borderline intelligence, bipolar disorder, and PTSD."[222] The prosecution's evidence at trial was thin. "No fingerprints, fibers, or strands of hair were recovered linking Ms. Hill to the crimes," nor was there any DNA.[223] The main evidence was the confession of the defendant herself who, as noted, suffered from a number of cognitive challenges.[224] The prosecution failed to disclose what the court described as "clearly exculpatory" evidence from the Philadelphia Police Department's homicide files:

> The allegedly withheld documents contained statements from neighbors contradicting the Commonwealth's theory about when [one victim] was killed, documents supporting [Hill's] initial statement to police that [someone else], and not she, had committed the [second] murder, and a statement by [a witness] contradicting [that witness's] later testimony about [Hill] possessing a watch taken from the scene of the crime.[225]

When it came time to assess materiality, however, the court did not engage with a single piece of the withheld evidence.[226] The court never analyzed how any of the withheld evidence could have impacted the jury's assessment of the case. Instead, the court simply noted that Hill had confessed and cited a study by a psychologist indicating that confessions are often powerful evidence.[227]

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219. *See id.* at 73.

220. *Id.*

221. *Id.*

222. 279 F. Supp. 3d 550, 555 (E.D. Pa. 2016).

223. *Id.* at 556.

224. *Cf. id.* (describing various types of evidence against the defendant but then minimizing the impact of each except for the confession).

225. *Id.* at 564.

226. *See id.* at 564-65.

227. *See id.* at 564.

The court's guilt-based analysis was particularly problematic because some of the withheld evidence supported Hill's earlier statement to police that someone else had committed the crime.[228] In other words, to properly analyze the evidence (under an evidence-based analysis) the court would have had to discuss how the withheld evidence about Hill's earlier statement did or did not undermine her later confession. The court did no such thing, though, and simply focused on the evidence presented at trial.

Another example of flawed guilt-based reasoning can be found in the Supreme Court of Arkansas' decision in *Davis v. State*.[229] In that robbery and kidnapping case, the prosecution failed to disclose a deal with a key witness that enabled them to serve their time in a lower-security facility rather than in prison—what the court called a "sweeter deal" than prison time.[230] The defendant contended that, had the prosecution disclosed the deal, the witness's testimony "would have been discredited."[231]

In finding the withheld evidence immaterial, the Supreme Court of Arkansas cited to "the trial transcript" and "[trial] exhibits" and recounted the evidence against the defendant.[232] However, the court never analyzed the withheld evidence. The court never discussed the testimony of the key witness and whether or not the jury would have discounted that testimony if it had known of the "sweeter deal"[233] the witness received in exchange for testifying.

The Sixth Circuit used similarly poor reasoning in *France v. Lucas*.[234] That case arose from a large-scale drug sting operation in which Jerrell Bray was a crucial undercover informant.[235] The Sixth Circuit explained that "[a]s a result of Bray's controlled [drug] buys, law enforcement arrested and prosecuted over two dozen individuals."[236] There was no question that Bray was a crucial witness in the case. Yet the prosecution failed to disclose misconduct by Bray—including that he was stealing drugs, stealing money, using his own drugs in deals, and staging phone calls.[237]

The Sixth Circuit acknowledged that the withheld evidence could be used to impeach Bray, but the court found that evidence to be immaterial.[238] The court's only explanation for that conclusion, though, was to cite other evidence

228. *See id.* at 556.

229. For the court's reasoning, see 574 S.W.3d 666, 670 (Ark. 2019).

230. *Id.* at 668, 670.

231. *Id.* at 669.

232. *See id.* at 670.

233. *Id.*

234. For the court's reasoning, see 836 F.3d 612, 630-31 (6th Cir. 2016).

235. *See id.* at 617.

236. *Id.* at 617-18.

237. *See id.* at 630.

238. *See id.* at 630-31.

against the defendants.[239] The court gave no reason to discount the seriousness of the withheld evidence. It did not review how the withheld evidence would have impacted the factfinder's view of Bray's testimony. In short, the court pointed to the trial record and said that it showed the defendant was guilty—a guilt-based analysis.

As we have made clear, evidence-based analysis is the correct way for courts to assess a *Brady* claim. And in 53% of the cases in our sample (55 of 103 cases), courts used exclusively evidence-based analysis.[240] Thus, in slightly over half of cases, courts used the correct approach to analyzing materiality.

In more than one-third of cases (38 of 103), courts used both evidence-based and guilt-based reasoning.[241] Far more concerning, in 7% of cases (7 of 103) courts *only* used guilt-based reasoning.[242]

Table 5

Types of Analysis[243]

Group	Total Cases	Percentage
Evidence-Based Only	55	53%
Evidence & Guilt Based	38	37%
Guilt-Based Only	7	7%
Conclusory (i.e., Not Evidence or Guilt-Based)	4	4%

III. Conclusions About Application of the Materiality Standard

Part II above provided a detailed analysis of the 103 cases in our study where courts found withheld evidence to be favorable but not material. Part II documented how courts seem to be less willing to find impeachment evidence to be material. Part II also detailed the types of favorable evidence (e.g., prior convictions) where courts found dismissed impeachment evidence as immaterial. And Part II documented the type of legal analysis—including flawed guilt-based reasoning—that courts undertook to determine evidence was not

239. *See id.*

240. *See Brady* Database Coding Document of Favorable but Not Material Cases, *supra* note 93.

241. *See id.*

242. *See id.* Four cases in our sample utilized conclusory analysis with no reasoning at all. Those cases are *People v. Werkheiser*, 171 A.D.3d 1297 (2019); *People v. Taylor*, 148 A.D.3d 1607 (2017); *Bogle v. State*, 213 So. 3d 833 (Fla. 2017) (per curiam); and *State v. Blank*, 192 So. 3d 93 (La. 2016).

243. The total number of cases for Table 5 is 104, rather than 103 (which is the number of cases in our sample). The reason is that one case had multiple types of withheld evidence and courts used different types of analysis. For one piece of evidence, the court used conclusory reasoning, while it used guilt-based and evidence-based reasoning for all of the other evidence. *See Bogle*, 213 So. 3d at 842-45.

material. In this Part, we draw some overarching conclusions about the successes and failures of courts' materiality analysis. We begin with the positives.

A. Many Courts Conducted Correct Materiality Analysis

Almost all courts set out the correct legal standard for assessing materiality. Most courts then conducted a detailed review of the *Brady* claim and clearly grappled with whether the withheld evidence was material. And in a majority of cases, courts conducted evidence-based analysis. That means most courts asked the right questions: How would the withheld evidence have affected the evidence presented at trial? And would the withheld evidence create a reasonable probability of a different outcome?

One final positive note is that for most cases we reviewed, the courts' decisions to find the evidence immaterial seemed plausible. Of course, we were not privy to the trial transcripts, nor did we review the briefs filed by the defendants alleging a *Brady* violation. As such, it is of course possible that courts presented a misleading picture of the *Brady* claim and thus conducted a flawed materiality analysis. Moreover, it is also important to note that while the Authors have read hundreds of *Brady* cases, we have no particular claim to expertise about what evidence should be found to be material and what should not. The materiality standard is fact-based and involves a counterfactual inquiry about the value of evidence that was not actually presented. Reasonable minds can differ as to whether withheld evidence would actually have mattered to jurors. So readers should not overvalue our interpretation of the judicial decisions.

With those caveats in mind, our conclusion from reading the 103 cases in the sample was that, in the vast majority of cases, courts made seemingly reasonable determinations that evidence was not material. For instance, in one case the prosecution withheld evidence that a key witness had pending criminal charges.[244] However, the jury was informed at trial that the same witness had twenty prior convictions.[245] It seems altogether plausible for a court to conclude that one withheld conviction would not have changed matters if the jury was unpersuaded by twenty other prior convictions.

In another case, the prosecution failed to disclose documents related to a witness's relationship with law enforcement as a possible confidential informant, as well as a plea offer.[246] Once again, that sounds like very valuable impeachment evidence. However, the jury was told that the witness "was convicted for twenty-three felonies—including armed robbery, armed burglary, aggravated assault, home invasion, and resisting arrest—which he pled guilty to

244. *See* State v. Wayerski, 922 N.W.2d 468, 473-74 (Wis. 2019).

245. *See id.* at 483.

246. *See* Rivera v. State, 187 So. 3d 822, 838 (Fla. 2015) (per curiam).

pursuant to a plea deal that provided for only a seven-year sentence."[247] The jury was aware that there was a plea agreement, such that the witness "did not expect to be incarcerated for more than two and a half years despite the large number of serious felony convictions, and hoped to receive a benefit from his testimony."[248] Once again, it seems reasonable to conclude (without testing how jurors would in fact rule) that the withheld evidence in this case was not material.

B. Problems with the Materiality Standard

While many courts engaged in competent analysis and reached reasonable conclusions, our sample of 103 cases demonstrated there are still significant problems with the materiality standard. First, we observe in these cases that the materiality standard can lead to intentional misconduct not being labeled as *Brady* violations. When courts find withheld evidence to be immaterial, the prosecutors or police who have purposefully engaged in misconduct are rarely if ever admonished and stigmatized as someone who committed a *Brady* violation. This, in turn, can lead to inadequate deterrence.

Second, and relatedly, we observed in these cases how the use of the materiality prong can lead to inadequate corrective action for communication errors between prosecutors and police. As we described, many cases of "favorable but not material" evidence involved undisclosed witness statements and benefits afforded to witnesses. Some of this evidence was withheld inadvertently because of poor communication between police and prosecutors. When that miscommunication does not lead to a *Brady* violation and reversal of a conviction, the key players in the criminal justice system are not incentivized to improve their coordination and communication.

Third, the high burden to demonstrate materiality leads to some questionable cases being upheld.

Fourth, the Supreme Court's lack of recent or specific guidance to lower courts on how to conduct materiality analysis leads to some courts conducting "guilt-based" rather than "evidence-based" analysis. We discuss each of these problems in more detail below.

1. Intentional misconduct is not labeled as a *Brady* violation

Prosecutors' failure to comply with *Brady* is a serious problem plaguing the criminal justice system[249]—leading some observers to label *Brady* violations to

247. *Id.* at 839.

248. *Id.*

249. *See* sources cited *supra* note 72; ANGELA J. DAVIS, ARBITRARY JUSTICE: THE POWER OF THE AMERICAN PROSECUTOR 131 (2007) ("*Brady* violations are among the most common

footnote continued on next page

be an "epidemic."[250] And even though some *Brady* violations are the product of flagrant prosecutorial misconduct, many well-meaning ethical prosecutors face cognitive biases that prevent them from appreciating and acknowledging that some of their peers have flouted their *Brady* obligations.[251] Moreover, some prosecutors' offices provide inadequate *Brady* training, leading to a lack of awareness of their *Brady* obligations and thus inadvertent violations.[252]

The *Brady* doctrine's materiality prong poses a serious problem on both the intentional and accidental misconduct fronts. A *Brady* violation is a serious finding. The prosecutor who handled the case is left with a mark that stains their reputation and may affect their future employment.[253] And for other prosecutors, seeing a case from their office labeled as a *Brady* violation is a teachable moment. It is hard to imagine such stigma or education coming from a court affirming a conviction because any withholding of favorable evidence was immaterial.[254] Put differently, flagrant misconduct becomes less salient when a court says it was not important enough to result in a reversal.

Consider a case from our study where the materiality prong saved a federal prosecutor who committed egregious misconduct. In *United States v. Garcia*, prosecutors brought a RICO case involving murders, robberies, drug trafficking, and other felonies.[255] Prosecutors built their case in substantial part based on a cooperating witness who agreed to plead guilty.[256] The prosecutors disclosed the plea agreement, which provided that "the government would dismiss four of his six charges, refrain from filing additional charges, recommend an offense-level reduction under the sentencing guidelines, and file a substantial-assistance motion to further reduce his sentence."[257] However,

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forms of prosecutorial misconduct."); Vida B. Johnson, *Federal Criminal Defendants Out of the Frying Pan and Into the Fire?* Brady *and the United States Attorney's Office*, 67 CATH. U. L. REV. 321, 323 (2018) ("*Brady* violations are the most common form of prosecutorial misconduct cited by courts when overturning convictions."); Garrett, *supra* note 45, at 54 (noting that *Brady* claims involving exculpatory evidence are among the most common fair trial claims brought in civil wrongful conviction cases).

250. *See, e.g.*, United States v. Olsen, 737 F.3d 625, 626 (9th Cir. 2013) (Kozinski, C.J., dissenting from the denial of rehearing en banc) ("There is an epidemic of *Brady* violations abroad in the land.").

251. *See* Adam M. Gershowitz, *The Challenge of Convincing Ethical Prosecutors That Their Profession Has a* Brady *Problem*, 16 OHIO ST. J. CRIM. L. 307, 314-15 (2019).

252. *See* Adam M. Gershowitz, *Accidental* Brady *Violations*, 12 TEX. A&M L. REV. 533, 544-45 (2025).

253. Of course, "may" is the operative word here. In too many cases, prosecutors face no discipline or stigma for *Brady* violations. *See* Garrett et al., *supra* note 12, at 232-34.

254. *Cf.* Hillary A. Sale, *Judges Who Settle*, 89 WASH. U. L. REV. 377, 412 (2011) ("Judges care about their reputations and hate reversals." (footnote omitted)).

255. *See* 793 F.3d 1194, 1202-03 (10th Cir. 2015).

256. *See id.* at 1203.

257. *Id.* at 1203-04.

prosecutors did not disclose that an Assistant United States Attorney told the witness that the government would request a sentence below the 30-year guideline calculation.[258] Further, the federal prosecutor encouraged the witness to cooperate with a state investigation and said, "[I]f you give them information that helps them lead to new charges, then we're gonna take that into consideration also."[259]

Upon discovering the withheld information enticing the witness to cooperate, the defendant moved for a new trial. At that point, the same federal prosecutor responded by dishonestly saying the witness "'had been offered nothing in return by federal and state authorities' for his cooperation in the state case, a position the government reiterated in [two] later [court] filings."[260] Eventually, the prosecutor conceded that the witness did receive a benefit for cooperating with the state case, but only after a lengthy period of dishonesty.[261]

The prosecutor's withholding of evidence at trial and his lack of candor in court filings to cover it up did not amount to a *Brady* violation, however. The court explained that the witness was "vigorously impeached" during trial and that the jury was aware of the witness's guilty plea and that he would likely receive a reduced sentence in exchange for cooperating.[262] Thus, in spite of the prosecutor's misconduct, there was no reasonable probability of a different outcome. The prosecutor who handled the case did not suffer the stigma of having committed a *Brady* violation. And other prosecutors in that office and around the country will not see the *Garcia* case as an example of misconduct. It is just another affirmance of a conviction.[263]

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258. *See id.* at 1204.

259. *Id.* (emphasis omitted).

260. *Id.* (citation omitted).

261. *See id.* at 1204-05.

262. *See id.* at 1206.

263. Consider also *United States v. Garrison*, 888 F.3d 1057 (9th Cir. 2018), which we did not include in our dataset because the prosecution's late disclosure still allowed the defense to use the evidence at trial. *See id.* at 1065; *supra* note 91. On the morning before one witness testified, the government found evidence that the witness had falsified medical records. *Garrison*, 888 F.3d at 1061. The prosecution did not turn over this information to the defense in a timely fashion. *See id.* Worse yet, when the witness acknowledged at trial that she had falsified records, it became clear that the government had learned about some of the witness's misconduct "months before trial" but failed to document it in its interview report. *See id.* The prosecution also delayed turning over documents relating to that same witness's plea negotiations until a few days before the witness testified. *Id.* On appeal, the Ninth Circuit explained that "[b]efore and during trial, the government made grave mistakes in its prosecution of the case by repeatedly failing to timely disclose information to the defense, as was required by law." *Id.* Yet the court found the prosecution's flagrant misconduct to be immaterial. *Id.* at 1065-66. The court explained that the jury eventually received all of the information—albeit late—and the trial court gave a curative instruction about the late disclosure. *Id.* The prosecutors engaged in "grave," *id.* at 1061, misconduct, but they will not be stigmatized as having violated the *Brady* doctrine.

When prosecutors intentionally withhold favorable evidence, but courts uphold convictions on immateriality grounds, there will be little deterrent effect to prevent future *Brady* problems. To be sure, the *Brady* doctrine, unlike the Fourth Amendment's exclusionary rule,[264] is not premised on deterrence. While the Supreme Court designed the exclusionary rule to promote compliance with the Fourth Amendment, the *Brady* doctrine is designed only to ensure a fair trial for the individual litigant in the case.[265] We recognize that deterrence is therefore not the main concern of the *Brady* doctrine. If it were, the materiality prong would be difficult to justify. But deterring serious *Brady* misconduct should be something that courts recognize. Careful and accurate application of the materiality prong is needed to begin to accomplish that. Wholesale reorientation of the doctrine is discussed in the last Part.

2. Disincentivizing improvements in communication between police and prosecutors

To state the obvious, the criminal justice "system" is not really a system at all.[266] There is no clear structure or operating manual that tells police and prosecutors how to communicate and work together.[267] Cultural barriers between police and prosecutors create silos and encourage each to "stay in their 'own lane.'"[268] And even when they want to coordinate, it is easier said than done. Some police work the night shift. The officers who work the day shift are often out on the street when prosecutors want to talk with them. And, of course,

264. *See generally* United States v. Leon, 468 U.S. 897, 906 (1984) (describing the exclusionary rule as a "judicially created remedy designed to safeguard Fourth Amendment rights generally through its deterrent effect, rather than a personal constitutional right of the party aggrieved" (quoting United States v. Calandra, 414 U.S. 338, 348 (1974))). The exclusionary rule is typically seen as deterring the police, though there is an argument that it is designed to deter prosecutors. *See, e.g.*, Guy Rubinstein, *The Prosecutor-Oriented Exclusionary Rule*, 65 B.C. L. REV. 1755, 1758 (2024).

265. As the Court remarked in *Brady* itself:

> The principle . . . is not punishment of society for misdeeds of a prosecutor but avoidance of an unfair trial to the accused. Society wins not only when the guilty are convicted but when criminal trials are fair; our system of the administration of justice suffers when any accused is treated unfairly. An inscription on the walls of the Department of Justice states the proposition candidly for the federal domain: "The United States wins its point whenever justice is done its citizens in the courts." A prosecution that withholds evidence on demand of an accused which, if made available, would tend to exculpate him or reduce the penalty helps shape a trial that bears heavily on the defendant. That casts the prosecutor in the role of an architect of a proceeding that does not comport with standards of justice, even though, as in the present case, his action is not "the result of guile" . . . .

Brady v. Maryland, 373 U.S. 83, 87-88 (1963) (footnote omitted) (citation omitted).

266. *E.g.*, LAWRENCE M. FRIEDMAN, CRIME AND PUNISHMENT IN AMERICAN HISTORY 461 (1993) (stating that "the criminal justice 'system' is not a system at all" but instead is "a jigsaw puzzle with a thousand tiny pieces" in which "[n]o one is really in charge").

267. Gershowitz, *supra* note 252, at 546.

268. *See id.* at 547.

prosecutors do not work with a single police department. In large cities, the district attorney's office interacts with dozens of law enforcement agencies.[269] All of this results in poor information sharing between prosecutors and police.

Poor communication between police and prosecutors can easily lead to inadvertent failure to disclose favorable evidence.[270] Police take most witness statements. If the police do not communicate well with prosecutors, those witness statements might not make it to the prosecution's file and thus, eventually, to the defense. The same is true for benefits provided to witnesses. Of course, prosecutors know when a defendant signed a plea deal. But they may not know when a witness told police that they would cooperate in exchange for a deal. Nor do prosecutors always know whether someone has been a confidential informant for the police and gotten walking-around money[271] or other benefits from the police on the street.

Fixing the communication problems between police and prosecutors is hard and requires clear incentives. An obvious incentive for the police is the reversal of convictions. As we noted above, the exclusionary rule is premised on the idea of incentivizing the police to professionalize their behavior. The same logic would apply to improving police communication with prosecutors. Unfortunately, the materiality standard creates the exact opposite incentive. When communication failures lead prosecutors to not disclose favorable evidence, an immateriality finding will lead police to conclude "no harm, no foul." In other words, if poor communication does not lead to a *Brady* violation because the evidence was immaterial, police will not see a problem and will not have an incentive to improve their communication next time.[272]

One case from our study provides a particularly instructive example. In *United States v. Dones-Vargas*, the defendant was convicted in federal court of distributing a large quantity of methamphetamine.[273] One of the witnesses

269. *Id.* at 562.

270. In McAward's study of 386 *Brady* violations, she found that:

> In 51% of successful *Brady* claims, *Brady* material never even made its way to the line prosecutor to be disclosed to the defense. Indeed, in 13% of cases, someone in the prosecutor's office itself—other attorneys or investigators—had the information and failed to give it to the line prosecutor.

McAward, *supra* note 64, at 925.

271. On the payment of witnesses, see Vida B. Johnson, *When the Government Holds the Purse Strings but Not the Purse:* Brady*,* Giglio*, and Crime Victim Compensation Funds*, 38 N.Y.U. REV. L. & SOC. CHANGE 491, 500-03 (2014).

272. Even as the Supreme Court has refused to suppress evidence when officers execute a defective warrant in good faith, the Justices see the logic in this basic reasoning. *See* United States v. Leon, 468 U.S. 897, 918 (1984) ("We have frequently questioned whether the exclusionary rule can have any deterrent effect when the offending officers acted in the objectively reasonable belief that their conduct did not violate the Fourth Amendment.").

273. *See* 936 F.3d 720, 721 (8th Cir. 2019).

against the defendant was his ex-girlfriend, who testified about personally observing him distribute drugs.[274] After trial, the defense learned that local police had paid the witness three separate times, totaling $400.[275] The first payment was for information about numerous drug traffickers, including the defendant.[276] The second and third payments were supposedly for information connected to someone other than the defendant.[277] The court found the witness payments to be immaterial,[278] which seemed to be a technically correct analysis of the materiality prong. Two witnesses testified that they sold methamphetamine to the defendant "by the pound."[279] Three other witnesses testified to engaging in drug deals with the defendant.[280] The police found drugs on the defendant when he was arrested.[281] And the defendant even admitted to dealing drugs.[282] In short, the ex-girlfriend's testimony was cumulative and thus the impeachment evidence about her receiving money from the police was likely immaterial.

While the materiality analysis makes sense, it is still troubling. The federal prosecutors who handled the trial were "unaware of [any] payments"[283] and thus could not possibly have disclosed them to the defense. The only way to avoid such a situation in the next case is for the local police to either stop paying witnesses or to design a better system for sharing such payments with state and federal prosecutors.[284] Yet because the evidence was not material, there was no *Brady* violation and the defendant's conviction was upheld. From the perspective of the local police, nothing bad happened and there accordingly was little incentive to improve communication with prosecutors. Far more work must be done to regulate and improve the quality and substance of communication between prosecutors and police. Detailed policy proposals have addressed these needs; one example of comprehensive guidelines comes from the American Law Institute's *Principles of the Law: Policing*.[285] As the Reporters'

274. *Id.*

275. *Id.* at 721-22.

276. *See id.*

277. *See id.* at 722.

278. *See id.* at 723.

279. *Id.* at 722.

280. *Id.* at 721.

281. *Id.*

282. *Id.*

283. *Id.*

284. *See* McAward, *supra* note 64, at 941 (noting that "there is an opportunity . . . to focus efforts on preventing 'good faith' *Brady* violations" and that "policymakers would do well to emphasize solutions that will prevent those officials from violating *Brady* in error").

285. PRINCIPLES OF THE L.: POLICING § 8.03 (A.L.I. 2025) (setting out general principles for disclosing evidence).

Notes to those Principles detail, however, few police agencies have adopted responsive policies concerning their *Brady,* much less their discovery, obligations.[286] We will discuss other systematic approaches further in Part IV.

3. Questionable convictions are upheld because of the high materiality standard

The materiality standard, by setting a potentially manipulable bar for finding a *Brady* violation,[287] may give license to courts to "explain away" government misconduct.[288] The result is that courts sometimes uphold questionable convictions. We offer two such examples from our dataset.

In *State v. Serfrere*, the defendant was convicted of drug trafficking and drug possession.[289] While the jury was deliberating, defense counsel discovered that one of the investigating officers was under investigation for grand theft.[290] A previous prosecutor had filed a *Brady* notice about the officer.[291] But the notice was never docketed, and the defense never learned of the impeachment evidence.[292]

Recognizing that the officer posed a problem to the State's case, the prosecution never called him as a witness.[293] But even without testifying, the officer's potential crime of dishonesty was highly relevant. The officer had worked with the key informant, and the defendant had asserted an entrapment defense.[294] Moreover, the defendant had a cell phone on his person at the time of arrest, but the phone was "lost" and "never logged as evidence."[295] In a motion for a new trial, the defense asserted that the cell phone contained valuable information and suggested that an officer who allegedly committed grand theft in another situation might have also stolen the defendant's cell phone.[296] In sum,

286. *Id.* § 8.03 reporters' notes.

287. *See* Daniel S. Medwed, Brady*'s Bunch of Flaws*, 67 WASH. & LEE L. REV. 1533, 1543 (2010) ("When *Brady* issues do come to light, the materiality test is a heavy burden for a defendant to overcome on appeal. Appellate courts are frugal in doling out *Brady* reversals."); Sundby, *supra* note 6, at 647 (reviewing the Court's materiality cases and describing the "gradual contraction of *Brady*'s reach").

288. Scott Sundby has argued that "*Brady* is not a discovery doctrine but instead a means of remedying police and prosecutorial misconduct or, in certain cases, unintentional but highly prejudicial non-disclosures." Sundby, *supra* note 6, at 661.

289. 267 So. 3d 407, 408 (Fla. Dist. Ct. App. 2019).

290. *See id.*

291. *See id.*

292. *See id.*

293. *See id.*

294. *Id.* at 409.

295. *Id.*

296. *See id.*

the defense made a compelling argument that it would have presented a different and stronger defense if it had known of the withheld information about the officer's alleged criminal activity.

The defendant prevailed in the trial court, which agreed that the evidence was material and ordered a new trial.[297] But a Florida appellate court reversed and reinstated the conviction.[298] The court engaged in mental gymnastics to conclude that the investigating officer's alleged criminal activity was not relevant since the prosecutor did not present him as a witness.[299] The defense could have called the officer as a witness or questioned the officer's partner, who did testify,[300] all of which the court ignored. The court also ignored that the defense could have used the grand theft allegation as part of the entrapment defense and to highlight the missing cell phone and the evidence it contained.[301] In short, the appellate court seemingly hid behind the high materiality standard in order to avoid finding a *Brady* violation.

A Missouri appellate court also seemed to use the high materiality standard in order to ignore a strong *Brady* claim. In *Lincoln v. Cassady*, Rodney Lincoln was convicted of manslaughter and assault based on the testimony of a seven-year-old child named "M.D."[302] The child had initially told the police that someone named "Bill" was the perpetrator, but later changed her story to identify Lincoln as the offender.[303] At trial, M.D. was "extensively cross-examined" about her identification and the changes to her story, but the jury convicted anyway.[304] Years later, M.D. recanted her testimony, but appellate courts continued to refuse to overturn Lincoln's conviction.[305]

Long after his conviction, Lincoln discovered records from the Division of Family Services showing "numerous clinical interviews of, and role-playing sessions with, M.D. which demonstrate that M.D. was extensively coached and uncertain in her eyewitness identification."[306] The court found the withheld information to be immaterial, however, because Lincoln knew about M.D.'s initial identification of "Bill" and the defense cross-examined her on that issue.[307] The court, however, neglected to even discuss the documents showing that the

297. *See id.*

298. *Id.* at 411.

299. *Cf. id.* at 410 (explaining that this is "not a case of an undisclosed material witness" but rather "a witness the State disclosed and later stated would not be called to testify").

300. *See id.* at 409-10.

301. *See id.*

302. *See* 517 S.W.3d 11, 15 (Mo. Ct. App. 2016).

303. *Id.*

304. *Id.* at 19.

305. *See id.* at 16, 23-24.

306. *Id.* at 18.

307. *See id.* at 19.

clinicians engaged in role-playing sessions to help M.D. identify Lincoln, and that the child was "extensively coached."[308] This evidence surely would have cast additional doubt on M.D.'s testimony, particularly given her later recantation. The appellate court, however, decided the *Brady* evidence was cumulative, seemingly using the materiality standard as a shield.[309]

4. The Supreme Court has not sufficiently discouraged incorrect analysis

A final problem with the materiality standard is the Supreme Court's lack of firm guidance to lower courts on how to apply it. Most courts properly apply evidence-based reasoning that considers how the withheld evidence would have affected the evidence presented at trial. That is what the doctrine requires. However, as noted, some courts employ guilt-based reasoning that focuses on whether the evidence at trial was sufficient to support a conviction, such that the withheld evidence "doesn't matter." As we described in Part II.D.2 above, the use of guilt-based reasoning sometimes results in courts using sloppy and perfunctory reasoning. And, unfortunately, the Supreme Court has failed to issue corrective rulings to cement the appropriate reasoning courts should engage in when evaluating the materiality of withheld evidence.

Given the application of the deferential AEDPA standard, the Supreme Court should provide strong incentives for state courts to conduct the correct materiality analysis in the first instance to avoid the need for federal review. Federal courts consistently hold that AEDPA deference is only due when the state court addresses each element of a constitutional claim; no deference is due under 28 U.S.C. § 2254(d) if the state court did not adjudicate that part of the claim on the merits.[310] However, that rule does call for deference when the claim was adjudicated, even summarily, and where the reasoning is not articulated.[311] Further, we have described cases in which it was the federal court that did not properly apply the materiality standard.[312]

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308. *See id.* at 18.

309. *See id.* at 18-19.

310. *See, e.g.*, Harris v. Lafler, 553 F.3d 1028, 1033-35 (6th Cir. 2009) (affirming the grant of the writ of habeas corpus based on a *Brady* claim, despite § 2254(d)(1)'s requirement of deference, because the state court failed to address the materiality element); Barker v. Fleming, 423 F.3d 1085, 1095 (9th Cir. 2005) (concluding that the AEDPA deference standard did not apply "[b]ecause the state court did not conduct the proper [*Brady*] analysis").

311. *See, e.g.*, Harrington v. Richter, 562 U.S. 86, 99 (2011) ("There is no merit to the assertion that compliance with § 2254(d) should be excused when state courts issue summary rulings because applying § 2254(d) in those cases will encourage state courts to withhold explanations for their decisions.").

312. *See supra* notes 176-82, 191-94, 198-203, 222-28 & 234-39 and accompanying text.

In addition, when conducting cause-and-prejudice analysis, to determine whether a *Brady* claim is procedurally defaulted, the same materiality inquiry must be conducted. The materiality standard therefore does double duty in that setting, since it will decide whether a federal court can even consider the claim, in addition to whether relief might be granted upon the claim.[313] That cause-and-prejudice doctrine also elevates the stakes and creates all the more pressure to get the analysis right.

And additional countervailing incentives arise from the Supreme Court's ruling in *Cullen v. Pinholster*, limiting federal habeas adjudication to the factual record developed in state court, interpreting AEDPA as "designed to strongly discourage" petitioners from supplementing the state record.[314] If additional *Brady* material surfaces for the first time during federal proceedings, the concern was that it might now not be considered in support of the *Brady* claim itself. Justice Sonia Sotomayor raised the constitutional and practical concerns with that aspect of the *Pinholster* ruling in dissent.[315] While it is possible that the suppressed evidence might constitute an excused and entirely new claim, as the majority suggested,[316] the concern is that if it does not meet those standards, it might be barred.[317]

To conclude, while the federal habeas corpus standards call for deferential review of constitutional claims litigated post-conviction in federal court, the Supreme Court has supplemented the statute with interpretive law, not always well-supported by the text, and which frustrates litigation of evidence which was concealed due to prosecutorial misconduct. Such doctrine unfairly rewards unconstitutional government misconduct and should be seen as inconsistent with the statutes, due process, and the purposes of the right.

313. *Cf.* Strickler v. Greene, 527 U.S. 263, 282 (1999) ("Because petitioner acknowledges that his *Brady* claim is procedurally defaulted, we must first decide whether that default is excused by an adequate showing of cause and prejudice. In this case, cause and prejudice parallel two of the three components of the alleged *Brady* violation itself.").

314. *See* 563 U.S. 170, 186 (2011).

315. *See id.* at 213 n.5 (Sotomayor, J., dissenting) ("There may be situations in which new evidence supporting a claim adjudicated on the merits gives rise to an altogether different claim.").

316. *See id.* at 216 & n.7.

317. *See id.* at 215 ("Under our precedent, if the petitioner had not presented his *Brady* claim to the state court at all, his claim would be deemed defaulted, and the petitioner could attempt to show cause and prejudice to overcome the default. If, however, the new evidence merely bolsters a *Brady* claim that was adjudicated on the merits in state court, it is unclear how the petitioner can obtain federal habeas relief after today's holding." (citations omitted)).

IV. Validating *Brady* Materiality

Because evidence that is suppressed generally remains concealed, it cannot be known how many *Brady* violations never come to light.[318] Even when violations do come to light and are litigated, however, the materiality standard plays a pivotal and often highly unsettling role. It should not trouble us so much if a judge concludes that evidence was in fact not suppressed. That might indicate that counsel knew of the evidence but did not effectively make use of it. However, when it is clear that favorable evidence was suppressed, the materiality standard becomes the crucial focal point.

That standard is our focus here, and our evidence suggests that courts do not evenly or even accurately apply it. Aside from repeating what the proper analysis should be and describing departures in an effort to highlight unsound judicial reasoning, what can be done to encourage judges to follow the required doctrine? We suggest that further improvements, focusing on systematic misconduct, could take the pressure off of the materiality standard itself, so that the analysis does not revolve around the individualized application of that prong. Further, just as ineffective assistance of counsel claims could focus more reliably on what conduct by lawyers in fact impacts the jury,[319] an empirically informed materiality inquiry in the *Brady* context could greatly improve the reliability of judicial rulings.

A. Materiality Reform Proposals

In general, much of post-conviction law depends on harmless-error type analysis. And, as then-Chief Judge Edwards described well, that analysis can inherently be inverted into an improper guilt-based analysis.[320] This body of law may invite improper guilt-based reasoning—indeed, that may be part of its attraction. Guilt-based analysis allows judges to appear detached from the merits, even though they are actually evaluating the merits of the prosecution's case (the task of the factfinder), and not just the merits of the constitutional claim. What can be done about this problem?

Scholars have offered various proposals for fixing the materiality standard. On the boldest end of the spectrum, Justice Thurgood Marshall and some

318. *See* Garrett, *supra* note 72, at 202-03; *cf.* Tracey L. Meares, *Rewards for Good Behavior: Influencing Prosecutorial Discretion and Conduct with Financial Incentives*, 64 FORDHAM L. REV. 851, 909 (1995) ("[I]t must be noted that many, if not most, instances of *Brady*-type misconduct are discovered only after the trial is over. . . . Consequently, it is probably fair to say that many instances of *Brady*-type misconduct are never discovered and hence never reported.").

319. For one of the Authors' views on the importance of studying the role of the lawyer during trial, see Garrett, note 3 above, at 950-54.

320. *See* Edwards, *supra* note 23, at 1187.

academic commentators have proposed abolishing the materiality prong.[321] Another solution would be to simply not weigh the withheld evidence, but grant relief based on a broader category of cases in which evidence was suppressed. Given the Supreme Court's longstanding adoption of materiality standards, not just in *Brady* but in procedural default and other post-conviction doctrines, that seems highly unlikely. Other commentators have explored lowering the materiality burden from a reasonable *probability* of a different outcome to a reasonable *possibility*.[322] Yet another approach would be to flip the burden of proof so that the prosecution, rather than the defendant, bears the burden of demonstrating that the outcome would not have been different.[323] Finally, Daniel Medwed has suggested the best way to avoid *Brady* violations is to require prosecutors to adopt an open-file system.[324]

All of the reform proposals identified above could carry some benefits. But we are skeptical that any of them is the right answer. First, as noted above, it is exceedingly unlikely that the Supreme Court will abolish the materiality prong altogether, given its pervasive use throughout post-conviction law, beginning with rulings in the late 1970s.[325] Nor is an open-file system a cure-all. The concealed evidence in *Brady* cases is often in the hands of police or other members of the prosecution team, not the prosecutor's own files.[326] Moreover, discovering a witness's prior convictions requires running queries in a criminal history database, not looking through pieces of paper in a file box, or failing to view lengthy video footage. Some jurisdictions now have some version of an open file policy,[327] yet *Brady* problems persist.

Moreover, the data in our study does not support abolition of the materiality standard. In the vast majority of cases in our study where courts found favorable evidence to be immaterial, the courts' reasoning was logical. For example, there is no reasonable probability that turning over information about

321. *See* Sundby, *supra* note 6, at 662 (expanding on Justice Marshall's discussions of *Brady* and suggesting that the Marshall interpretation would lead to removing the materiality prong); *cf.* United States v. Bagley, 473 U.S. 667, 702 (1985) (Marshall, J., dissenting) ("I simply cannot agree with the Court that the due process right to favorable evidence recognized in *Brady* was intended to become entangled in prosecutorial determinations of the likelihood that particular information would affect the outcome of trial.").

322. *See, e.g.*, Medwed, *supra* note 287, at 1555 (noting that New York has adopted the "reasonable possibility" approach when a defendant specifically requests a piece of evidence).

323. *See, e.g.*, *id.* (describing how New Hampshire has flipped the burden to the prosecution).

324. *Id.* at 1557-59.

325. For scholarship canvassing cases, see Garrett, *supra* note 3, at 936-41.

326. *See supra* note 270; Gershowitz, *supra* note 252, at 561-70.

327. *See* Jenia I. Turner & Allison D. Redlich, *Two Models of Pre-Plea Discovery in Criminal Cases: An Empirical Comparison*, 73 WASH. & LEE L. REV. 285, 288-89 (2016) (discussing open file policies and noting that "a recent trend has been in the direction of earlier and broader discovery").

a single pending criminal charge against a witness would change the outcome when the jury was already told that the witness had twenty prior convictions, as in *State v. Wayerski*.[328] Changing the standard from "reasonable probability" to "reasonable possibility" or shifting the burden of proof is also unlikely to accomplish much. Few of the "favorable but not material" cases in our study were "close call[s]"[329] that might have been affected by a different standard or a shifting of the burden of proof. To the contrary, in roughly 20% of the cases in our study, courts went out of their way to highlight the "overwhelming evidence" against the defendant.[330]

And, as noted in Part I, our focus is on *Brady* rulings on the merits. Yet post-conviction, the merits are often not the focus. The materiality standard does not operate alone, and additional statutory and doctrinal restrictions in federal habeas corpus often create far more substantial barriers than the materiality standard. Reforming all of federal habeas corpus, and amending AEDPA, might make post-conviction litigation more merits-focused, but that is a different and far larger problem than just the materiality standard.[331]

We also note that the Supreme Court has itself left open a structural or systemic "exception" to otherwise applicable rules of deference that would apply during federal habeas corpus review, one that may be open for cases in which "a deliberate and especially egregious error of the trial type, or one that is combined with a pattern of prosecutorial misconduct, . . . infect[s] the integrity of the proceeding."[332] Lower courts have noted the need for, and granted, relief in such settings.[333] The doctrine could be greatly developed, including to better focus on the indicia of a systematic pattern of prosecutorial misconduct. The patterns that we have identified in this *Brady* database could inform such caselaw. For example, judges might emphasize a series of instances in which taken individually, concealed evidence was not material and did not meet that part of the *Brady* standard. Further, judges might conduct such analysis across cases, and not just within individual cases; some of the cases noted here involved evidence of repeated misconduct. While post-conviction law has increasingly

328. 922 N.W.2d 468, 483 (Wis. 2019).

329. Commonwealth v. Natividad, 200 A.3d 11, 32-33 (Pa. 2019).

330. *See supra* notes 195-96 and accompanying text.

331. For a discussion of AEDPA reform possibilities, see Brandon L. Garrett & Kaitlin Phillips, *AEDPA Repeal*, 107 CORN. L. REV. 1739, 1764-77 (2022).

332. Fry v. Pliler, 551 U.S. 112, 117 (2007) (alterations in original) (quoting Brecht v. Abrahamson, 507 U.S. 619, 638 n.9 (1993)).

333. *See, e.g.*, United States v. Bowen, 799 F.3d 336, 339, 358 (5th Cir. 2015) (finding "novel and extraordinary" reasons, including prosecutorial misconduct, supported trial reversal of conviction).

made it difficult to litigate aggregate harm across cases,[334] judges can at least consider cumulative impacts across cases when they examine procedural bars. We note that judges, at least at the federal level, might also conduct issues-only inquiries into *Brady* violations, looking across cases, even if they could not necessarily grant post-conviction relief in the form of vacaturs of convictions.[335] Further, state courts have experimented with other aggregate approaches, including by adopting presumptions regarding relief when large numbers of cases are affected by misconduct. One high profile example involved the tens of thousands of cases affected by the drug laboratory scandals in Massachusetts. Due to that scandal, the Supreme Judicial Court adopted a "conclusive presumption" of misconduct in all affected cases, rather than conduct individualized inquiries into *Brady* and other violations, including after finding that prosecutors had engaged in misconduct by not disclosing the full extent of the problem.[336]

In addition to reversing large numbers of criminal convictions, as well as setting out rules regarding entering any future pleas in such cases, the Massachusetts Supreme Judicial Court also adopted informational remedies by ordering investigation into the full extent of the cases affected.[337] The court further adopted "[p]rophylactic measures,"[338] including the following: "To provide more detailed guidance to prosecutors, we ask the standing advisory committee to draft a proposed *Brady* checklist to clarify the definition of exculpatory evidence."[339] And having adopted such a systematic approach in these drug lab cases, when similar misconduct surfaced regarding state use of blood alcohol testing and breathalyzers, the court similarly resolved common issues regarding 27,000 cases en masse, given the "extensive nature of [the]

334. *See generally* Brandon L. Garrett, *Aggregation in Criminal Law*, 95 CALIF. L. REV. 383, 404-10 (2007) (describing the demise of habeas corpus class actions, including due to exhaustion and other procedural requirements).

335. For a proposal in this vein, "group[ing] cases raising common problems before specialized decisionmakers," see *id.* at 444.

336. *See* Commonwealth v. Scott, 5 N.E.3d 530, 535 (Mass. 2014) ("[W]e now hold that where [the chemist in question] signed the certificate of drug analysis as either the primary or secondary chemist in the defendant's case, the defendant is entitled to a conclusive presumption that [the chemist's] misconduct occurred in his case, that it was egregious, and that it is attributable to the Commonwealth."). The court followed up with additional orders. *See, e.g.*, Comm. for Pub. Couns. Servs. v. Att'y Gen., 108 N.E.3d 966, 971-72 (Mass. 2018) (finding that lab "misconduct, compounded by prosecutorial misconduct, requires that this court exercise its superintendence authority and vacate and dismiss all criminal convictions tainted by governmental wrongdoing").

337. For an overview of the actions of the court, see Matthew Segal & Jessica Lewis, *From Lab Scandals to Police Scandals: Lessons in Resolving Government Misconduct in Criminal Cases*, BOS. BAR J., Winter 2024, at 7, 9.

338. *Comm. for Pub. Couns. Servs.*, 108 N.E.3d at 993.

339. *Id.* at 991.

misconduct," by presuming government misconduct.[340] The court explained, "Requiring tens of thousands of defendants to bear the cost of proving that [the government's] conduct was egregiously impermissible would be antithetical to our responsibility to ensure the efficient administration of justice."[341]

Thus, the focus was large-scale, systematic, and both remedial and forward-looking. The Supreme Judicial Court concluded that individual rulings on materiality, and individual findings of government misconduct, were simply unnecessary. Conducting such inquiries would frustrate justice and be highly inefficient. We view such an approach as very much justified in appropriate circumstances. Indeed, some of the courts in our dataset that express frustration with patterns of misconduct, which they could not remedy under the *Brady* doctrine, could benefit from this systematic approach, which state courts, to be sure, are far more able to adopt. Perhaps a greater focus on systematic misconduct, rather than individualized materiality inquiries, would better deter entrenched misconduct.

B. Empirically Informed Materiality Analysis

We propose that materiality analysis be informed by empirical evidence concerning what actually impacts jurors. We counsel judges, consistent with current doctrine, to base their assessments of whether there is a "reasonable probability" of a different outcome on empirical evidence concerning how actual lay jurors weigh evidence. That focus would draw judges' attention to the actual impact of concealed evidence on jurors—the evidence-based analysis that the *Brady* doctrine demands. In so doing, that approach would try to focus judges on valid measures of impact on jurors, rather than what a judge views based on hindsight and her subjective assessment.

Where should judges look to obtain better evidence concerning what might impact, to a reasonable degree, the actual factfinders? There is a body of evidence concerning how jurors weigh evidence. That research includes mock jury studies, as well as other social science evidence, such as studies of jury deliberations. As Brian Bornstein and Edie Greene have summarized, the evidence from these studies is fairly clear in criminal cases: The strength of the prosecution's evidence is the main consideration that informs the initial votes of jurors, which is fortunately what the legal system expects.[342] Further, those initial votes are largely decisive concerning how jurors deliberate and ultimately reach a verdict, even if sometimes inter-group dynamics produce

340. Commonwealth v. Hallinan, 207 N.E.3d 465, 469 (Mass. 2023).

341. *Id.* at 481.

342. *Cf.* Brian H. Bornstein & Edie Greene, *Jury Decision Making: Implications for and from Psychology*, 20 CURRENT DIRECTIONS PSYCH. SCI. 63, 64 (2011) ("[S]trength of the prosecution's evidence is a strong predictor of verdicts in criminal cases . . . ." (citation omitted)).

divergent results; and "deliberating jurors tend to stay focused on" the strength of the evidence, doing so even when it is more complex scientific evidence.[343] If anything, in deliberation, especially in discussion of the reasonable doubt standard, there may be a leniency effect in which the group may favor defendants[344]—although it may be counterbalanced by a failure to properly account for that standard.[345] Regardless, in focusing on reasonable jurors, judges can correctly assume that jurors are focused on the law and on the strength of the facts presented to them.

When they examine whether evidence would be material, judges should then examine what types of evidence jurors attach particular weight to. There is quite a bit of research on those questions as well. These studies include research on, for example, how jurors evaluate impeachment evidence, which, as we described, many judges do not view as very impactful.[346] In fact, studies suggest jurors give great weight to impeachment.[347] As a result, judges should be quite skeptical of arguments and decisional law suggesting that impeachment would not materially affect the outcome at trial.

To provide one example, jurors are heavily influenced by jailhouse informants,[348] but they give less weight to the testimony of informants if they learn that the informants were given incentives to testify (although they may not give weight to the size of those incentives).[349] Thus, impeachment evidence regarding informants should often be found to have been material, which is not what we saw in many of the rulings studied. To be sure, jurors may also sometimes give undue weight, making propensity inferences regarding prior convictions. Such propensity inferences are not legally permitted and should not be credited when conducting materiality analysis.[350] The standard is a

343. *See id.* at 65.

344. *See id.* (citing Robert J. MacCoun & Norbert L. Kerr, *Asymmetric Influence in Mock Jury Deliberation: Jurors' Bias for Leniency*, 54 J. PERSONALITY & SOC. PSYCH. 21, 30 (1988)).

345. *See* Brandon L. Garrett & Gregory Mitchell, *Error Aversions and Due Process*, 121 MICH. L. REV. 707, 741-42 (2023).

346. *See supra* Part II.B.

347. *See, e.g.*, Tanford & Cox, *supra* note 119, at 177-78.

348. *See, e.g.*, Jonathan M. Golding et al., *The Influence of Jailhouse Informant Testimony on Jury Deliberation*, 28 PSYCH., PUB. POL'Y & L. 560, 568 (2022).

349. For a recent study discussing jurors' considerations of informant testimony, see Emily Shaw, Mona Lynch & Nicholas Scurich, *Juror Perceptions of Incentivized Informant Testimony*, 30 PSYCH., CRIME & L. 1378, 1390 (2024).

350. *See* Sarah Tanford & Michele Cox, *The Effects of Impeachment Evidence and Limiting Instructions on Individual and Group Decision Making*, 12 LAW & HUM. BEHAV. 477, 478 (1988); *see also* Roselle L. Wissler & Michael J. Saks, *On the Inefficacy of Limiting Instructions: When Jurors Use Prior Conviction Evidence to Decide on Guilt*, 9 LAW & HUM. BEHAV. 37, 39-47 (1985); FED. R. EVID. 404(a) (proscribing propensity evidence in federal courts).

reasonable juror standard. But the views of actual lay jurors should be considered in the analysis.

We view the research as supporting a rigorous assessment of the materiality of expert witness testimony in conducting *Brady* analysis. One type of impeachment evidence that came up multiple times in the opinions finding no materiality was impeachment regarding forensic expert witnesses. There is a large body of research regarding how jurors evaluate forensic expert testimony. Jurors can place great weight on it.[351] And that research strongly suggests that strength of evidence matters, and it also suggests that laypeople pay close attention to evidence that an expert might not be as reliable as they claim.[352] Prior misconduct involving forensic methods,[353] errors in the lab, failures in proficiency testing, and other departures from proper expert methods all impact jurors[354]—as they should. And yet, there are examples of cases where, for example, a forensic expert having failed proficiency tests was found not material.[355] Further research supports the view that if this failure of a test is disclosed, and the defense calls an expert that can highlight departures from accepted methods, then jurors will be still more affected by this evidence.[356]

We noted earlier that we identified two cases where confessions were suppressed and ten cases where forensic evidence or something related to forensic evidence was suppressed. Each are types of evidence on which jurors in general place great weight. Jurors are influenced by forensic evidence and assume it is highly reliable (despite, in some disciplines, studies revealing

351. *See, e.g.*, Brandon Garrett & Gregory Mitchell, *How Jurors Evaluate Fingerprint Evidence: The Relative Importance of Match Language, Method Information, and Error Acknowledgment*, 10 J. EMPIRICAL LEGAL STUD. 484, 503 (2013).

352. *See id.*

353. For a case in our dataset finding no materiality when the DNA analyst had been fired for incompetence from the lab in question, see *State v. Davila*, 357 P.3d 636, 647-49 (Wash. 2015) (en banc).

354. *See, e.g.*, Gregory Mitchell & Brandon L. Garrett, *The Impact of Proficiency Testing Information and Error Aversions on the Weight Given to Fingerprint Evidence*, 37 BEHAV. SCIS. & L. 195, 208 (2019); Brandon L. Garrett, William E. Crozier & Rebecca Grady, *Error Rates, Likelihood Ratios, and Jury Evaluation of Forensic Evidence*, 65 J. FORENSIC SCIS. 1199, 1204-06 (2020).

355. One ostensible reason in *Commonwealth v. Sullivan* was the limited role of the analyst in question. *See* 85 N.E.3d 934, 947 (Mass. 2017) ("In the circumstances here, the nondisclosure of Koester's failure to pass the proficiency tests did not rise to the requisite level of prejudice. Koester's involvement in the investigation of the defendant was limited; he collected evidence, tested items for the presence of human blood, and sent the samples along to the DNA laboratory. He was not directly responsible for the DNA testing that implicated the defendant in the crimes.").

356. *See, e.g.*, Gregory Mitchell & Brandon L. Garrett, *Battling to a Draw: Defense Expert Rebuttal Can Neutralize Prosecution Fingerprint Evidence*, 35 APPLIED COGNITIVE PSYCH. 976, 983-84 (2021); Brandon L. Garrett, Richard E. Gutierrez & Nicholas Scurich, *The Impact of Defense Experts on Juror Perceptions of Firearms Examination Testimony*, 64 JURIMETRICS 223, 231-32 (2024).

unknown levels of reliability).[357] As noted earlier, some state courts have responded to misconduct by taking a structural approach; for example, the Supreme Judicial Court of Massachusetts assumed that suppressed evidence concerning forensic crime lab failures prejudiced numerous cases.[358] And a body of studies has shown how powerfully confession evidence can affect jurors,[359] even though judges may find such errors harmless (and the Supreme Court has itself recognized that while error concerning confessions can be harmless, it is extremely strong evidence[360]).

Judges sometimes found evidence cumulative if it related to the same subject matter as that discussed by witnesses at trial. However, not all evidence is as compelling. Jury studies unsurprisingly find that people view, for example, body-worn camera footage as much more compelling than written transcripts of an interaction between police and a person charged with resisting arrest.[361]

More broadly, a large body of research also describes how jurors view evidence holistically, called the "story model" of jury decisionmaking.[362] Jurors will not view evidence in isolation, therefore, as judges sometimes did in the cases discussed, and they may view the impact of one theory or witness as naturally affecting related theories or witnesses. The research strongly supports judges examining how withheld evidence would impact the entire prosecution case, as well as the narrative arc of the defense case, in conducting a holistic analysis.

If there is any general lesson from the body of research on jury decisionmaking, it is that the strength of evidence matters deeply to jurors, and that judges far too readily downplay evidence that has real strength when viewed by lay factfinders. In serving as factfinders, jurors ask, as instructed, whether evidence cumulatively meets the standard of proof. Given the demanding standard of proof in criminal cases, one would expect that quite a bit of exculpatory and impeachment evidence would suffice to create a reasonable

357. *See* Jonathan J. Koehler, *Intuitive Error Rate Estimates for the Forensic Sciences*, 57 JURIMETRICS 153, 155 (2017).

358. *See, e.g.*, Commonwealth v. Scott, 5 N.E.3d 530, 545 (Mass. 2014) (holding that the defendant is entitled to "a conclusive presumption that egregious government misconduct occurred in the defendant's case" based on the revelations of misconduct at a drug laboratory); *see also* Garrett, *supra* note 170, at 33-36.

359. *See, e.g.*, D. Brian Wallace & Saul M. Kassin, *Harmless Error Analysis: How Do Judges Respond to Confession Errors?*, 36 LAW & HUM. BEHAV. 151, 156 (2012).

360. *See* Arizona v. Fulminante, 499 U.S. 279, 312 (1991).

361. *See* Alana Saulnier, Kelly C. Burke & Bette L. Bottoms, *The Effects of Body-Worn Camera Footage and Eyewitness Race on Jurors' Perceptions of Police Use of Force*, 37 BEHAV. SCIS. & L. 732, 734, 745 (2020).

362. *See, e.g.*, Dan Simon, *A Third View of the Black Box: Cognitive Coherence in Legal Decision Making*, 71 U. CHI. L. REV. 511, 560-61 (2004); Nancy Pennington & Reid Hastie, *The Story Model for Juror Decision Making*, *in* INSIDE THE JUROR: THE PSYCHOLOGY OF JUROR DECISION MAKING 192, 192-203 (Reid Hastie ed., 1993).

doubt. If judges reframe their inquiry to ask about a reasonable probability, by more accurately placing themselves in the position of a juror, they may reach more balanced results. Further, they must understand that expert evidence, confession evidence, and more play an enormous role at any trial. Impeaching key witnesses similarly can be decisive in the minds of jurors. Judges do not accurately interpret materiality when they view such evidence as immaterial.

There are also psychological explanations for why judges face challenges in replaying a criminal trial post-conviction, given their own hindsight and confirmation bias, knowing that the jury did convict and that a retrial would be quite burdensome on the state. That is why structural solutions may be needed. Existing habeas corpus law makes it quite difficult to consider suppressed evidence, and new evidence of innocence more generally. Broader reforms to prevent prosecutorial misconduct and facilitate litigation of new evidence that comes to light would require statutory changes. We emphasize here that existing doctrine can be applied far more faithfully, be informed by research, and result in constitutional violations being more appropriately remedied. Larger structural defects in our post-conviction system will require structural remedies.

Conclusion

The materiality standard, fairly innocuously defined as just a "reasonable probability" that the evidence would have affected the outcome at trial, plays a decisive role in questions of whether prosecutorial misconduct tainted a conviction in violation of due process. For better or for worse, the *Brady* rule sets the constitutional floor defining disclosure practices in criminal cases. Yet far too little is known about how these claims are litigated in practice.

Building from the work in creating a database of five years of *Brady* rulings in state and federal courts, this Article focuses on how the central concept of materiality is evaluated by judges when they reach the merits. We analyzed over 100 rulings in which evidence favorable to the defendant was suppressed and not disclosed, but courts concluded that the evidence was nevertheless not material. And we examined cases in which materiality was found and relief was granted.

The good news was that many courts conduct the correct form of analysis, examining whether the undisclosed evidence would have contributed to the conviction. However, about 40% of the cases improperly conducted a guilt-based analysis that asked whether there was enough evidence to convict, instead of whether the new evidence would have made a difference to the outcome. Most of the cases involved impeachment evidence, highlighting the skepticism courts may have regarding the effect of witness impeachment on outcomes at criminal trials.

The analysis of this body of state and federal rulings helps to show just how demanding the materiality standard is, but more importantly, how malleable it

is in practice when applied to various types of suppressed evidence. And it points the way toward improvements in the doctrine and judicial practice when adjudicating such materiality claims in *Brady* and other criminal procedure contexts can be decisive.

We propose, in line with our empirical approach, that judges themselves rely on empirical evidence and engage with systematic issues in groups of cases or in predictably repeated conduct. Certainly, the Supreme Court could clarify the need for evidence-based analysis and highlight how, as many courts have held, the failure to conduct a proper *Brady* materiality analysis means that a state court does not receive AEDPA deference—because it did not adjudicate that claim on the merits or did so contrary to law. However, under existing law, a reasonableness standard for assessing materiality should rely on what reasonable jurors actually do. Social scientists have examined such questions, and they would be further incentivized to conduct such research if judges found it relevant when examining questions of prosecutorial misconduct. And when systematic prosecutorial misconduct comes to light that may have tainted a case beyond individualized parsing of harm, judges should presume materiality.

The *Brady* doctrine provides a crucial bulwark against some of the most serious prosecutorial misconduct. We aim to reconsider how the *Brady* materiality standard—not as written but as applied—fails to safeguard these crucial due process rights, and more fundamentally, to ensure fair trials, public safety, and to prevent wrongful convictions. A renewed focus on how judges apply the *Brady* materiality standard is long overdue.