

MAPPING THE PATH OF *BRADY* VIOLATIONS: TYPOLOGIES, CAUSES & CONSEQUENCES IN ERRONEOUS CONVICTION CASES†

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Drawing on an empirical method proposed nearly a decade ago, this article uses modified path analysis to examine wrongful conviction cases in which prosecutors failed to disclose material, exculpatory evidence under *Brady v. Maryland*. The results of this study help to explain how and why *Brady* violations occur, how they influence wrongful convictions, how they can be ameliorated, and, conversely, why the presence of other contributing factors limits the power of disclosure to prevent erroneous convictions. Ultimately, the path from a *Brady* violation to a wrongful conviction could be broken at many points. But, accomplishing this new result requires willingly-opened eyes from multiple actors in the criminal justice process and a set of incentives that better commands compliance.

On December 17, 1999, a seventy-six-year-old woman was found stabbed to death in a public housing development in Cleveland, Ohio.¹ She had been the victim of a sexual assault and murder.² Police focused on David Ayers, a security officer in the housing development, who admitted that he had seen the victim the night of her murder.³ However, in the rush to indict and prosecute Ayers, police failed to investigate a tip from a fellow resident of the housing development that a different man had been banging on apartment doors the day of the murder and had been breaking into apartments the previous summer.⁴ The girlfriend of that man would later contact the police, saying that he was in prison and

1. Maurice Possley, *David Ayers*, NAT'L REGISTRY OF EXONERATIONS, <https://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=3868> (last visited Feb. 14, 2021).

2. *See id.*

3. *See id.*

4. *See* Erick Trickey, *The Curious Case of David Ayers*, CLEVELAND MAG. (Aug. 24, 2013, 12:00 AM), <https://clevelandmagazine.com/in-the-cle/the-read/articles/the-curious-case-of-david-ayers>.

wanted to talk about the crime, but police did not follow up.⁵ None of this information was shared with the defense.⁶

Over the course of two months, Ayers was interrogated four times before he was eventually indicted for murder.⁷ During this time, investigators heard from the victim's neighbor that the victim's nephew had been stealing from her.⁸ Police questioned the nephew under polygraph, but investigators neither followed up further with this suspect nor shared the information with the defense.⁹ Instead, the prosecution moved along, with Ayers convicted of murder on December 11, 2000.¹⁰ He was sentenced to life in prison without the possibility of parole.¹¹

Ayers would serve eleven years in prison before being exculpated by a DNA test.¹² In a subsequent civil proceeding, Ayers was awarded \$13.2 million as compensation for detectives' fabrication and concealment of exculpatory evidence, although this recovery was later overturned by the Ohio Supreme Court.¹³

Stories like those of David Ayers are, unfortunately, common in the criminal justice system. Erroneous convictions happen with regularity,¹⁴ and prosecutors' failures to disclose exculpatory evidence—popularly known as *Brady* violations¹⁵—are said to be “epidemic.”¹⁶ Research has linked wrongful convictions to the failure to disclose exculpatory

5. *See id.*

6. James F. McCarty, *CMHA Security Officer Wins \$13.2 Million Verdict for Civil Rights Violations by Cleveland Detectives*, CLEVELAND.COM (Mar. 8, 2013), https://www.cleveland.com/metro/2013/03/post_113.html.

7. *See* Trickye, *supra* note 4.

8. *See* Ayers v. City of Cleveland, No. 1:12-CV-753, 2013 U.S. Dist. LEXIS 25992, at *17–18 (N.D. Oh. Feb. 25, 2013).

9. *See id.* at *18.

10. *See* Possley, *supra* note 1.

11. *Id.*

12. *See id.*

13. Mark Gillispie, *Supreme Court Tosses \$13.2 Million Judgment Against Ex-Detective*, WKBN (Mar. 26, 2020, 4:24 PM), <https://www.wkbn.com/news/ohio/supreme-court-tosses-13-2m-judgment-against-ex-detective/>.

14. Marvin Zalman, Brad Smith & Angie Kiger, *Officials' Estimates of the Incidence of "Actual Innocence" Convictions*, 25 JUST. Q. 72, 72 (2008).

15. *See* Brady v. Maryland, 373 U.S. 83, 86 (1963). In *Brady v. Maryland*, the U.S. Supreme Court ruled that withholding of evidence favorable to the defendant is a violation of a defendant's constitutional rights under the due process clause of the Fourteenth Amendment. *Id.*

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

evidence,¹⁷ with an empirical study identifying *Brady* violations as one of nine primary sources.¹⁸

Still, while we can establish that erroneous convictions occur and that *Brady* violations contribute to them, it is unclear how, when, or why they occur. To be sure, individual case studies and anecdotal summaries exist, but “there is little empirical data on the causes of *Brady* violations.”¹⁹ The data are so lacking that previous writers have been limited to self-described “thought experiment[s] that postulate[]” the “causes of *Brady* violations, based on [the] logic, experience, intuition, and observations” of practitioners.²⁰

For more than a decade, researchers have urged the application of a new method—path analysis—to analyze wrongful convictions holistically as a case moves through the criminal justice system.²¹ Envisioning the sources of wrongful convictions as “contributing factors” rather than “dichotomous causes,” this approach “allows researchers to understand better where and how intervening forces shape the movement and outcome of a case.”²² In turn, it is possible to identify where the causal chain “might have been broken at some point before conviction.”²³

In this article, we take up that earlier call, applying a modified path analysis to trace the effect of *Brady* violations on wrongful conviction cases. We chose *Brady* abuses because their origin is still relatively opaque despite renewed attention of late²⁴ and because the allegation and

17. See, e.g., Brian Gregory, *Brady is the Problem: Wrongful Convictions and the Case for “Open File” Criminal Discovery*, 46 U. S.F. L. REV. 819, 821 (2012) (arguing that “[t]he *Brady* rule has failed to protect factually innocent defendants”).

18. See Jon B. Gould, Julia Carrano, Richard A. Leo & Katie Hail-Jares, *Predicting Erroneous Convictions*, 99 IOWA L. REV. 471, 477 (2014). Indeed, in presentations, one of us has described *Brady* violations as one of three sources (along with the strength of the prosecution’s evidence and poor defense effort) that create a “perfect storm” of conditions for wrongful convictions. J. Paul Johnson, *Study Reveals 10 Factors in Wrongful Conviction Cases*, AM. UNIV. (Mar. 11, 2013), https://www.american.edu/media/news/spa_news_wrongful-convictions-study.cfm.

19. Barry Scheck, Symposium, *New Perspectives on Brady and Other Disclosure Obligations: What Really Works?: Professional and Conviction Integrity Programs: Why We Need Them, Why They Will Work, and Models for Creating Them*, 31 CARDOZO L. REV. 2215, 2215 (2010); see also Kate E. Bloch, *Harnessing Virtual Reality to Prevent Prosecutorial Misconduct*, 32 GEO. J. LEGAL ETHICS 1, 11 (2019) (“There is limited empirical data specifically pinpointing the causes of *Brady* error.”).

20. Scheck, *Professional and Conviction Integrity Programs*, *supra* note 19, at 2215, 2227.

21. See, e.g., Jon B. Gould & Richard A. Leo, *One Hundred Years Later: Wrongful Convictions After a Century of Research*, 100 J. CRIM. L. & CRIMINOLOGY 825, 840 (2010).

22. *Id.* at 840–41.

23. *Id.* at 840.

24. See Brandon L. Garrett, *Judging Innocence*, 108 COLUM. L. REV. 55, 58–59 (2008) (“This Article presents the results of an empirical study that examines how our criminal

determination of such violations is easily identified in court filings. The results of this research help to explain how and why *Brady* violations occur, how they influence wrongful convictions, how they can be ameliorated, and, conversely, why the presence of other contributing factors limits the power of disclosure to prevent erroneous convictions.

Ultimately, we show that the vast majority (69%) of *Brady* violations occurs before a suspect is even arrested,²⁵ with prosecutors solely responsible for sixty percent of disclosure errors.²⁶ Most of the withheld evidence involves witness statements (50%)²⁷ or police reports (25%),²⁸ which would be useful to the defense in suggesting alternative suspects (62%)²⁹ or impeaching witnesses (36%).³⁰ Although only thirty-seven percent of violations are clearly intentional,³¹ the great majority (81%) appear to be motivated by police and prosecutors' beliefs that they have caught the right suspect and intend to convict him.³²

Perhaps most troubling from the research, many of the mistakes would not be remedied by a commonly recommended reform—open-file discovery.³³ Although we appreciate the value of discovery in providing defendants fair access to the state's evidence, many of the errors we identify never produce physical evidence for the defense to view. For that matter, open-file discovery relies on a zealous defense advocate willing and able to investigate new leads found in the state's files. Unfortunately, in some of the cases we analyzed, defense lawyers failed at this function.³⁴

system handled, from start to finish, the cases of the first 200 persons exonerated by postconviction DNA testing in the United States.”); Peter A. Joy, *The Relationship Between Prosecutorial Misconduct and Wrongful Convictions: Shaping Remedies for a Broken System*, 2006 WIS. L. REV. 399, 421 (2006) (analyzing the role of prosecutorial misconduct in wrongful convictions); Daniel S. Medwed, *The Zeal Deal: Prosecutorial Resistance to Post-Conviction Claims of Innocence*, 84 B.U. L. REV. 125, 130 (2004) (examining “why prosecutors may turn a blind eye to post-conviction allegations of innocence”).

25. See *infra* Table 1: Type and Timing of Withheld Evidence (“Before Origin” and “Before Arrest”).

26. See *infra* Table 2: Responsibility and Mindset of Disclosure (“Prosecutors”).

27. See *infra* Table 1: Type and Timing of Withheld Evidence (“Witness Statements”).

28. See *infra* Table 1: Type and Timing of Withheld Evidence (“Police Reports”).

29. See *infra* Table 1: Type and Timing of Withheld Evidence (“Alternative Suspect”).

30. See *infra* Table 1: Type and Timing of Withheld Evidence (“Impeachment”).

31. See *infra* Table 2: Responsibility and Mindset of Disclosure (“Intentional”).

32. See *infra* Table 3: Bases for Nondisclosure (“Convicting This Defendant”).

33. See *infra* Part IIA. Under open-file discovery, the prosecutor typically makes available to the defense all non-privileged information in its case file. REBECCA BERNHARDT ET AL., TEX. APPLESEED & TEX. DEF. SERV. IMPROVING DISCOVERY IN CRIMINAL CASES IN TEXAS: HOW BEST PRACTICES CONTRIBUTE TO GREATER JUSTICE 14 (2013), <https://www.texasappleseed.org/sites/default/files/17-DiscoveryReport.pdf> (citing TEX. R. CIV. P. 192.3(a) (2021)).

34. See *infra* part III.H.3 (discussing defense errors).

A more systematic approach will require a change in norms and incentives among actors in the criminal justice system. It will turn on police officers' resistance to tunnel vision and willingness to investigate leads. It will require prosecutors prepared to share information they know about a case, regardless of whether the material actually appears in their files. And it will depend on defense lawyers having the time, resources, and disposition to fully examine the files provided by prosecutors and follow up on any evidence that does not match the state's theory of the case. Many of these measures have been raised in earlier discussions of wrongful convictions,³⁵ and we leave those prescriptive debates to the scholars and practitioners that have ably debated the options. Our point is empirical—the path from a *Brady* violation to a wrongful conviction could be broken at many points. But, preventing a wrongful conviction requires willingly-opened eyes from multiple actors in the criminal justice process and a set of incentives that better commands compliance.

The discussion that follows is divided into five parts. In the first section, we survey the literature on *Brady* violations and their role in wrongful convictions, setting up the gap to examine. Part two describes the present study, in which we employ a modified form of ethnographic decision-tree modeling to analyze the development of wrongful conviction cases in which *Brady* violations occurred. We explain our method in detail and offer an example of its implementation using publicly available information from a case in our sample.

The third section applies that method to a sample of proven wrongful conviction cases, uncovering data about the nature, bases, and consequences of *Brady* violations. Using the decision-trees to track the evolution of cases from crime to exoneration, we compare the relative influence of *Brady* failures in producing miscarriages of justice.

Part four considers the policy implications of the study, highlighting the limits of open-file discovery. Despite prior calls—including our own—for such policies, the results here suggest multiple challenges that stymie open-file discovery. Rather than rely on such policies as a cure-all, we believe *Brady* violations call for a more systemic approach that addresses the norms and incentives of those charged with investigating and sharing potentially exculpatory evidence.

35. See generally JON B. GOULD, *THE INNOCENCE COMMISSION: PREVENTING WRONGFUL CONVICTIONS AND RESTORING THE CRIMINAL JUSTICE SYSTEM* (2007) (reviewing twelve wrongful conviction cases and discussing how and why convictions occurred).

Finally, we note the limitations of this study and propose future work. In particular, we call for additional research that examines the other correlates of wrongful convictions through a modified path analysis.³⁶

I. *BRADY* VIOLATIONS & ERRONEOUS CONVICTIONS

A. *Withholding Exculpatory Evidence*

State disclosure of exculpatory evidence is established by *Brady v. Maryland*³⁷ and its progeny of cases.³⁸ In *Brady*, the Supreme Court ruled that withholding evidence favorable to the defendant is a violation of a defendant's constitutional rights under the due process clause of the Fourteenth Amendment.³⁹ This decision requires prosecutors to share with the defense any evidence that is potentially exculpatory and is material to either the guilt or punishment of the defendant.⁴⁰ Material evidence was later defined in *United States v. Bagley* as that for which there is a "reasonable probability that, had the evidence been disclosed to the defense, the result of the proceeding would have been different."⁴¹ A "*Brady* violation," therefore, refers to an instance in which the prosecution does not share material and exculpatory evidence with the defense.⁴² Importantly, the withholding of evidence may originate with law enforcement officers, who may not recognize the relevance of evidence in their possession.⁴³ Ultimately, however, the duty to disclose belongs to the prosecution wherever the exculpatory evidence originates.⁴⁴ States have enacted legislation broadening the discovery requirements beyond those of *Brady* by, for example, requiring that evidence be shared with the defense earlier in a case (e.g., before a plea

36. Path analysis can refer to a methodology that involves estimating the direct and indirect effect of variables on an outcome. *E.g.*, Kenneth C. Land, *Principles of Path Analysis*, 1 SOC. METHODOLOGY 3, 5 (1969). However, this method requires the statistical analysis of variables in a large number of cases and was therefore not deemed suitable for the present study. Instead, we use a modified form of decision-tree modeling (described below), to examine *Brady* violations.

37. 373 U.S. 83, 87 (1963).

38. *See, e.g.*, *Turney v. United States*, 137 S. Ct. 1885, 1895 (2017); *Connick v. Thompson*, 563 U.S. 51, 71–72 (2011); *Arizona v. Youngblood*, 488 U.S. 51, 58 (1988).

39. 373 U.S. at 87.

40. *Id.*

41. 473 U.S. 667, 682 (1985).

42. Note that *Brady* violations are extremely difficult to prove. Therefore, there are many more suspected failures to disclose evidence than proven *Brady* violations. *See* SAMUEL R. GROSS ET AL., *GOVERNMENT MISCONDUCT AND CONVICTING THE INNOCENT* 167 (Nat'l Registry of Exonerations ed., 2020). The authors also reference personal conversations with Samuel R. Gross before and during the research project.

43. *See id.* at 80.

44. *Id.* at 112.

deal), eliminating the need for the defense to make a request for evidence, or expanding the amount of evidence that must be shared.⁴⁵

There are various reasons the state may withhold exculpatory information and, thus, engage in a *Brady* violation. One of the most commonly cited explanations is that prosecutors are “hyperadversarial”⁴⁶ and “subscribe to a ‘conviction psychology’ theory of prosecution, where prosecutors prioritize convictions over justice.”⁴⁷ Moreover, conviction rates are a common metric of success, influencing prosecutors’ career trajectories and,⁴⁸ in particular, district attorneys’ odds of reelection.⁴⁹ Scholars debate whether prosecutorial zealotry increases as individual prosecutors gain experience⁵⁰ or is tempered over time.⁵¹ Further, there may be a subset of “zealot” prosecutors whose tendency to be adversarial does not change over the course of their career.⁵²

The multiple conflicting roles that prosecutors play in the justice system may also play a role in failures to disclose. Prosecutors are often ambiguously called on to “do justice”⁵³ and be contradictorily “impartial ministers of justice but also forceful advocates; officers of the court but also leaders of law enforcement; sticklers for the law but also agents of mercy and discretion.”⁵⁴ These conflicting roles may intersect with subjective assessments of exculpatory and material evidence to produce *Brady* violations.

Relatedly, although the most egregious *Brady* violations involve the intentional withholding of evidence, it is important to note that

45. See, e.g., CAL. PEN. CODE § 1054.1 (West 2021); Michael Morton Act, S.B. No. 1611, § 2, 83d Leg., Reg. Sess. (Tex. 2013); N.Y. CRIM. PROC. LAW § 245.25 (McKinney 2021).

46. Hadar Aviram, *Legally Blind: Hyperadversarialism, Brady Violations, and the Prosecutorial Organizational Culture*, 87 ST. JOHN’S L. REV. 1, 5 (2013).

47. Kay L. Levine & Ronald F. Wright, *Prosecutor Risk, Maturation, and Wrongful Conviction Practice*, 42 L. & SOC. INQUIRY 648, 648 (2017); see also George T. Felkenes, *The Prosecutor: A Look at Reality*, 7 SW. U. L. REV. 98, 109–10 (1975).

48. See Daniel S. Medwed, *The Prosecutor as Minister of Justice: Preaching to the Unconverted from the Post-Conviction Pulpit*, 84 WASH. L. REV. 35, 44 (2009).

49. See Joy, *supra* note 24, at 405.

50. See, e.g., Medwed, *supra* note 24, at 138–39.

51. See, e.g., Milton Heumann, PLEA BARGAINING: THE EXPERIENCES OF PROSECUTORS, JUDGES AND DEFENSE ATTORNEYS 99 (1977); Levine & Wright, *supra* note 47, at 652.

52. Levine & Wright, *supra* note 47, at 657.

53. Jeffrey Bellin, *Theories of Prosecution*, 108 CALIF. L. REV. 1203, 1217 (2020).

54. David A. Sklansky, *The Problems with Prosecutors*, 1 ANN. REV. CRIMINOLOGY 2.1, 2.11 (2018).

withholding may be unintentional⁵⁵ and a result of cognitive biases.⁵⁶ Often referred to as tunnel vision, these biases may blind even well-meaning prosecutors to the possibility that evidence points to innocence by causing “the prosecutor to overestimate the strength of her case without the evidence at issue and to underestimate the evidence’s potential exculpatory value.”⁵⁷

Further, errors in prosecutors’ decisions may be compounded because other criminal justice actors tend to follow their lead.⁵⁸ As a case progresses through the criminal justice system, each individual relies on the decisions and judgement of those who came before.⁵⁹ As such, “the prosecutor’s role as a first and constant case screener may lead to cascading effects on other prosecutors, judges, and jurors, who might be less scrutinizing for reasonable doubt because of an assumption that charges are pursued only against the guilty.”⁶⁰

Prosecutors may not even recognize material evidence within their possession. Since most cases are resolved via guilty pleas, prosecutors are likely to wait until shortly before trial to fully review all evidence.⁶¹ They also are largely unaware of the defense’s strategy until trial.⁶² As a result, prosecutors “have difficulty forecasting before trial what evidence will in retrospect seem to have been material.”⁶³ Large caseloads and a lack of resources also lead prosecutors to inadvertently overlook exculpatory evidence.⁶⁴ Together, prosecutor subculture, tunnel vision, and the workplace environment contribute to *Brady* violations.⁶⁵

55. See Geoffrey S. Corn & Adam M. Gershowitz, *Imputed Liability for Supervising Prosecutors: Applying the Military Doctrine of Command Responsibility to Reduce Prosecutorial Misconduct*, 14 BERKELEY J. CRIM. L. 395, 403–04 (2009); see also Myrna Raeder, *What Does Innocence Have to Do with It?: A Commentary on Wrongful Convictions and Rationality*, 2003 MICH. ST. L. REV. 1315, 1327 (2003).

56. See Alafair Burke, *Improving Prosecutorial Decision Making: Some Lessons of Cognitive Science*, 47 WM. & MARY L. REV. 1587, 1590–91 (2006); Alafair Burke, *Neutralizing Cognitive Bias: An Invitation to Prosecutors*, 2 N.Y.U. J. L. & LIBERTY 512, 515 (2007); Keith Findley & Michael S. Scott, *The Multiple Dimensions of Tunnel Vision in Criminal Cases*, 2006 WISC. L. REV. 291, 295 (2006).

57. Samuel R. Wiseman, *Brady, Trust and Error*, 13 LOY. J. PUB. INT. L. 447, 466 (2012).

58. See *id.*

59. See *id.*

60. *Id.*

61. See Stephanos Bibas, *The Story of Brady v. Maryland: From Adversarial Gamesmanship Toward the Search for Innocence?*, PENN L. LEGAL SCHOLARSHIP REPOSITORY, July 2005, at 1, 12.

62. *Id.* at 12.

63. See *id.*

64. Adam M. Gershowitz & Laura R. Killinger, *The State (Never) Rests: How Excessive Prosecutorial Caseloads Harm Criminal Defendants*, 105 NW. U.L. REV. 261, 284 (2011).

65. See Aviram, *supra* note 46, at 5.

B. Brady Violations as Sources of Erroneous Convictions

Within a broader umbrella of prosecutor misconduct, innocence scholars have pointed to *Brady* violations as a key factor correlated with wrongful convictions.⁶⁶ Individual, well-publicized cases highlight the effect of *Brady* violations on the innocent. These include the stories of John Thompson, whose case reached the Supreme Court in *Connick v. Thompson*,⁶⁷ and Michael Morton, who was convicted and served twenty-five years in prison for killing his wife—all while the prosecution was in possession of evidence that implicated another man in his wife's murder.⁶⁸

Additionally, several large-scale studies have assessed the impact of *Brady* violations on miscarriages of justice. For example, Brandon Garrett examined 200 DNA exonerations and found that the prosecution withheld exculpatory evidence in thirty-seven percent of cases.⁶⁹ In another large study, the Preventing Wrongful Convictions Project (PWCP), Gould et al. compared 260 wrongful convictions to 200 near misses—cases in which an innocent defendant was indicted but not convicted.⁷⁰ The researchers identified ten factors that distinguished these two types of cases.⁷¹ Among these factors were the withholding of exculpatory evidence by the prosecution.⁷² *Brady* violations were more likely in wrongful conviction cases than near misses, suggesting that they are one impediment to self-correction in the justice system.⁷³

Finally, it is important to note that the prevalence of *Brady* violations is much debated. Referring to incidents of *Brady* violations across the

66. See Gould et al., *supra* note 18, at 501; see also Joy, *supra* note 24, at 402; see also Bruce MacFarlane, *Convicting the Innocent: A Triple Failure of the Justice System*, 31 MANITOBA L.J. 403, 431 (2005); see generally BARRY SCHECK, PETER NEUFELD & JIM DWYER, ACTUAL INNOCENCE: FIVE DAYS TO EXECUTION AND OTHER DISPATCHES FROM THE WRONGLY CONVICTED (2001) (discussing flaws that lead to wrongful convictions, including *Brady* violations). Studies have found a range of other factors are also correlated with the conviction of an innocent person, including eyewitness misidentification, false confessions, faulty forensic science, inadequate defense, informant testimony, and prosecutor misconduct. Samuel R. Gross, *Lost Lives: Miscarriages of Justice in Capital Cases*, 61 LAW & CONTEMPORARY PROBLEMS 125, 136, 140 (1998); Samuel R. Gross & Barbara O'Brien, *Frequency and Predictors of False Conviction: Why We Know So Little, and New Data on Capital Cases*, 5 J. EMPIRICAL LEGAL STUD. 927, 932 (2008); Gould et al., *supra* note 18, at 479.

67. See 563 U.S. 51, 54 (2011).

68. See MICHAEL MORTON, GETTING LIFE: AN INNOCENT MAN'S 25-YEAR JOURNEY FROM PRISON TO PEACE (2014); *Michael Morton*, THE INNOCENCE PROJECT, <https://innocenceproject.org/cases/michael-morton/> (last visited Feb. 21, 2021).

69. Brandon L. Garrett, *Judging Innocence*, 108 COLUM. L. REV. 55, 119 (2008).

70. Gould et al., *supra* note 18, at 477.

71. See *id.*

72. See *id.* at 496, 501.

73. See *id.* at 501, 517.

country, former federal appellate Judge Kozinski described this phenomenon as an “epidemic.”⁷⁴ Although recognizing that precise estimates are impossible, academics widely agree that *Brady* violations are not uncommon.⁷⁵ However, these claims of vast prosecutorial misconduct via *Brady* violations have been met with opposition. For example, Jerry Coleman and Jordan Lockey argue that the number of known *Brady* violations account for only a small proportion of the total number of prosecutions in the United States,⁷⁶ a stance also taken by the U.S. Department of Justice.⁷⁷ Further, while acknowledging that there are intentional and egregious cases of *Brady* violations (for example, by Ken Anderson in Michael Morton’s case in Texas), Coleman and Lockey point out that other *Brady* violations are more likely to be the result of reckless or negligent conduct by prosecutors.⁷⁸

II. THE PRESENT STUDY

To our knowledge, researchers have yet to systematically investigate variations in the timing of *Brady* violations, whether such abuses were coterminous with other potential causes of wrongful convictions, and whether and when other intervening factors might impede the causal path between failures to disclose and erroneous conviction. Jon Gould and Richard Leo underscored this point when they suggested it is “better to understand the sources of wrongful convictions not so much as dichotomous causes—a witness correctly or incorrectly identified the defendant and the identification directly led the jury to convict—but as contributing factors in a path analysis that might have been broken at some point before conviction.”⁷⁹

We apply that logic here to the study of *Brady* violations and their impact on erroneous convictions. We focus on failures to disclose for two reasons. First, disclosure errors are uniformly recognized as a contributing factor to erroneous convictions,⁸⁰ and yet the research still

74. *United States v. Olsen*, 737 F.3d 625, 626 (2013) (Kozinski, C.J., dissenting).

75. See CATHERINE M. RIDOLFI & MAURICE POSSLEY, PREVENTABLE ERROR: A REPORT ON PROSECUTORIAL MISCONDUCT IN CALIFORNIA 1997-2009 36–37 (2010); see also Aviram, *supra* note 46, at 4; see also Joy, *supra* note 24, at 421.

76. See Jerry P. Coleman & Jordan Lockey, *Brady “Epidemic” Misdiagnosis: Claims of Prosecutorial Misconduct and the Sanctions to Deter It*, 50 U. S.R. L. REV. 199, 224 (2016).

77. See Letter from Andrew D. Goldsmith, Assoc. Deputy Attorney Gen., U.S. Dep’t of Justice, & John F. Walsh, U.S. Attorney, U.S. Dep’t of Justice, to Editors, *Geo. L.J.* (Nov. 4, 2015) (on file with author).

78. See Coleman & Lockey, *supra* note 76, at 207–08, 226.

79. Gould & Leo, *supra* note 21, at 840.

80. See BRANDON L. GARRETT, CONVICTING THE INNOCENT: WHERE CRIMINAL PROSECUTIONS GO WRONG 10 (2011); Gould et al., *supra* note 18, at 492; Joy, *supra* note 24, at 402–03.

lacks a comprehensive understanding of how and why they occur or the effects of these failures. As such, the subject is rich for further inquiry, with the results likely relevant to wrongful conviction research. Second, because failures to disclose are often litigated—even if not often successfully for defendants⁸¹—we were able to draw from judicial opinions that provide either a recitation of the facts surrounding nondisclosure or suggestions of where to look in the case record for additional, important information.

To some extent, this study involves grounded theory, in that we do not test particular hypotheses about the causes or effects of *Brady* violations. Certainly, prior literature provides an understanding of the range of possible bases for nondisclosure,⁸² but research to date has not offered a systematic theory that predicts why nondisclosure arises, when it is likely to occur in a case, how it relates to other sources of wrongful conviction, and what other dynamics may extend or limit the effects of nondisclosure. To build upon prior research, we have chosen to trace the investigation and prosecution of wrongful convictions containing *Brady* violations from their beginning, utilizing a decision-tree analysis to chart how failures to disclose arise and affect a case, and then analyzing the results to build better theory about the nature and effects of nondisclosure. Although decision trees are descriptive—explaining what happened in a case and when—the methodology is fundamentally analytical, offering competing scenarios for how a case might have progressed and employing logic models to connect events at one point in a case with later results.

In addition, the analysis provides a nuanced depiction of nondisclosure, delineating in the cases between evidence determined by the courts to qualify under *Brady*, and evidence alleged by the defense to have violated *Brady* but not confirmed by the courts. Since confirmed *Brady* cases “are the mere tip of the problem of nondisclosure,”⁸³ we included alleged *Brady* violations in order to account for the relevant contribution of various claims of nondisclosure to the risk of a wrongful conviction.

A. Case Selection

To examine these questions, we employed a modified form of ethnographic decision tree modeling, drawing cases that met three criteria. First, they involved a factually innocent defendant who was

81. See Joy, *supra* note 24, at 399 n.2, 402–03.

82. See Coleman & Lockey, *supra* note 76, at 207–08, 226.

83. GROSS, *supra* note 42. The authors also reference personal conversations with Samuel R. Gross before and during the research project.

wrongly convicted. This definition, first employed by the PWCP distinguishes *factual* innocence (i.e., the defendant did not commit the crime in question) from *legal* innocence (i.e., innocence based upon legal error).⁸⁴ Second, cases included a judicial determination that material, exculpatory evidence was withheld from the defense. In most instances, we established this criterion by appellate decisions that the state had violated *Brady*, although in a few cases we relied on post-exoneration civil suits in which a court premised civil liability on the state's failure to have disclosed essential, exculpatory evidence.⁸⁵ Finally, all the cases in our study originated from 1980 forward. A cutoff also employed in PWCP,⁸⁶ our interest is in more modern cases in which the facts and some of the sources may still be available and in which most of the law enforcement techniques at issue in the cases are still relevant to today.

We initially turned to the PWCP database to locate cases that met our criteria. Finding six in that dataset, we randomly sampled 350 cases from the National Registry of Exonerations that contained allegations of prosecutorial misconduct. Of these, thirteen cases met the three criteria outlined above. Finally, we solicited recommendations from attorneys familiar with wrongful convictions, from which we obtained the remaining cases.

Ultimately, we were able to analyze twenty-two cases, encompassing seventy-three individual pieces of evidence.⁸⁷ To some, this number might appear small. The National Registry of Exonerations (NRE) lists 2,729 exonerations since 1989.⁸⁸ However the NRE uses a definition of exoneration that may include defendants who are factually

84. Funded by the National Institute of Justice, the PWCP compared 260 wrongful conviction cases with 200 “near misses.” Gould et al., *supra* note 18, at 471, 477. The latter constituted innocent defendants who were charged but not convicted of a crime they did not commit. *Id.* at 483. In addition to employing a control group, the PWCP database differs from other known datasets, including the National Registry of Exonerations, because all the defendants are factually innocent. *See id.* at 475–76, 483. In the present study, we used PWCP’s definition of innocence to forestall any objections that the defendants had been exonerated on “legal technicalities” alone.

85. Although we recognize the latter is not specifically a *Brady* violation, in most such cases the court relied upon *Brady v. Maryland* in holding the state liable. For ease of reference, we will be titling these cases “*Brady* violations.”

86. *See* Gould et al., *supra* note 18, at 483.

87. *See infra* App. B: Case and Evidence List.

88. *National Registry of Exonerations*, MICH. ST. UNIV. COLL. OF L., <http://www.law.umich.edu/special/exoneration/Pages/about.aspx> (last visited Feb. 15, 2021) [hereinafter *National Registry*].

guilty.⁸⁹ This has been an issue of scholarly debate,⁹⁰ one in which we err on the side of caution and utilize a conservative definition of innocence. Further, at the time we began this research, the NRE listed a generic category of “official misconduct” as a contributing factor without furthering distinguishing between *Brady* violations and other forms of misconduct.⁹¹ Even today, the NRE lists a category of “withheld exculpatory evidence,”⁹² but this classification reflects a judgement of the NRE’s research team rather than reflecting a court’s determination. Again, we seek to err on the side of caution in selecting cases.

Our point is not to criticize the NRE but to suggest that *Brady* violations have been elusive in the study of erroneous convictions. The legal standard alone makes a *Brady* claim hard to prove,⁹³ and courts have been hesitant to acknowledge erroneous convictions absent biological evidence.⁹⁴ As such, our set of twenty-two cases of *Brady* violations in exonerations of factual innocence is arguably the most comprehensive compilation currently available for analysis. We do not claim that the cases are fully representative of *Brady* errors or wrongful convictions, and, indeed, we should all wish that such cases were easier to identify. But in covering the twin issues of *Brady* errors and their contribution to erroneous convictions, these cases represent an appropriate start in empirical analysis.

B. Data Collection

To compile comprehensive information on each case, we used multiple sources, including legal documents, case files, media accounts, and interviews with justice officials involved with the cases. We evaluated the reliability of each piece of information. In general, court

89. As the NRE’s glossary indicates, the NRE includes cases in which a conviction is overturned and a prosecutor chooses not to retry the defendant. See *National Registry of Exonerations: Glossary*, MICH. ST. UNIV. COLL. OF L., <https://www.law.umich.edu/special/exoneration/Pages/glossary.aspx> (last visited Feb. 15, 2021) [hereinafter *Glossary*]. However, in these instances, “evidence of innocence need not be an explicit basis for the official action.” *Id.*

90. See, e.g., Richard A. Leo & Amy Shlosberg, *Double Wrongful Convictions and Second Chance Near Misses: What Does Data from the National Registry of Exonerations Teach Us?* AM. SOC’Y OF CRIMINOLOGY (2019); Richard A. Leo, Has the Innocence Movement Become an Exoneration Movement? The Risks and Rewards of Redefining Innocence 1–2, 9–12 (Mar. 1, 2016) (research paper, University of San Francisco Law), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2756124 (the citation is based on the authors’ experience attending the paper presentation at the 2019 annual meeting of the American Society of Criminology.)

91. *National Registry*, *supra* note 88.

92. *Id.*

93. See Aviram, *supra* note 46, at 37–38.

94. GOULD, *supra* note 35, at 88, 214–15, 218–19.

records were given the highest level of reliability, followed by police reports, media reports, and law review or scholarly articles.⁹⁵ Interview notes and organizational reports were evaluated on a case-by-case basis. Where documents were not clear, we contacted the attorneys involved for additional information. For this reason, our research was conducted under a Human Subjects Protection Plan that required anonymity of the cases.⁹⁶

Although each case included a judicial declaration of nondisclosure, we also chose to track instances within our sample in which the defense alleged, but a court rejected, additional claims of *Brady* violations. We labeled these charges “alleged *Brady* claims.” We are not claiming that defense-alleged claims qualify on the same level as a court’s declaration of material nondisclosure. But given scholars’ expectations that proven *Brady* claims are only a small subset of problematic nondisclosure by the state,⁹⁷ we noted cases of alleged nondisclosure and followed the implications of such evidence.

C. Decision-Tree Modeling

After compiling a comprehensive timeline of each case, we used a modified form of decision tree modeling to examine the selected cases. Decision tree modeling helps the researcher follow a sequence of decision-making processes to understand how a final outcome is reached.⁹⁸ First, a process requiring a series of complex steps is selected.⁹⁹ Researchers collect information on the decision-making process, elicit decision criteria, and identify contrasts in decision-making processes between individuals.¹⁰⁰ Based on these data, the researcher composes individual decision trees, which are subsequently integrated into a combined model.¹⁰¹ This method has been used to understand the

95. For example, court filings from either side in a case were considered more reliable than media accounts in describing trial-level facts, but none was considered definitive unless confirmed by a judicial opinion.

96. Human Subjects Protection Plans are intended to protect the rights and welfare of participants in a research study as the subject of that research. *Human Subjects Protections*, REGENTS OF THE UNIV. OF MICH., <https://orsp.umich.edu/glossary/human-subjects-protections#:~:text=%22Human%20Subjects%20Protections%22%20is%20a,the%20subjects%20of%20that%20research> (last visited Feb. 19, 2021).

97. GROSS, *supra* note 42. The authors also reference personal conversations with Samuel R. Gross before and during the research project.

98. See, e.g., Kirk A. Beck, A Decision Making Model of Child Abuse Reporting 44 (unpublished thesis, University of British Columbia) (2010), <https://open.library.ubc.ca/cIRcle/collections/ubctheses/831/items/1.0089769>.

99. *Id.*

100. *Id.*

101. *Id.*

processes involved in a range of social issues, including whether to evacuate for a hurricane,¹⁰² recycle cans,¹⁰³ and sunscreen use.¹⁰⁴

Modifying decision trees to examine legal cases, rather than decision-making processes of individuals, can be particularly beneficial to understand erroneous convictions. In our study, we examined both the decisions by investigators to follow-up on potentially exculpatory information (or not) as well as the decisions by prosecutors to share potentially exculpatory and material evidence (or not) and the effects of each on the progression of the case. Examining alternate scenarios in a case can illustrate the points at which a case could have ended or taken an alternate course (e.g., an alternative suspect pursued or the charges against a defendant dropped). Further, analyzing how and why the key events in a case occurred can be synthesized with existing legal or social science literature to reach a more holistic understanding of the various factors involved in a wrongful conviction. In the case of *Brady* violations, constructing decision trees has the advantage of breaking down a formerly binary concept (a *Brady* violation occurred vs. a *Brady* violation did not occur) to understand the sources, timing, types, and effects of *Brady* evidence.

The decision trees were drawn from the timelines and were organized around key events in the discovery, investigation, and disclosure of evidence. For ease of reference, we delineated between confirmed and alleged *Brady* violations with different shading. Once the relevant events were identified, these were placed in chronological order and connected by a causal-path tree to other events in the decision tree. Additionally, we created alternate paths in the tree to account for different directions the case might have taken had any of the coded *Brady* evidence (confirmed or alleged) been recognized at the time as being material and potentially exculpatory. The result of this process was a visual

102. See Christiana H. Gladwin, Hugh Gladwin, & Walter Gillis Peacock, *Modeling Hurricane Evacuation Decisions with Ethnographic Methods*, 19 INT'L J. MASS EMERGENCIES & DISASTERS 117, 119 (2001).

103. See Gery W. Ryan & H. Russell Bernard, *Testing an Ethnographic Decision Tree Model on a National Sample: Recycling Beverage Cans*, 65 HUM. ORG. 103, 103 (2006).

104. See Elyse Shuk et al., *Factors Associated with Inconsistent Sun Protection in First-Degree Relatives of Melanoma Survivors*, 22 QUALITATIVE HEALTH RES. 934, 935 (2012). Although many studies employing decision trees rely on large-n samples, this method is also well-suited to smaller samples of twenty to twenty-five individuals or cases for the development of preliminary models. See Beck, *supra* note 98, at 55; see also generally CHRISTINA H. GLADWIN, ETHNOGRAPHIC DECISION TREE MODELING (1989) (providing a step-by-step guide to the decision tree modeling method). Thus, the sample size in the present study—twenty-two cases—is acceptable for composing preliminary decision trees of *Brady* violations.

representation of the events (and possible alternate events) in each case as related to the *Brady* evidence.¹⁰⁵

D. Decision-Tree Example: Ayers's Case

To illustrate our method, we outline the decision tree for the case of David Ayers, the only case in our sample that relies entirely on publicly available data and, thus, need not be kept confidential under our Human Subjects Protection Plan. On December 17, 1999, Dorothy Brown was found dead in her apartment by a neighbor.¹⁰⁶ She had been bludgeoned several times by an object that was never recovered.¹⁰⁷ In late January of 2000, investigators began to focus on Ayers, who worked as a security guard and lived in the same apartment complex as the victim.¹⁰⁸ Despite requests to turn over all potentially exculpatory evidence, the presence of alternative suspects¹⁰⁹ and an incriminating statement made by Ayers under duress¹¹⁰ were all withheld from the defense. Ayers was convicted of the murder and robbery of Dorothy Brown in December 2000.¹¹¹ In 2010, the U.S. Court of Appeals for the Sixth Circuit granted him a writ of habeas corpus on the basis that two investigators violated Ayers's Sixth Amendment right to counsel by using a jailhouse informant to induce incriminating statements without the assistance of counsel.¹¹²

In Appendix A, we provide the full decision tree in Ayers's case.¹¹³ The initial steps of the investigation (from December 1999 to January 2000) illustrate one possible contrast between cases—when in the case the evidence was discovered.¹¹⁴ Four of the five suspects in this case were derived from the initial police investigation.¹¹⁵ Of these suspects, all but one constituted alternate suspects that were neither pursued by investigators nor disclosed to the defense.¹¹⁶ In one instance, the court found the failure to disclose the suspect violative of *Brady*.¹¹⁷ In another,

105. See *infra* App. A: Ayers' Decision Tree.

106. Possley, *supra* note 1.

107. See *id.*

108. See *Ayers v. City of Cleveland*, No. 1:12-CV-753, 2013 U.S. Dist LEXIS 25992, at *3–4, 6 (N.D. Oh. Feb. 25, 2013); see also Possley, *supra* note 1.

109. See *infra* App. B: Case and Evidence List (Evidence 1.1–1.3, 1.5).

110. See *infra* App. B: Case and Evidence List (Evidence 1.4).

111. Possley, *supra* note 1.

112. *Ayers v. Hudson*, 623 F.3d 301, 316–17 (6th Cir. 2010) (citing 28 U.S.C. § 2254(d)(1) (2021)).

113. See *infra* App. A: Ayers' Decision Tree.

114. See *infra* App. A: Ayers' Decision Tree.

115. See *infra* App. A: Ayers' Decision Tree.

116. See *infra* App. A: Ayers' Decision Tree.

117. *Ayers*, 2013 U.S. Dist LEXIS 25992, at *20 (regarding alternative suspect Lawrence Reid); App. B: Case and Evidence List (Evidence 1.5).

the defense later challenged the nondisclosure but the court found it legally permissible.¹¹⁸ In each example, though, the decision tree shows the alternate paths (denoted by dashed lines on the decision tree) the investigation and case might have taken had the police followed-up on the evidence.¹¹⁹ For example, charges might have been brought against one of the other suspects.

Moving from the police investigation to the trial phase (March to December 2000), the decision tree shows that the defense learned of some of the potentially exculpatory evidence during the pretrial hearing.¹²⁰ The dashed line and box show an alternate path the case could have taken: Had the prosecution disclosed the presence of alternate suspects to the defense or shared earlier the coercive nature of the interrogation, the defense could have used this evidence at trial, potentially leading to his acquittal or the dismissal of charges.¹²¹ Thus, using decision trees to analyze cases enables us to assess the impact of *Brady* evidence by examining the progression of the case and alternate possible paths. This method also highlights contrasts between cases and helps us understand variation between *Brady* cases.

E. Key Questions

Using case timelines and decision trees as a guide, we compared cases across multiple categories representing the type of nondisclosure present and the respective paths taken in the investigation, prosecution, and defense of the case. We categorized the evidence in our cases across several dimensions.¹²² These included the type of evidence, the point in the investigation the evidence was discovered, the discovering party, how the defense became aware of the withheld evidence, the intentionality of the withholding, reasons for nondisclosure, how the withheld evidence could have affected the case, and whether the disclosure of the evidence to the defense would have prevented the wrongful conviction.¹²³ Our procedures for each are described in Appendix C.¹²⁴

After classifying the cases, we reviewed our coding of representative cases with a panel of three experienced prosecutors from different

118. *Ayers v. Bradshaw*, No. 1:04CV0133, 2007 U.S. Dist. LEXIS 71946, at *17 (N.D. Ohio Sep. 27, 2007) (regarding alternative suspect Darin Ward); *See infra* App. B (Evidence 1.1, 1.2).

119. *See infra* App. A: Ayers' Decision Tree.

120. *See infra* App. A: Ayers' Decision Tree.

121. *See infra* App. A: Ayers' Decision Tree.

122. *See infra* App. C: Case Classification Methods.

123. *See infra* App. C: Case Classification Methods.

124. *See infra* App. C: Case Classification Methods.

jurisdictions.¹²⁵ Known nationally for their expertise and for their training of other prosecutors, the panelists served a check of our analysis. Those discussions convinced us that we had been *too* deferential to prosecutors in one of our coding rules—the distinction between intentional and reckless or negligent nondisclosure—which led to an adjustment. We also created two new categories for the basis of nondisclosure given their recommendation.¹²⁶ Ultimately, then, the findings here rely on conservative judgements deferential to justice officials and in consultation with a panel of experienced prosecutors.

Further, we considered the extent to which the disclosure of the evidence to the defense could have prevented the wrongful conviction. In several cases, the defendants were retried following the discovery of the evidence, so we were able to directly discern the effect the evidence had on trial outcome. For the remaining cases, we applied our understanding of the defense's strategy, the other evidence available to the prosecution, and our own knowledge of the wrongful convictions literature to estimate the likely outcome had the defense been in possession of the exculpatory evidence. Finally, using both descriptive statistics and inductive reasoning to identify common patterns, we sorted our cases into common categories or typologies.¹²⁷

III. FINDINGS

Within the twenty-two cases, we identified seventy-three distinct pieces of relevant evidence, which we organized based on whether a court confirmed them as violating *Brady* or the defense unsuccessfully alleged that they violated *Brady*.¹²⁸ Among these, the great majority (71%) were declared by a court to have violated *Brady*, meaning they were material and exculpatory and not disclosed to the defense by the time of trial.¹²⁹ In

125. *See infra* Part III.A. We used stratified random sampling to create a subset of three homicide cases and three non-homicide cases for review by the panel of prosecutors.

126. *See infra* Table 2: Responsibility and Mindset of Disclosure. The revised coding of mindset and the new categories for basis are related. Originally, we coded as unintentional prosecutors' decisions to withhold evidence because of a mistaken evaluation of the evidence's materiality. The expert panel of prosecutors convinced us, however, that materiality judgments are, by definition, intentional, even if sincerely made. Indeed, an important finding from our research—as we discuss later—is the distinction between intentional and malicious nondisclosure.

127. *See infra* Tables 1–3.

128. For an anonymized list of cases and associated evidence, please see Appendix B.

129. *See infra* Table 1: Type and Timing of Withheld Evidence (Fifty-two out of seventy-three).

the remaining twenty-nine percent, the defense had unsuccessfully challenged the evidence in court as violating *Brady*.¹³⁰

A. Type & Timing of Evidence

As shown in Table 1, 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.¹³¹ The evidence as a whole was especially relevant in identifying alternative suspects (49%) or impeaching the veracity of state witnesses (47%).¹³² Generally, evidence first became known to the state once a suspect arose but before he was arrested (64%).¹³³ Another quarter of the evidence arose post-arrest but prior to trial, meaning that almost all exculpatory evidence was uncovered before the trial stage (95%).¹³⁴

Table 1. Type and Timing of Withheld Evidence

	Confirmed (n = 52)	Alleged (n = 21)	Total (n = 73)
Evidence Type^a			

130. See *infra* Table 1: Type and Timing of Withheld Evidence (Twenty-one out of seventy-three).

131. See *infra* Table 1: Type and Timing of Withheld Evidence

132. See *infra* Table 1: Type and Timing of Withheld Evidence

133. See *infra* Table 1: Type and Timing of Withheld Evidence

134. See *infra* Table 1: Type and Timing of Withheld Evidence

Criminal Record	10%	0%	7%
Expert Report	8%	0%	5%
Informants	2%	5%	3%
Log/Time Records	2%	5%	3%
Police Report	25%	24%	25%
Improper Procedure	0%	14%	4%
Witness Statements	50%	48%	49%
Tips	4%	5%	4%

When Identified^b

Before Origin	6%	10%	7%
Before Arrest	63%	67%	64%
Before Trial	25%	19%	24%
During Trial	4%	0%	2%
Post-Conviction	2%	5%	3%

Use of Evidence^c

Alternative Suspect	62%	19%	49%
Defendant Character	0%	10%	3%
Impeachment	36%	71%	47%
Mitigation	2%	0%	1%

^a $p = 0.1$ ^b $p = 0.77$ ^c $p = 0.002$

B. Responsibility & Mindset Nondisclosure

For all cases in the sample, prosecutors (59%) were more than twice as likely as police (23%) to be responsible for a failure to disclose.¹³⁵ Nondisclosure was intentional in just over one-third of confirmed *Brady* violations (37%) and twenty-four percent of alleged violations.¹³⁶ However, given the large number of instances in which mindset could not be determined (23% of confirmed cases and 62% of alleged violations),¹³⁷ it is possible that an even greater share of *Brady* violations were intentional. Nevertheless, for present purposes we are able to say that *at least one-third* of nondisclosure was intentional.¹³⁸

135. See *infra* Table 2: Responsibility and Mindset of Disclosure.

136. See *infra* Table 2: Responsibility and Mindset of Disclosure. As discussed earlier, we made this determination conservatively, looking mainly to judicial determinations that a prosecutor or law enforcement officer intended to exclude material, exculpatory evidence from the defense; we further checked a sample of our coding decisions with an expert panel of prosecutors, who convinced us to code additional instances as intentional.

137. See *infra* Table 2: Responsibility and Mindset of Disclosure.

138. See *infra* Table 2: Responsibility and Mindset of Disclosure.

Table 2. Responsibility and Mindset of Disclosure

	Confirmed (n = 52)	Alleged (n = 21)	Total (n = 73)
Responsible Party^a			
Police	19%	33%	23%
Prosecutors	60%	57%	59%
Disputed	4%	0%	3%
Unclear	17%	10%	15%
p=.44			
Mindset for Nondisclosure^b			
Intentional	37%	24%	33%
Reckless or Negligent	31%	14%	26%
Undetermined	33%	62%	40%

^a $p = 0.44$ ^b $p = 0.44$

C. Bases for Nondisclosure

Finally, we examined the potential motivations for non-disclosure. Although the plurality of confirmed failures was unintentional, we determined that the cases still indicate a preoccupation by police and prosecutors with closing cases and convicting the defendant. Police and prosecutors may be pressed for time (18%) or misplace evidence (16%), but these bases for withholding pale in comparison to those confirmed *Brady* violations (81%) in which police or prosecutors appeared to be so driven to convict the defendant that they did not disclose material, exculpatory evidence in their possession.¹³⁹ In a later section,¹⁴⁰ we discuss the distinction between the state's interest in convicting *a* suspect and its desire to convict *this* defendant, but for now the data in Table 3 suggest that even unintentional failures reveal troubling motives.¹⁴¹ This is particularly true when one considers that almost all of the confirmed *Brady* evidence (94%) was first identified by the state prior to trial and could have been shared with the defense in time to affect adjudication or sentencing.¹⁴²

139. See *infra* Table 3: Bases for Nondisclosure. To be sure, we identified multiple reasons that a single piece of evidence went undisclosed, so the percentages for bases in Table 1: Type and Timing of Withheld Evidence sum to more than 100%.

140. See discussion *infra* Part III.F (discussing bases versus motives for nondisclosure).

141. See *infra* Table 3: Bases for Nondisclosure.

142. See *supra* Table 1: Type and Timing of Withheld Evidence.

Table 3. Bases for Nondisclosure

	Confirmed (n = 52)	Alleged (n = 21)	Total (n = 73)
Mislaid Evidence	16%	19%	17%
Pressed for Time	18%	29%	21%
Protecting Witness	12%	0%	8%
Winning A Conviction	30%	24%	29%
Convicting This Defendant	81%	62%	75%
Materiality Judgment	29%	19%	26%
Defense Burden	13%	0%	10%

Because there were multiple bases for the nondisclosure of evidence, percentages do not add to 100 percent, and separate p values exist for each basis of nondisclosure. Together, these p values average 0.3.

D. The Path from Crime to Erroneous Conviction

In addition to describing the nature of *Brady* evidence, our aim was to understand how the evidence relates to key events in a case, which in turn explain the path from crime to erroneous conviction. To examine these patterns, we turned to the decision trees, looking for common connections between case events or mapping how particular kinds of evidence more commonly led to particular results. This was necessarily an inductive process and one that involved the entire research team. Each of three researchers was responsible for a single case and presented their findings to a group of five. In a back-and-forth analysis akin to medicine's teaching rounds,¹⁴³ the paths were refined and the case typologies developed.

From this process, we educed several common characteristics of undisclosed evidence in wrongful conviction cases. These include the timing and nature of *Brady* violations, the difficulty in unearthing and recognizing exculpatory evidence in time to affect the outcome of a case, and the stealth power of potential *Brady* evidence that, while largely not withheld intentionally, still reinforces tunnel vision by justice officials. More specifically, our findings suggest several broad themes, described below.

143. See David M. Irby, *How Attending Physicians Make Instructional Decisions When Conducting Teaching Rounds*, 67 ACAD. MED. 630, 630 (1992).

E. Timing of Evidence

The most common forms of exculpatory evidence are uncovered early in a case, but police and prosecutors do not appear to appreciate—or act on—its discovery.¹⁴⁴ As Table 1 indicates, the most common types of exculpatory evidence could have identified alternative suspects or cast doubt on the motives or testimony of state witnesses.¹⁴⁵ However, alternative suspect and case information often appears to come to light early in a case—before a defendant is identified or an arrest is made.¹⁴⁶ At that point, detectives and prosecutors do not seem to appreciate the materiality or exculpatory nature of this evidence.¹⁴⁷ For example, over ten witnesses in Case 9 gave matching accounts suggesting the crime occurred at a location different from the one identified by investigators,¹⁴⁸ and yet police did not investigate the alternative site. Although *Brady* would require the eventual disclosure of this evidence to the defense, it is more important that police and prosecutors act on it early in an investigation before they become locked into a theory of the case and potentially discount facts that do not fit their assumptions.

Were investigators to give greater attention to alternative suspects or carefully dissect contradictory case information, they might beat back the kind of tunnel vision that leads to wrongful convictions.¹⁴⁹ For example, in Case 13 police ignored the presentation of a viable alternative suspect in favor of continued investigation into the wrongfully convicted suspect.¹⁵⁰ The alternative suspect had first been proposed by neighbors during a routine canvas, who reported that the alternative suspect had exposed himself to their underage daughter. Despite this information, and the wrongfully convicted suspect's strong alibi placing him at a local retail establishment during the time of the assault, investigators did not follow-up on the witnesses' statement. Shortly following the canvas, the alternative suspect moved away from the area, which complicated the defense's investigation once the possibility of an alternative suspect became known. As this case exemplifies, earlier attention by investigators to potentially exculpatory evidence (the alternate suspect) might have forestalled the investigation and prosecution of the innocent defendant.

144. See Susan Bandes, *Loyalty to One's Convictions: The Prosecutor and Tunnel Vision*, 49 HOWARD L.J. 475, 479 (2006).

145. See generally, *supra* Table 1: Type and Timing of Withheld Evidence.

146. See, e.g., *supra* Table 1: Type and Timing of Withheld Evidence.

147. See Bandes, *supra* note 144, at 477–78.

148. See *infra* App. B: Case and Evidence List (Evidence 9.4–9.10). Multiple witness accounts were recorded in single pieces of evidence.

149. See *id.* at 375–76.

150. See *infra* App. B: Case and Evidence List (Evidence 13.1).

For that matter, the state does not appear to become aware of weaknesses in its evidence until after arrest, but at that point it may be difficult to hold back the march toward a wrongful conviction. The literature on prosecutor tunnel vision suggests that as a case continues to build, prosecutors often become more locked into their theory and witnesses, to the point that it is difficult to dissuade them with contradictory information about the evidence or witnesses.¹⁵¹

Defense attorneys, however, are in a reasonable position to challenge the state's case to the triers of fact, and their access to such exculpatory information is essential. In Case 17, for example, prosecutors withheld documents detailing a series of revisions and recantations by their lead witness.¹⁵² These documents contained direct statements from the witness that she had been coached by a friend to identify the defendant.¹⁵³ Had this information been properly disclosed, defense counsel could have challenged not only the witness but also the investigators regarding the witness's identification of the defendant.¹⁵⁴ Given that this was the strongest piece of evidence linking the defendant to the case, we believe it is reasonable to conclude that the evidence could have altered the outcome of the case. For that matter, in Case 20, the original defense attorneys signed an affidavit in their client's habeas appeal explaining exactly how they would have employed the withheld evidence to his benefit at trial.¹⁵⁵

F. Basis vs. Motive

As indicated in Table 2, using conservative judgements, we concluded that nondisclosure was almost as likely to be unintentional as intentional.¹⁵⁶ Typically, police and prosecutors failed to disclose evidence in these cases because they did not appear to recognize its significance at the time.¹⁵⁷ For example, a witness in Case 12 informed investigators that a family member had spotted a suspicious person lurking in a parked vehicle near the scene of a homicide on multiple prior occasions. At the time they received the report, investigators were already

151. See Bandes, *supra* note 144, at 479; see also Burke, *Improving Prosecutorial Decision Making*, *supra* note 56, at 1604; see also Burke, *Neutralizing Cognitive Bias*, *supra* note 56, at 515; see also Findley & Scott, *supra* note 56, at 292; see also Aviram, *supra* note 46, at 38.

152. See *infra* App. B: Case and Evidence List (Evidence 17.3).

153. See *infra* App. B: Case and Evidence List (Evidence 17.3).

154. See *infra* App. B: Case and Evidence List (Evidence 17.3).

155. See *infra* App. B: Case and Evidence List (Evidence 20.1–20.4).

156. See *supra* Table 2: Responsibility and Mindset of Disclosure.

157. See *supra* Table 3: Bases for Nondisclosure.

convinced that the victim's spouse was the perpetrator and dismissed the report as immaterial.¹⁵⁸

In other cases, the state's unintentional failure to disclose reflected the intense time pressure that police and prosecutors were under to close a case, especially when the crime drew local attention. In that rush, investigators neglected to obtain certain evidence, such as a witness' criminal history. For example, in Case 18 detectives accepted the word of the alleged victim that he did not have a criminal record rather than taking the time to run his criminal history.¹⁵⁹ If the detectives had done so, they would have learned that the victim had multiple convictions and a propensity to lie to law enforcement.¹⁶⁰ Here, rather than knowingly put forth an untruthful witness, police simply skipped a step in hurrying a case along to closure.¹⁶¹

There were also cases in which police officers or prosecutors were motivated to protect an informant (Case 2).¹⁶² Wishing to believe their "asset," or reluctant to reveal that these witnesses received special treatment from police or prosecutors, justice officials failed to disclose holes in their witnesses' backgrounds or testimony. Although these may sound like intentional decisions on the part of police or prosecutors, they were really more akin to recklessness, as investigators, who relied heavily on confidential informants, too often disregarded questionable stories, evidence, or testimony from their sources.¹⁶³ In this respect, the detectives' unwillingness to disclose reflects the type of cognitive biases illustrated in Findley and Scott's research on tunnel vision in criminal cases, in which investigators discount evidence that contradicts their theory of the cases.¹⁶⁴

Of graver concern were intentional *Brady* violations, those cases in which police or prosecutors were so intent to secure a conviction that they kept from the defense evidence that was both material and exculpatory.

158. See *infra* App. B: Case and Evidence List (Evidence 12.1–12.4).

159. See *infra* App. B: Case and Evidence List (Evidence 18.1).

160. See *infra* App. B: Case and Evidence List (Evidence 18.1).

161. See *infra* App. B: Case and Evidence List (Evidence 18.1).

162. See *infra* App. B: Case and Evidence List (Evidence 2.1–2.5).

163. Under the Restatement (Third) of Torts, intent to produce a consequence exists if "(a) the person acts with the purpose of producing that consequence" or "(b) the person acts knowing that the consequence is substantially certain to result." RESTATEMENT (THIRD) OF TORTS § 1 (2020). By contrast, a person acts recklessly if "(a) the person knows of the risk of harm created by the conduct or knows facts that make that risk obvious to another in the person's situation, and (b) the precaution that would eliminate or reduce that risk involves burdens that are so slight relative to the magnitude of the risk as to render the person's failure to adopt the precaution a demonstration of the person's indifference to the risk." RESTATEMENT (THIRD) OF TORTS § 2 (2020).

164. See Findley & Scott, *supra* note 56, at 292.

Of these, a few were especially egregious. In Case 16, a detective claimed to have received a tip that an inmate in jail had information regarding the homicide in question.¹⁶⁵ However, a recording of their conversation indicated the detective, along with the prosecutor, coached and coerced the informant into identifying the defendant as the perpetrator in exchange for release from jail.¹⁶⁶ Prosecutors knowingly refused to share the recording with the defense.¹⁶⁷

However, even among the intentional failures to disclose, we distinguish between purposeful and bad faith acts by police and prosecutors, especially as they pertain to materiality judgments. In twenty-nine percent of the confirmed *Brady* violations, police or prosecutors inaccurately judged the materiality of the exculpatory evidence in their hands.¹⁶⁸ As our panel of prosecutors noted, these determinations were necessarily intentional, but the officials making these calls *may* have made the decisions in good faith.

For example, in Case 2, police failed to pass along to prosecutors the report of an alternative suspect's girlfriend that he had been beating her.¹⁶⁹ In their view, the fact that a known drug dealer would beat his girlfriend was commonplace and did not make him any more likely to kill one of his customers. However, an appellate court disagreed, concluding that the alternative suspect's prior sexual relationship with his customer made the report of interpersonal violence material. As in several other cases, we were unable to determine here whether detectives had made a plausible, although incorrect, judgement when initially weighing the materiality of the report or whether their justification was a ruse. Still, we take seriously the reminder of Coleman and Lockey that it is possible, indeed plausible, that officials may have acted intentionally but without malice in declining to disclose evidence they thought to be immaterial.¹⁷⁰

In other instances of intentional nondisclosure, prosecutors provided some, but not all, of the exculpatory evidence in their possession because they believed the defense should be required to conduct its own investigation. These actions accounted for thirteen percent of the confirmed *Brady* violations and encompassed such situations as providing the names of exculpatory witnesses as part of a larger list of potential witnesses with no explanation as to the nature of their likely

165. See *infra* App. B: Case and Evidence List (Evidence 16.8).

166. See *infra* App. B: Case and Evidence List (Evidence 16.8).

167. See *infra* App. B: Case and Evidence List (Evidence 16.8).

168. See *supra* Table 3: Bases for Nondisclosure.

169. See *infra* App. B: Case and Evidence List (Evidence 2.3).

170. See Coleman & Lockey, *supra* note 76, at 225–26.

testimony (Case 9).¹⁷¹ Prosecutors did this as well in Case 5 purportedly to bury contradictory victim statements within a mountain of paper disclosed at the last possible moment.¹⁷²

We recognize it is tempting to focus on the distinction between intentional and reckless/negligent *Brady* violations, but our analysis suggests that the more pressing issue for nondisclosure is the basis, not mindset, of that failure. Indeed, as Table 3 indicates, in more than four of five confirmed *Brady* violations state officials were so desirous of a conviction or so certain that they had caught the “right guy” that they were blind to holes in the evidence.¹⁷³ Several of these instances reflect unintentional nondisclosure, but in some ways that makes their occurrence more troubling. It appears that in many cases prosecutors and police officers did not set out to hide exculpatory evidence from defendants and their lawyers; rather, they were so confident in their judgement and actions that they missed the materiality of evidence in their possession or turned a blind eye to its exculpatory nature.

In some of these cases, justice officials believed that the defendant was the true perpetrator of the crime in question.¹⁷⁴ Naturally, police and prosecutors should maintain a level of confidence in their work, but we identified this basis in a troubling number of cases: seventeen of twenty-two. It arose in situations in which detectives rejected a lead more credible than the defendant’s link to the crime or when officers focused on the first suspect to surface and declined to investigate further. For example, in Case 16, investigators immediately identified two co-defendants as the perpetrators, despite the victim having other equally likely associates.¹⁷⁵ Investigators then repeatedly rejected a series of witness statements identifying an alternative suspect who had similar connections to the victim and had fled town the day after the murder, leaving his vehicle by the side of the road untouched.

By contrast, we found that in thirty percent of instances police and prosecutors were motivated by the desire to secure *any* conviction.¹⁷⁶ In these cases, police and prosecutors were typically facing pressure to close a notorious case, either from their supervisors, political leaders or media attention or sometimes from their own sense of duty to “bring justice” to the victim. For example, one of these cases (Case 14) involved allegations of child sexual abuse at the height of mass hysteria surrounding abuse at

171. *See supra* Table 3: Bases for Nondisclosure; *see also* App. B: Case and Evidence List (Case 9).

172. *See infra* App. B: Case and Evidence List (Evidence 5.1).

173. *See supra* Table 3: Bases for Nondisclosure (“Convicting This Defendant”).

174. *See supra* Table 3: Bases for Nondisclosure: Bases for Nondisclosure.

175. *See infra* App B: Case and Evidence List (Evidence 16.1–16.7).

176. *See supra* Table 3: Bases for Nondisclosure (“Winning a Conviction”).

day care centers in the 1980s.¹⁷⁷ Another case involved the home invasion and rape of a young woman. High profile cases such as these typically garner increased attention from criminal justice actors, who are responding to pressures both from supervisors and the public.¹⁷⁸ This additional attention very likely includes an increase in investigative activity and, therefore, an increase in the amount of evidence collected and documents produced. Theoretically, the greater volume of evidence could increase the likelihood that evidence would be misplaced or that exculpatory material would go unexamined.

We think, however, that the literature on tunnel vision provides the better explanation for these findings. As police and prosecutors face greater pressure to make a collar—to find a suspect, close the case and reassure the public and their superiors—incentives increase to accept the evidence before them that points to the suspect’s guilt or at the very least to discount alternative evidence that threatens the theory of the case.¹⁷⁹ In some cases, these incentives become deliberate instructions. Consider Case 13, in which an investigator was reprimanded by a member of the prosecution team for revealing more information to the defense than was strictly required by law.¹⁸⁰ In Case 10, prosecutors narrowly crafted their response to the defense’s discovery request to answer what they saw as the limited question posed while still concealing an exculpatory statement made by a government witness.¹⁸¹ In both cases, judges later reprimanded justice officials for withholding material exculpatory evidence from the defense, serving as a reminder that the pressure to close a case cannot stand in the way of disclosure.

G. Source of Eventual Disclosure

We found that defendants do not typically learn of undisclosed evidence until post-conviction, and then often from extra-judicial sources. By definition, any evidence held violative of *Brady* is not shared with the defense during the trial phase or is disclosed so late in the trial process that it cannot be used effectively by the defendant or his representatives.¹⁸² Unfortunately, there are cases in our sample in which

177. See Bette L. Bottoms & Suzanne L. Davis, *The Creation of Satanic Ritual Abuse*, 16 J. SOC. & CLINICAL PSYCH. 112, 113 (1997); see *infra* App. B: Case and Evidence List (Case 14).

178. See generally Marilyn Corsianos, *Discretion in Detectives’ Decision Making and ‘High Profile’ Cases*, 4 POLICE PRAC. & RES. 301 (2003) (discussing the effects of various pressures on detectives’ decision making in high-profile cases).

179. Findley & Scott, *supra* note 56, at 323–29.

180. See *infra* App. B: Case and Evidence List (Case 13.1).

181. See *infra* App. B: Case and Evidence List (Case 10).

182. See *Brady v. Maryland*, 373 U.S. 83, 87 (1963).

the prosecution failed to turn over exculpatory evidence even when the defense made a specific request for such material or the court held an evidentiary hearing to deduce what evidence was in the state's possession. In many of these cases it took until the collateral appeals process for exculpatory evidence to arise in response to evidentiary requests. In one such case, the state's reply provided information on an individual who claimed to have witnessed the victim being abducted at the same time the defendant had a solid alibi (Case 20).¹⁸³ The original trial attorneys then signed an affidavit stating they would have used this information at trial had it been disclosed.

But, even when exculpatory evidence is discovered post-trial, the cases suggest that evidence is uncovered through extra-judicial processes or actors—processes *other* than court orders and from sources *other* than justice officials. For example, in multiple cases the defense seemed to learn of exculpatory evidence when trial witnesses arose to recant their prior testimony (Cases 1 and 18)¹⁸⁴ or friends or family members who had access to law enforcement records came across exculpatory information on their own (Cases 3 and 16).¹⁸⁵

The situation is particularly troublesome when the state has intentionally failed to disclose exculpatory evidence. In these cases, our analysis reveals a concerted effort on behalf of state officials to keep exculpatory evidence from ever reaching the defense's hands, so much so that the defense learned of the withheld information only when friends, investigators or private citizens independently came to their aid. In Case 13, witnesses who identified an alternative suspect to investigators were so surprised to read in the newspaper that another person had been convicted that they contacted the defense team.¹⁸⁶ This phone call was the first time the defense was made aware of an alternative suspect. Had the witnesses not been so convinced of the alternative suspect's guilt, the defense would never have learned of the identification. In Case 16, the defense gained post-conviction access to evidence only through the diligent work of the defendant's family.¹⁸⁷ Independently, they were able to collect video, audio, and written statements identifying an alternative suspect who had not been disclosed by the prosecution. Thus, it was private initiative—not a judicial order or state action—that eventually brought the exculpatory evidence to the defense's attention.

183. See *infra* App. B: Case and Evidence List (Case 20).

184. See *infra* App. B: Case and Evidence List (Case 1 & 18).

185. See *infra* App. B: Case and Evidence List (Case 3 & 16).

186. See *infra* App. B: Case and Evidence List (Evidence 13.1).

187. See *infra* App. B: Case and Evidence List (Case 16).

H. Other Sources of Error

One of the advantages of our approach is the insight it offers into the relative power of discrete sources of error in erroneous convictions. In this project, we have been able to trace the effect of *Brady* violations and their interplay with other related factors, such as investigative errors, tunnel vision, and inadequate defense. From that analysis, we conclude that fewer than one-quarter of wrongful convictions in this sample (five out of twenty-two cases) could have been avoided solely by the prosecution's disclosure of exculpatory evidence knowingly in its possession. This does not mean that *Brady* disclosure is unhelpful, but instead serves as a reminder that multiple factors, often acting in concert, produce a wrongful conviction.¹⁸⁸ In short, we found that other factors in the case, including investigative errors, prosecutor tunnel vision, and defense representation, exacerbate the failure to disclose.

1. Investigative Errors

Police exacerbated the effects of nondisclosure by declining to investigate alternative suspects.¹⁸⁹ Present in thirteen of the twenty-two cases in our sample, it appears that investigators often did not consider the alternative suspect to be viable and, therefore, did not deem evidence regarding the suspect to be sufficient to explore or share with prosecutors.¹⁹⁰ For example, an out-of-jurisdiction investigator assisting in Case 3 developed a credible lead early in the investigation of a sexual homicide, which he shared with the home agency.¹⁹¹ However, claiming that they were already familiar with the suspect, detectives in the home agency dismissed this investigator's suspicions and failed to disclose his report to prosecutors. In Case 7, police failed to investigate a tip provided by an inter-agency memo indicating that the homicide in question could be related to organized crime.¹⁹² Investigators did not follow this lead, and the memo was not disclosed to the prosecution.

Investigations also were hindered by the use of improper investigative tools. In Case 21, for example, the defendant was implicated based on techniques from arson science that were later debunked.¹⁹³ In Case 3, the defendant was targeted by a flawed behavioral profile,¹⁹⁴ and, in Case 8, the defendant was convicted based largely on evidence gained

188. See Gould et al., *supra* note 18, at 476.

189. See *supra* Table 1: Type and Timing of Withheld Evidence ("Alternative Suspect").

190. See *supra* Table 1: Type and Timing of Withheld Evidence ("Alternative Suspect").

191. See *infra* App. B: Case and Evidence List (Evidence 3.1).

192. See *infra* App. B: Case and Evidence List (Evidence 7.1).

193. See *infra* App. B: Case and Evidence List (Case 21).

194. See *infra* App. B: Case and Evidence List (Case 3).

by hypnosis.¹⁹⁵ Importantly, investigators in all three cases used contemporary scientific knowledge to guide the investigations. Although, by the time each case concluded, these methods were known to be either improper or factually inaccurate, *Brady* disclosure would not have helped the defendants because neither police nor prosecutors had reason to doubt the veracity of their findings at the time.¹⁹⁶

Even more troubling, in nine of the twenty-two cases, investigators seem to have deliberately withheld exculpatory evidence in order to strengthen their case against the defendants.¹⁹⁷ Six of these cases involved under-investigated alternative suspects, such as when prosecutors in Case 13 reprimanded an investigator for alluding to canvas sheets while being deposed by the defense.¹⁹⁸ The sheets contained information on alternative suspects, one of whom was likely the true perpetrator. In the remaining three cases, investigators withheld evidence that contradicted aspects of the prosecutions' narratives. This impeachment evidence included proof of informant coaching (Case 16), multiple suspect recantations (Case 6), and evidence suggesting investigators provided the suspects' identities to witnesses (Case 19).¹⁹⁹

2. Prosecutors & Tunnel Vision

Tunnel vision also appeared to play a significant role in prosecutors' decisions, as they seemed to be blinded to the possibility that they held or could obtain exculpatory evidence.²⁰⁰ In several cases, for example, prosecutors overlooked witness' criminal histories because they were convinced of the witness' accounts and needed their testimony to obtain a conviction. In another category of cases, we determined that prosecutors could not accept that they were sitting on exculpatory evidence. In one such case, prosecutors persuaded a suspect to implicate a potential conspirator because they were convinced that the crime required multiple perpetrators (Case 6).²⁰¹ When the original suspect later recanted his implication of the co-defendant, prosecutors refused to accept the denial or turn this information over to the defense because they believed the

195. See *infra* App. B: Case and Evidence List (Case 8).

196. In fact, the court in the hypnosis case refused to ban the retroactive use of hypnotically refreshed testimony. Although that court eventually took issue with the prosecution's failure to document the nature of the hypnosis, it, like the others, refused to apply *Brady* to the most significant weakness in the case—the state's use of investigative techniques later found to be unreliable.

197. See *supra* Table 2: Responsibility and Mindset of Disclosure and Table 3: Bases for Nondisclosure.

198. See *infra* App. B: Case and Evidence List (Case 13).

199. See *infra* App. B: Case and Evidence List (Evidence 6.1, 16.8, & 19.1).

200. See Findley, *supra* note 56, at 292.

201. See *infra* App. B: Case and Evidence List (Case 6).

suspect had lied.²⁰² Essentially, they had become so invested in their theory of the crime that they could not countenance the recantation being truthful.

3. *Defense Representation*

As prior research has shown, inadequate or poorly-resourced defense representation can increase the risk of a wrongful conviction.²⁰³ Similarly, our analysis suggests that a fuller defense effort could have blunted the effects of late or nondisclosure in a subset (13%) of cases. In Case 10, for example, defense counsel did not attend a public hearing of a co-defendant where an exculpatory statement was uttered.²⁰⁴ Although prosecutors were far from forthcoming when asked about the events at the proceeding by the defense attorney, it was still the defense's responsibility to check the public record. In Case 18, the defense lawyer presumed there was no exculpatory evidence when, in reality, the prosecution had merely not answered the defense query.²⁰⁵ Here, the defense attorney had requested the criminal histories of all government witnesses from the prosecution. Hearing nothing in response, the lawyer did not follow up or investigate the witnesses further himself, even though post-conviction inquiry found that the witnesses had extensive histories and incentives to lie.²⁰⁶ Finally, in Case 3, the defense failed to ask for a continuance in the face of last-minute disclosure by the prosecution.²⁰⁷ Unfortunately, in agreeing to rush to trial, the defense lawyer failed to recognize the prosecution had dumped exculpatory evidence on him. Thus, in this subset of cases, partial responsibility for the lack of availability of exculpatory evidence lies with the defense.

Defense attorneys must also be prepared to employ newly disclosed evidence. In the cases in this study, almost all the confirmed *Brady* evidence pointed to alternative suspects or sowed doubts about the veracity of state witnesses.²⁰⁸ Practically, however, even had this been shared with the defense, it would have required defense teams to undertake their own investigation to generate new or additional evidence or roll the dice and take the case to trial where they could cross-examine the state's witnesses in court. Presumably, the police or prosecutors would already have quashed the case had they been convinced of the defendant's innocence at the time of *Brady* disclosure, so any additional

202. See *infra* App. B: Case and Evidence List (Evidence 6.1).

203. See Gould et al., *supra* note 18, at 502.

204. See *infra* App. B: Case and Evidence List (Evidence 10.1).

205. See *infra* App. B: Case and Evidence List (Case 18).

206. See *infra* App. B: Case and Evidence List (Case 18).

207. See *infra* App. B: Case and Evidence List (Case 3).

208. See *supra* Table 1: Type and Timing of Withheld Evidence (“Alternative Suspect”).

efforts at dismissal or acquittal would have had to rely on defense lawyers.

We were not able to fully assess the efforts of defense teams in each of the cases in this study, but we are familiar with the considerable resource disparity faced by defense teams as compared to police and prosecutors.²⁰⁹ It would not be surprising, then, if defense lawyers were reluctant or unable to follow up on disclosure with a full investigation of their own.²¹⁰ Further, because the American justice system is designed to encourage pleas rather than trials,²¹¹ the defense might have considered it less risky to negotiate a better plea deal with the prosecution in light of new evidence rather than going to trial and hoping for an acquittal by impeaching the state's witnesses. In short, there are multiple hurdles that would have prevented the effective use of fully-disclosed *Brady* evidence to refute a case against the defendant.

IV. RESEARCH & POLICY IMPLICATIONS

Our findings have multiple implications—for better modeling of erroneous convictions, for the future of research on miscarriages of justice, and for the development and implementation of policies most likely to identify and prevent *Brady* violations. Initially, our decision-tree analysis of *Brady* violations in wrongful conviction cases confirms Gould and Leo's supposition that much can be learned from examining "how intervening forces shape the movement and outcome of a case through the criminal justice process."²¹² Rather than analyzing the potential sources of an erroneous conviction as static factors—researchers simply recording their presence (or lack thereof) in a case or testing their influence at a fixed point in a case's development—the decision trees in this analysis provided greater context for the ways in which potential sources may interact with one another and have different influences at particular points in a case's path from the identification of a suspect to exoneration.

Results demonstrate that much of the *Brady* evidence involves witness statements and police reports that would have been relevant in

209. See generally Mary Sue Backus & Paul Marcus, *The Right to Counsel in Criminal Cases: Still a National Crisis?* 86 GEO. WASH. L. REV. 1564 (2018) (discussing issues in public defense work including the overworking and underfunding of defense attorneys).

210. See, e.g., *Wilbur v. City of Mount Vernon*, 989 F. Supp. 2d 1122, 1124 (W.D. Wash. 2013) (discussing lawyers' failure to conduct independent investigations in their criminal cases in lawsuit challenging the constitutional adequacy of public defense system in two cities).

211. See Jed S. Rakoff, *Why Innocent People Plead Guilty*, N.Y. REV. OF BOOKS (Nov. 20, 2014), <https://www.nybooks.com/articles/2014/11/20/why-innocent-people-plead-guilty/>.

212. Gould & Leo, *supra* note 21, at 841.

identifying alternative suspects or impeaching questionable state witnesses.²¹³ Although we determined that roughly one-third of nondisclosure was intentional, in the remaining cases mindset and basis were related, as police and prosecutors seemed determined to close a case and convict the suspect.²¹⁴ This may explain why, even if not intentionally withheld, material and exculpatory evidence does not usually reach the defense until after conviction, despite typically first being identified at the start of a criminal investigation. Our conclusions about intentionality match Coleman and Lockey's arguments that there are important distinctions between *Brady* violations.²¹⁵ Rather than assume all instances of nondisclosure are the result of zealous or unethical prosecutors, we found there to be important distinctions between *Brady* violations that result from intentional misconduct, recklessness, and negligence.

In addition to illuminating these various contributing factors to a *Brady* violation, the analysis also offers a deeper understanding of the process by which nondisclosure can lead to an erroneous conviction. In our sample, *Brady* errors occurred contemporaneously with investigative failures and were shaped in part by prosecutors' or officers' tunnel vision.²¹⁶ Even when disclosure might have occurred, ineffectual defense representation might have diluted its value. Indeed, the decision trees illustrate how the problem of *Brady* violations works in tandem with other factors to contribute to erroneous convictions.

A. *Open-file Discovery*

In responding to the problem of *Brady* violations and their contribution to the scourge of erroneous convictions, several advocates and organizations have urged the adoption of "open-file discovery" practices.²¹⁷ Although there is no exact definition of these measures—there being both narrow and broad interpretations of the concept—"the idea [behind open-file discovery is] that the prosecution should provide the defense with [non-privileged information] in the prosecution's file—including witness statements and the names of witnesses, forensic evidence, and police reports"—sufficiently ahead of trial so that the

213. See *supra* Table 1: Type and Timing of Withheld Evidence ("Alternative Suspect" and "Impeachment").

214. See *supra* Table 2: Responsibility and Mindset of Disclosure ("Intentional") and Table 3: Bases for Nondisclosure ("Convicting This Defendant").

215. See Coleman & Lockey, *supra* note 76, at 207.

216. See *supra* Table 3: Bases for Nondisclosure.

217. See generally, REBECCA BERNHARDT ET AL., *supra* note 33 (identifying four cases in which an open-file policy would have avoided *Brady* violations).

defense has a full and fair opportunity to examine the material and conduct any follow-up investigation.²¹⁸

The theory behind open-file discovery is attractive, which has led many scholars—including one of the authors of this article—to back its adoption.²¹⁹ However, much of the academic support is normative, scholars arguing why open-file discovery should work well in theory but not marshaling empirical evidence to support their recommendation.²²⁰ Even many of the objections to open-file discovery are largely normative.²²¹ Indeed, as one writer noted, this is an “area ripe for study . . . through use of sophisticated empirical methodologies that move beyond mere counting of disclosure violations in exoneration cases.”²²²

In the few instances in which researchers have applied empirical methods to open-file discovery, the picture is muddled.²²³ The socio-legal scholar Allison Redlich has concluded that disclosure increases under an open-file system, but in one of her studies this was not true for all types of evidence,²²⁴ and in the other the conclusions were based on a study of undergraduates serving as mock prosecutors.²²⁵ Ellen Yaroshefsky, a

218. Brian P. Fox, *An Argument Against Open-File Discovery in Criminal Cases*, 89 NOTRE DAME L. REV. 425, 426 (2013).

219. GOULD, *supra* note 35, at 190.

220. *See, e.g.*, Fox, *supra* note 218, at 446; Gregory, *supra* note 17, at 852; Daniel S. McConkie, *The Local Rules Revolution in Criminal Discovery*, 39 CARDOZO L. REV. 59, 70 (2017); Janet Moore, *Democracy and Criminal Discovery Reform After Connick and Garcetti*, 77 BROOK. L. REV. 1329, 1330 (2012); Gerald S. Reamey, *The Truth Might Set You Free: How the Michael Morton Act Could Fundamentally Change Texas Criminal Discovery*, *Or Not*, 48 TEX. TECH. L. REV. 893, 895–97 (2016); Cadene A. Russell, *When Justice Is Done: Expanding a Defendant's Right to the Disclosure of Exculpatory Evidence on the 51st Anniversary of Brady v. Maryland*, 58 HOW. L. J. 237, 261 (2014); Rodney J. Uphoff, *Criminal Discovery in Oklahoma: A Call for Legislative Action*, 46 OKLA. L. REV. 381, 404 (1993).

221. *See, e.g.*, Steven Koppel, *An Argument Against Increasing Prosecutors' Disclosure Requirements Beyond Brady*, 27 GEO. J. LEGAL ETHICS 643, 643 (2014); D. Michael Risinger & Lesley C. Risinger, *Innocence is Different: Taking Innocence into Account in Reforming Criminal Procedure*, 56 N.Y. L. SCH. L. REV. 869, 887–90 (2012); J. Thomas Sullivan, *Ethical and Effective Representation in Arkansas Capital Trials*, 60 ARK. L. REV. 1, 35 (2007).

222. Jennifer E. Laurin, *Brady in an Age of Innocence*, 38 N.Y.U. REV. L. & SOC. CHANGE 505, 519 (2014). Laurin has praised as “exemplary” the antecedent project of this article, “which, employing multiple methods including bivariate and logistical regression as well as qualitative analysis, identified evidentiary non-disclosure as a significant predictor of error when false convictions were compared with similar cases resulting in acquittals.” *Id.*

223. *See* Dan Svirsky, *The Cost of Strict Discovery: A Comparison of Manhattan and Brooklyn Criminal Cases*, 38 N.Y.U. REV. L. & SOC. CHANGE 523, 528 (2014).

224. *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, 381 (2016). In particular, impeachment material and evidence held by investigating agencies were no more likely to be produced. *Id.*

225. *See* Samantha Luna & Allison D. Redlich, *The Decision to Provide Discovery: An Examination of Policies and Guilty Pleas*, J. EXPERIMENTAL CRIMINOLOGY, at 1 (2020).

supporter of open-file discovery, conducted prosecutor interviews in New Orleans, Louisiana, but she could not conclude that a new policy of open discovery in the office had led to prosecutor compliance.²²⁶

Our research, based on the modified decision-tree analysis, suggests that open-file discovery is not a cure-all to the problem of *Brady* violations. Although *Brady* material represents the most vital subset of evidence within open-file discovery, there are factors that stymie its recognition or frustrate its use. Police and prosecutors may be unaware of exculpatory evidence or deliberately choose to withhold it, and the defense may fail to appreciate or investigate the information to the client's benefit. In fact, in our assessment, full and proper disclosure of exculpatory evidence would have prevented a wrongful conviction in just five of the twenty-two cases in our sample.

Primarily, the defense might have been able to impeach prosecution witnesses sufficiently to establish reasonable doubt about guilt. For example, in Case 19, investigators had focused on the defendant as a potential suspect long before being identified by a witness, but at trial the same investigators testified that they first came to know of the defendant from that witness.²²⁷ An appellate court later found the discrepancy material, concluding that a reasonable juror would have doubted the veracity of investigators—and raised suspicions about the suggestiveness of the witness' identification—if the defense had been able to introduce the divergent stories to the jury.

The same was true of *Brady* disclosure in the other four cases. In fact, the defendant in Case 3 was acquitted on retrial based entirely on the introduction of the previously withheld evidence.²²⁸ In the others, the prosecution's case rested primarily on the testimony of a potentially impeachable witness. For example, in accusing a defendant of sexually assaulting a young child, prosecutors in Case 14 relied heavily on the child's statements, which accurately described sexual acts.²²⁹ Withheld from the defense, however, were statements indicating that the child had exhibited signs of sexual abuse well before the alleged incident took place, thus accounting for the accurate descriptions.²³⁰ Furthermore, the child had named two other possible suspects before mentioning the defendant.²³¹ Had defense attorneys been able to establish that the child had exhibited signs of abuse prior to contact with the defendant, much of

226. See Ellen Yaroshefsky, *New Orleans Prosecutorial Disclosure in Practice After Connick v. Thompson*, 25 GEO. J. LEGAL ETHICS 913, 942 (2012).

227. See *infra* App. B: Case and Evidence List (Case 19).

228. See *infra* App. B: Case and Evidence List (Case 3).

229. See *infra* App. B: Case and Evidence List (Case 14).

230. See *infra* App. B: Case and Evidence List (Evidence 14.1–14.2, 14.4–14.5).

231. See *infra* App. B: Case and Evidence List (Evidence 14.3).

the prosecution's case would have collapsed, and the inclusion of other potential suspects would only have further muddied the prosecution's argument.

How is it that open-file discovery would have averted a wrongful conviction in such a small percentage of innocence cases involving *Brady* violations? The answer implicates multiple actors in case processing. First, investigators and prosecutors may fail to appreciate the existence of exculpatory evidence and, as a result, fail to include it in the prosecutor's files or otherwise notify the defense. As Table 1 indicated, the most common form of exculpatory information could have identified alternative suspects.²³² However, that information often appears early in a case—before a defendant is identified or an arrest is made. At that point, detectives and prosecutors do not seem to appreciate the materiality or exculpatory nature of this evidence and may not, as our research indicates, investigate alternative sites, suspects, or theories. In turn, prosecutors are unaware of the information and are unable to share it with the defense.

Unfortunately for the defense, proper disclosure in these instances would not have prevented a wrongful conviction on its own. At most, the available evidence might have suggested a potential alternative suspect. To truly clear an innocent defendant at or ahead of trial, detectives and prosecutors would have needed to engage in additional investigation before becoming locked into a flawed theory of the crime and either ignoring or burying potential exculpatory evidence.²³³

Second, open-file discovery presumes that police and prosecutors place all case information in the prosecutor's files and that any failure to disclose comes once the file is constructed.²³⁴ However, this assumption misses the cases of intentional nondisclosure in which investigators or prosecutors hold back information from each other or the file. As Table 2 indicated, thirty-seven percent of *Brady* violations in this study were intentional, with the vast majority motivated by officials' desire to convict the particular defendant.²³⁵ In their zeal, police or prosecutors may bury information, not just failing to show it to the defense but concealing its existence or even creating contradictory evidence.

As Bennett Gershman has argued, some prosecutors "play games" with *Brady* evidence and coach or otherwise manipulate witnesses so they

232. See *supra* Table 1: Type and Timing of Withheld Evidence ("Alternative Suspect").

233. Indeed, this is the very example of tunnel vision, which propels investigators and prosecutors further along a narrow theory of the case and makes them resistant to consider alternative theories. See Findley & Scott, *supra* note 58, at 292.

234. See Fox, *supra* note 218, at 429.

235. See *supra* Table 2: Responsibility and Mindset of Disclosure ("Intentional").

will stand up to impeachment by the defense.²³⁶ Eight of our twenty-two cases involved at least one incident of witness coaching or coercion by someone involved in the investigation, and an additional case included an instance of an investigator being coached by prosecutors. In some instances, informants were fed pertinent information about the case—including one incident in which an informant was given a tour of the crime scene location—so their testimony would track the state’s hypothesis of the crime and not raise alternative theories that might suggest reasonable doubt. In other instances, such as a case in which an investigator was coached about the substance of his testimony, the goal was to limit answers on cross-examination so that witnesses did not disclose potentially exculpatory information. In a final set of cases, investigators or prosecutors pressured uncooperative witnesses into conforming their testimony to the prosecutors’ narrative of the case, even offering, as in Case 16, to release an informant from jail in exchange for identifying the defendant as the perpetrator.²³⁷ It is difficult to see how open-file discovery would uncover, let alone remedy, these instances.

But, even when prosecutors approach *Brady* evidence with blind neglect, where, as Gershman argues, they avoid learning of exculpatory evidence that they must disclose,²³⁸ open-file discovery would not make this information available to the defense. In our analysis, we found examples in which prosecutors failed to conduct a detailed investigation so they would not uncover evidence inconsistent with the state’s theory. In other cases, prosecutors limited their search of exculpatory evidence to their own files, so they would not have to contact other government agencies for related information. Whether because of time pressures or simply as an example of malpractice, some prosecutors failed to investigate the history or credibility of government witnesses, including expert witnesses (whose reports must be disclosed) or lay attestants (whose criminal history and mental acuity are relevant). Gershman recommends that the defense file direct discovery requests to counteract this game,²³⁹ however in several of our sampled cases the defense specifically requested criminal histories from the prosecution but were ignored or told incorrect information.

Finally, open-file discovery assumes that the defense will have the time and resources to fully investigate prosecutor files made available to

236. See Bennett L. Gershman, Symposium, *Litigating Brady v. Maryland: Games Prosecutors Play*, 57 CASE W. RES. L. REV. 531, 541, 565 (2007).

237. See *infra* App. B: Case and Evidence List (Evidence 16.8).

238. See Gershman, *supra* note 236, at 552.

239. See *id.* at 560.

them.²⁴⁰ However, as explained earlier,²⁴¹ most defense teams face woefully inadequate resources,²⁴² and, with a justice process that primarily leads to plea bargaining,²⁴³ the defense has few incentives to dive deeply into the case file. This problem is worsened when prosecutors are able to bury a victim's contradictory statements in a mountain of paper, as they did in Case 5, presuming correctly that defense lawyers have neither the time, resources, nor inclination to sift through all of the disclosed information.²⁴⁴ Even if the material were made available before plea or trial, defendants would require considerably greater resources to fully benefit from open-file discovery.

B. Norms & Culture

We do not mean to suggest that *Brady* doctrine is, by definition, ineffectual or that open-file disclosure is unhelpful. But neither is each a panacea whose requirement to disclose exculpatory evidence will alone prevent wrongful convictions. In our estimation, fewer than a quarter of wrongful convictions in this sample could have been avoided had prosecutors disclosed material exculpatory evidence in their possession. In almost all of these cases, the usefulness of the information would have been its impeachment value, meaning that defendants would only have benefitted had their attorneys recognized the importance of this evidence and been willing to use the newly-acquired material at trial.

More often, however, incomplete investigations, prosecutor error, or defense inadequacies failed to uncover—or sometimes intentionally concealed—important information that the defendant could have used to stave off conviction.²⁴⁵ Even as the courts later recognized the value of this evidence, it usually was not available at the trial-stage. Arguably it should have been; police investigators should have been more thorough; prosecutors should have questioned their witness' motives and seriously considered their recantation; defense lawyers should have been more zealous. But, in these cases it was more common that tunnel vision blinded state actors from the evidence they should have collected or considered or that the defense should have investigated. As such, an open-file policy would have been powerless to ensure the disclosure of such exculpatory evidence to the defendant or its effective use.

Thus, our analysis suggests that the true value of *Brady* is not so much what it provides defendants prior to or at trial but rather what it

240. See Fox, *supra* note 218, at 437–38.

241. See *supra* Part III.H.3.

242. See Fox, *supra* note 218, at 437–38.

243. See Rakoff, *supra* note 211.

244. See *infra* App. B: Case and Evidence List (Case 5).

245. See *supra* Table 3: Bases for Nondisclosure.

allows the defense post-conviction: a legally-sanctioned opportunity to investigate the case once more, oftentimes more thoroughly than at the trial stage, and to employ the newly-found exculpatory evidence to earn the innocent defendant his release. *Brady* may well free the innocent, but its great power is providing a potential claim on appeal.

There are multiple proposals afloat to strengthen *Brady*'s disclosure requirements. In addition to open-file discovery, advocates have pushed for stricter professional discipline,²⁴⁶ an end to absolute immunity for prosecutor's bad faith actions,²⁴⁷ civil liability,²⁴⁸ and even criminal sanctions.²⁴⁹ Some states have imposed new requirements on prosecutors, delineating the types of case information that must be shared with the defense and setting out earlier timelines to facilitate disclosure.²⁵⁰

Although we are supportive of these multiple measures, our findings suggest that greater and potentially lasting change will be found in shifting the norms and culture of prosecuting as much as enforcing additional punitive measures. As we show, the failure to disclose is not often intentional and that, rather than prosecutors hiding evidence or dumping scores of material on the defense immediately before trial, the most likely timing for a *Brady* violation is before arrest, when investigators and prosecutors fail to appreciate the significance of potentially exculpatory evidence and neglect to investigate further. These failures are exacerbated by the problem of tunnel vision, in which the further a case proceeds on a single theory the less likely detectives and prosecutors are willing to accept or consider alternative evidence or explanations for the crime.²⁵¹

Hence, as one of us wrote more than a decade before

The most promising venue for criminal justice reform [may lie] in the local police departments, sheriff's offices, and district attorneys' offices that form the front line of America's criminal justice system. This

246. See Joseph R. Weeks, *No Wrong Without a Remedy: The Effective Enforcement of the Duty of Prosecutors to Disclose Exculpatory Evidence*, 22 OKLA. CITY U.L. REV. 833, 835, 879 (1997).

247. Bennett L. Gershman, *Bad Faith Exception to Prosecutorial Immunity for Brady Violations* 37–44, (Aug. 10, 2010) (unpublished manuscript, Elisabeth Haub School of Law at Pace University), <http://digitalcommons.pace.edu/lawfaculty/635/>.

248. See Brian M. Murray, Jon B. Gould & Paul Heaton, *Making Brady Actionable* (July 22, 2020) (unpublished manuscript) (on file with authors).

249. Andrew Smith, *Brady Obligations, Criminal Sanctions, and Solutions in a New Era of Scrutiny*, 61 VAND. L. REV. 1935, 1966–70 (2008).

250. See *Discovery Reform Legislative Victories*, NAT'L ASS'N CRIM. DEF. LAWS. (May 21, 2020), <https://www.nacdl.org/Content/DiscoveryReformLegislativeVictories>) (collecting discovery reforms adopted by states); see, e.g., N.Y. CRIM. PROC. LAW § 245.25 (McKinney 2021).

251. See Findley & Scott, *supra* note 56, at 292.

initially may seem odd to some observers, since law enforcement officers and prosecutors are not usually considered top advocates for criminal suspects.²⁵²

However, even career prosecutors have been won over by an emphasis on professionalism,²⁵³ embracing in-service training that provides an “opportunity to review the risks and nature of ‘tunnel vision.’”²⁵⁴ As Yaroshefsky has demonstrated, prosecutors’ “office culture and informal understandings [have the power to] subvert [formal] policies,”²⁵⁵ so it is all the more important that prosecutors and investigators are trained early in their careers to run down all leads and explore multiple avenues of suspicion to ensure that exculpatory information is uncovered—and the true perpetrator is identified.

Indeed, this last point is sometimes ignored in the discussion of *Brady* disclosure. If police or prosecutors are sitting on exculpatory information, and if the failure to disclose contributes to an erroneous conviction, then the true perpetrator is still running free. By emphasizing the norm of accuracy—training officers and lawyers to consider competing theories and disclose to each other and the defense potentially exculpatory information—*Brady* compliance might improve and erroneous convictions also fall. Simultaneously, prosecutors and investigators would have greater certainty that they had caught and convicted the right suspect.

Just as we say that open-file discovery is not a cure-all for *Brady* violations, we also recognize that training and messaging are not a panacea to improve discovery. But, if one of the greatest impediments to reform is cultural change, then an emphasis on changing the narrative—of training investigators and prosecutors to seek accuracy through a full investigation—seems a reasonable investment. At the very least, it should be considered a complement to the punitive measures already proposed.

252. GOULD, *supra* note 35, at 240.

253. Former Attorney General Edwin Meese had been an early supporter of the work detailed in Gould, *supra* note 18, precisely because he sought to raise the level of professionalism among police and prosecutors.

254. GOULD, *supra* note 35, at 240.

255. Yaroshefsky, *supra* note 226, at 938 (quoting Ellen Yaroshefsky & Bruce Green, LAWYERS IN PRACTICE: ETHICAL DECISION MAKING IN PRACTICE 282 (Leslie C. Levin & Lynne Mather eds., 2012)).

CONCLUSION

A. Limitations & Future Research

We readily acknowledge that this research has multiple limitations. The most prominent is the size of our sample,²⁵⁶ the composition of which was also one of convenience. Nevertheless, we believe the research has established proof of concept for studying wrongful convictions through a modified path analysis. As such, these findings suggest various avenues for further research. Using a similar method, future studies might focus on cases containing another common error, such as mistaken eyewitness identification or false confessions.

The project is also subject to all of the limitations associated with the data collected by the Preventing Wrongful Convictions Project.²⁵⁷ These include challenges with case selection, limitations in available case data, and, of course, the focus of virtually all wrongful conviction scholarship on serious felonies.²⁵⁸ Future research in this area should attempt to address these concerns as well as examine a comparison set of cases in which prosecutors chose to disclose *Brady* material.

Additionally, the assessments of police and prosecutorial mindset in this research were obviously made without access to the officials' thoughts at the time of investigation and trial. Instead, we relied on traditional social science methods to make informed assessments. These methods included defining terms based on case law and prior research findings, employing multiple analysts, using conservative judgments deferential to law enforcement and prosecutors, consulting with prosecutors about our coding, seeking reliability between assessments, and discussing and changing any assessments when disagreements suggested inconsistency or ambiguity.

B. Final Thoughts

Those trained in law, and certainly anyone who studies the American criminal justice system, have been schooled on the importance of *Brady v. Maryland*. Prosecutors, who serve as officers of the court, have an obligation to share with the defense any material evidence that suggests the defendant's innocence.²⁵⁹ As much as we seek to convict the

256. This study involved only twenty-two cases, a relatively small sample size compared to other similar studies. See, e.g., Gould et al., *supra* note 18, at 477 ("large-scale empirical research project . . . compares 260 wrongful conviction cases to 200 near misses in violent felony cases from across the United States.").

257. See *supra* text accompanying notes 89–92.

258. Gould et al., *supra* note 18, at 477 n.14.

259. See *Brady v. Maryland*, 373 U.S. 83, 87 (1963).

guilty, it is just as important to free the innocent, and *Brady* is said to stand as a protection against miscarriages of justice.²⁶⁰

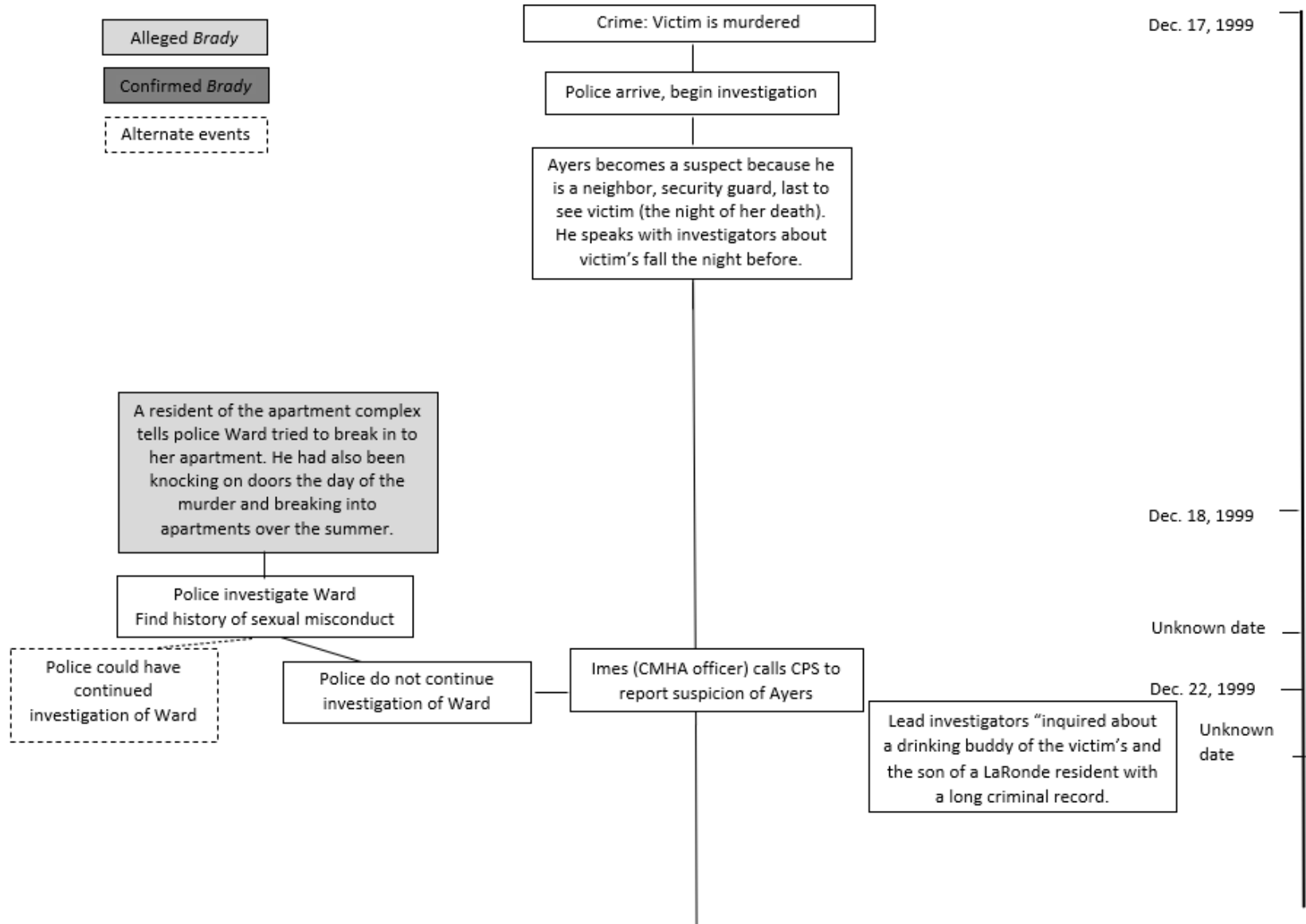
Prior research has already implicated the failure to disclose *Brady* material with erroneous convictions.²⁶¹ But as Gould and Leo noted,²⁶² *Brady* violations, much like the other likely sources of wrongful convictions, have been captured as static forces in previous work. This paper adds credence to the pair's call to employ modified path analysis to the study of wrongful convictions, showing that the process is feasible and the results illuminating. In this research, we demonstrate the multifarious ways that failures to disclose arise, how *Brady* failures relate to other events in a case's investigation or prosecution, and how the various aspects of withholding affect a case's ultimate path through the criminal justice system. In all, we note the significance and interplay of mindset and motive for nondisclosure. Even if most *Brady* failures are unintentional, our research suggests that they are driven in large part by the desire to convict a suspect and are exacerbated by tunnel vision, ineffectual defense representation, and the failure to fully investigate alternative suspects and new leads. In this respect, the causes of erroneous convictions are both multifarious and related.

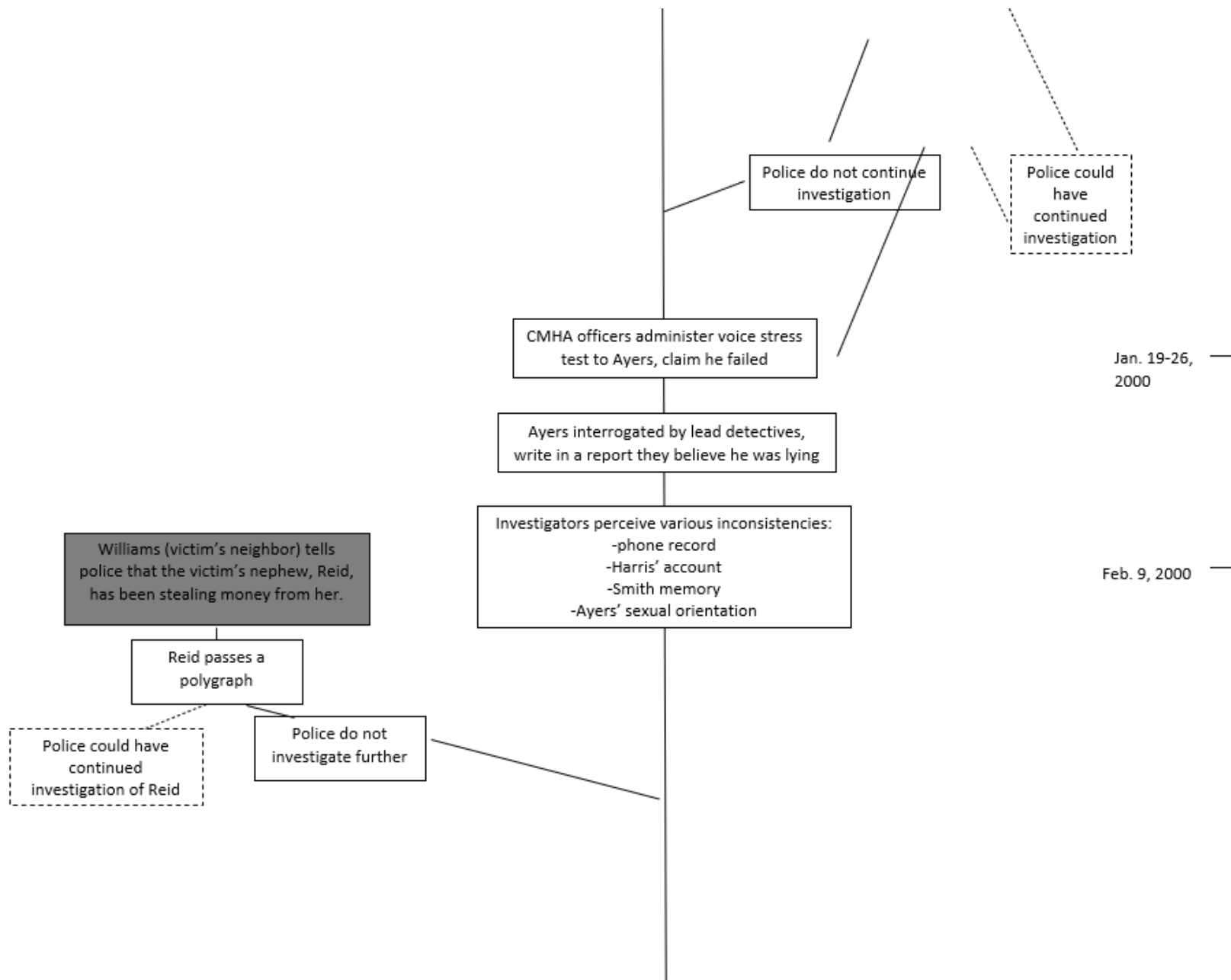
260. See Gould et al., *supra* note 18, at 501 (“[T]he prosecution’s failure to turn over exculpatory evidence severely harms the system’s ability to self-correct from initial errors because it hamstring the defense and reduces the effectiveness of the jury’s decision-making process.”); see also Joy, *supra* note 24, at 403–04; MacFarlane, *supra* note 66, at 405; SCHECK et al., *supra* note 66, at 172–73.

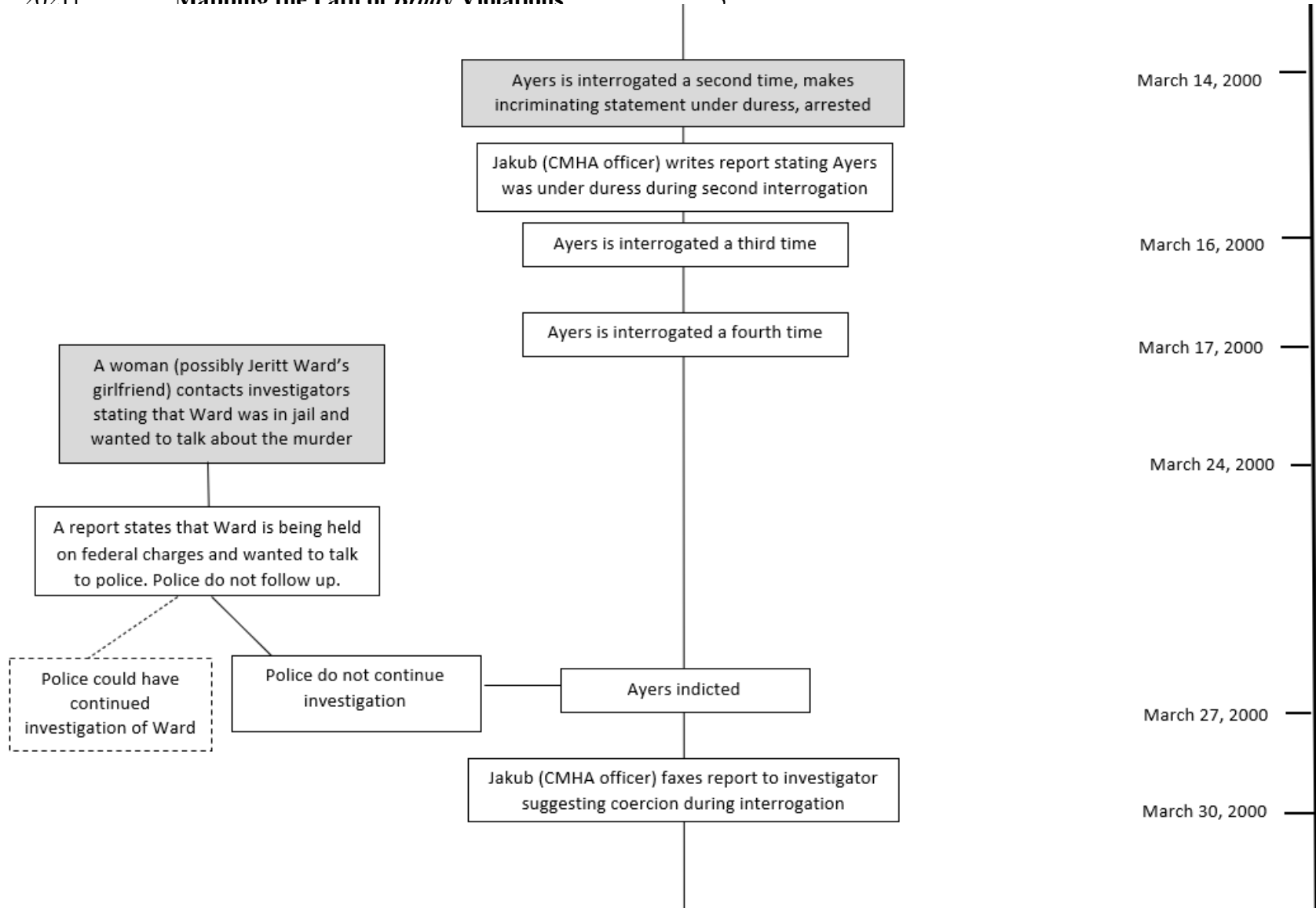
261. See Gould et al., *supra* note 18, at 515.

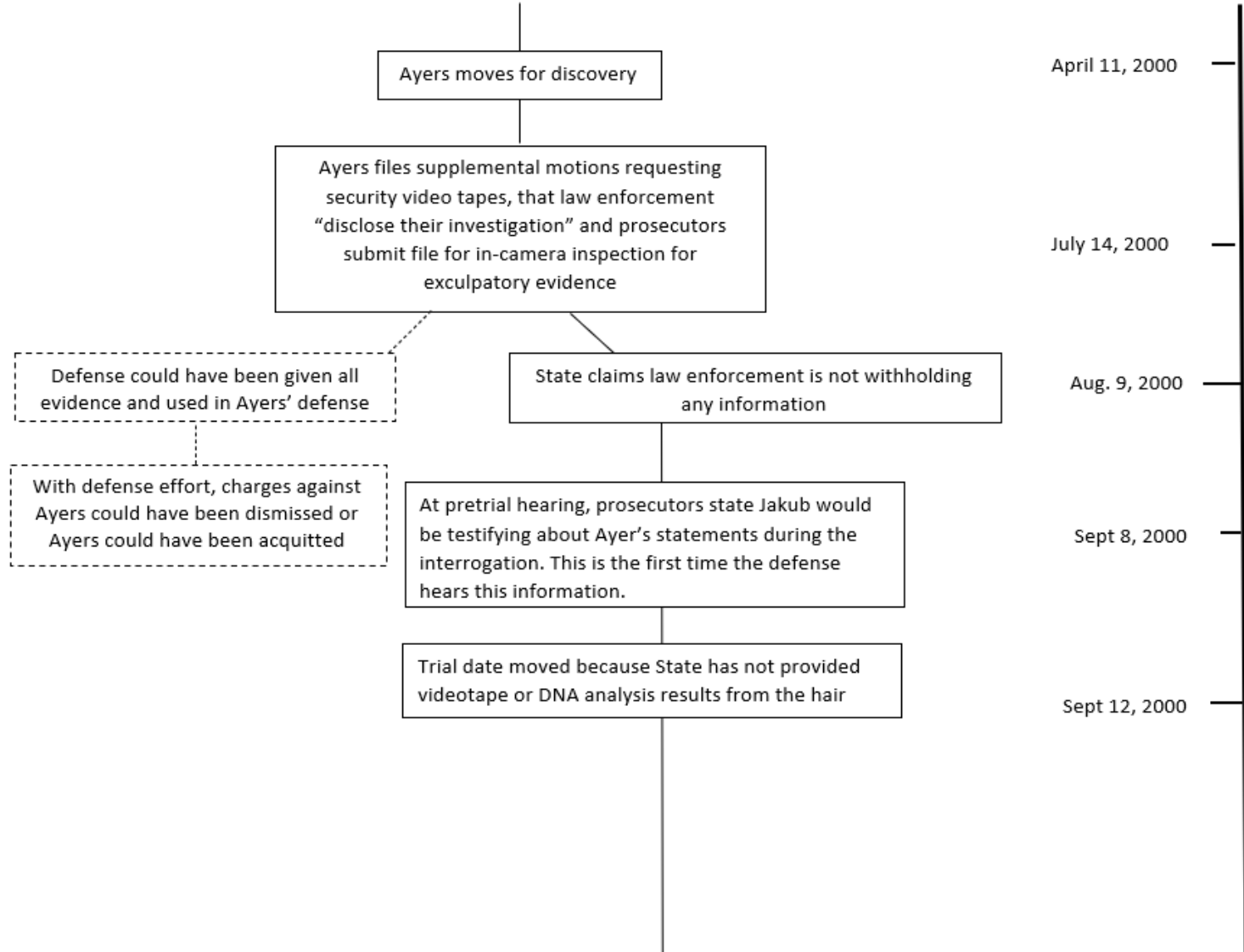
262. See Gould & Leo, *supra* note 21, at 841.

Appendix A: Ayers' Decision Tree









Pretrial Suppression Hearing

-Investigators mention statements by Ayers "If I tell you I beat her can I go home?" This had not been included in any written report. Investigators state they had made this information available to the prosecutor. Judge denies suppression motion because the fault lies with the detectives.

-Some material from the in-camera review shown to defense. This includes information on Darrin Ward and Jeritt Ward as alternative suspects.

Nov. 20, 2000

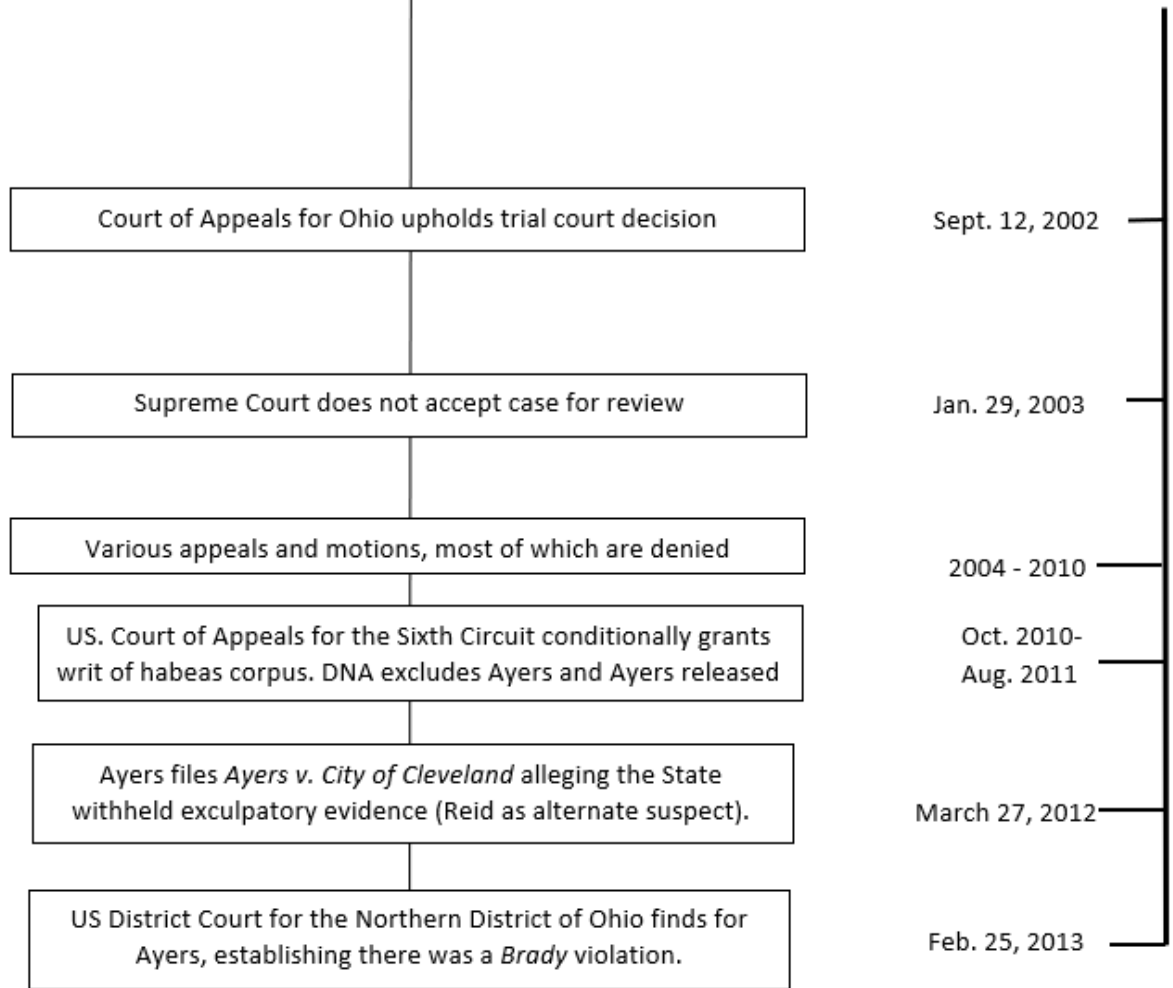
Williams (victim's neighbor) testifies that he told the investigators that the victim complained about Reid stealing from her. This is the first time the defense learns of this.

Unknown date

Jury convicts Ayers of aggravated murder, aggravated burglary, and aggravated robbery

Dec. 11, 2000

Ayers appeals, claiming (among other things) a *Brady* violation for the evidence regarding Darren Ward and Jerrit Ward



Appendix B: Case and Evidence List

Case #	Description	Evidence #
	[Number of Victims] [Modifiers] [Crime type]. [Defendant origin of implication]. [Disclosure information]	[Case Number]. [Evidence Number] Note, some evidence numbers are skipped because they are not <i>Brady</i> . Italics denote alleged <i>Brady</i>
1	Single victim blunt force trauma homicide. Defendant was the last to see the victim alive and was instantly a suspect. Most evidence was disclosed last minute, but one alternative suspect was entirely withheld.	1.1 Witness statement naming alternative suspect 1.2 Interview with alternative suspect 1.3 Anonymous phone call naming alternative suspect 1.4 Statement regarding potential coerced statement by defendant 1.5 Alternative suspect evidence and polygraph
2	Single victim strangulation homicide. Suspected to be domestic in nature, and defendant was a former boyfriend of the victim.	2.1 Alternative suspect failed polygraph 2.2 Alternative suspect domestic battery charge 2.3 Alternative suspect evidence of domestic abuse 2.4 Alternative suspect steroid use 2.5 <i>Investigator confirmation of potential alibi</i>
3	Single victim (minor) sexual assault and homicide. Defendant was identified via tip line. Evidence of an alternative suspect was withheld during the original trial and additional evidence was disclosed late during the retrial.	3.1 Investigator report on alternative suspect 3.2 <i>Identification of alternative suspect via phone call</i>
4	Single victim gunshot	4.1 Victim's criminal record

	homicide. Defendant identified by eyewitness.	indicating willingness to lie to criminal justice officials.
5	Single victim rape. Victim identified defendant as rapist, while defendant claimed consensual sex occurred. Evidence of the victim's changing statement was disclosed during trial.	5.1 Report of victim interview contradicting victim testimony
6	Multiple victim homicide and arson. Defendant was identified by real perpetrator as a co-perpetrator. Evidence of the real perpetrator's recantation of this identification was withheld.	6.1 Recantation of identifying statement 6.2 <i>Alternative suspect identified</i>
7	Multiple victim sexual assault, homicide, and arson. Defendant was a known associate seen near crime scene. Evidence of alternative suspects and investigator coercion was withheld	7.1 Law enforcement memo identifying alternative suspect 7.2 <i>Alternative suspect interview recording</i> 7.3 <i>Evidence of witness coercion by investigators</i>
8	Single victim rape. Defendant was identified based on similarity to composite. Evidence of hypnosis-altered identification information and improper line-up procedures were withheld.	8.1 Victim initial description of perpetrator 8.2 Officer initial description of potential perpetrator 8.3 Victim hypnosis session 8.4 Officer hypnosis session 8.5 Evidence of improper line-up procedure
9	Multiple victim homicide. Defendant was related to one victim and the two had a complicating history suggesting a compelling motive. Evidence of alternative suspects and an alternative crime scene were withheld.	9.1 Potential impeachment evidence of officer 9.2 Statement of defendant's lack of motive 9.3 Statement with evidence of defendant's lack of motive 9.4 Alternative suspect/location statement 9.5 Alternative suspect/location statement 9.6 Alternative suspect/location statement

		9.7 Alternative suspect/location statement 9.8 Alternative suspect/location statement 9.9 Alternative suspect/location statement 9.10 Alternative suspect/location statement
10	Zero victim drug offense. Defendant was accompanying real perpetrators. Evidence of defendant's non-involvement was withheld.	10.1 Statement of defendant's innocence by perpetrator
11	Multiple victim gunshot homicide. Defendant was identified due to proximity to the crime scene. Evidence regarding alternative suspects was withheld.	11.1 Statement identifying alternative suspect 11.2 Anonymous tip identifying alternative suspect
12	Single victim blunt force trauma homicide. Defendant was related to the victim and was immediately a suspect. Evidence suggesting an alternative suspects was withheld.	12.1 Eyewitness account suggesting alternative suspect <i>12.2 Evidence of alternative suspect/possible theft</i> <i>12.3 Evidence of alternative suspect/possible theft</i> 12.4 Eyewitness statement suggesting alternative suspect
13	Single victim attempted sexual assault. Defendant was identified due to matched the general description of the perpetrator. Evidence identifying an alternative suspect that bettered matched the description was withheld from the defense.	13.1 Statement identifying alternative suspect
14	Single victim child molestation. Defendant was identified by the victim as the perpetrator. Evidence indicating alternative suspects/scenarios was withheld from the defense.	14.1 Evidence of victim behavior indicating prior abuse 14.2 Evidence of alternative suspect and behavior indicating prior abuse 14.3 Evidence of alternative

		<p>suspect</p> <p>14.4 Evidence of victim behavior indicating prior abuse</p> <p>14.5 Evidence of victim behavior indicating prior abuse and impeachment of victim statement</p> <p><i>14.6 Evidence of disclosure discrepancies</i></p> <p>14.7 Potential impeachment evidence</p>
15	<p>Single victim sharp force trauma homicide. Defendant was identified as being present due to gang affiliation. Impeachment evidence and an eyewitness's negative identification of the defendant was withheld from the defense.</p>	<p>15.1 Grand jury testimony containing impeachment evidence</p> <p><i>15.2 Eyewitness negative identification</i></p>
16	<p>Single victim sharp force trauma homicide. Defendants were identified due to their connected criminal history with the victim. Evidence of alternative suspects and witness coaching was withheld from the defense.</p>	<p>16.1 Evidence of alternative suspect A</p> <p>16.2 Evidence of alternative suspect B</p> <p>16.3 Evidence of alternative suspect B</p> <p>16.4 Evidence of alternative suspect B</p> <p>16.5 Evidence of alternative suspect B</p> <p>16.6 Evidence of alternative suspect B</p> <p>16.7 Evidence of alternative suspect B</p> <p>16.8 Evidence of coaching of a jailhouse informant</p>
17	<p>Single victim blunt force and gunshot homicide. Defendants were identified by faulty eyewitness identification. Evidence of an alternative suspect's</p>	<p>17.1 Alternative suspect confession</p> <p>17.2 Use of reward money</p> <p>17.3 Impeachment evidence for main eyewitness A</p> <p>17.4 Impeachment evidence</p>

	confession and witness coaching/inconsistencies was withheld from the defense.	for main eyewitness B 17.5 Impeachment evidence for main eyewitness C
18	Single victim armed robbery and assault. Defendant was identified by the victim. Evidence of the victim's criminal history and tendency to lie to law enforcement was withheld from the defense.	18.1 Victim's criminal record
19	Single victim sharp force trauma sexual homicide of a minor. Defendants were allegedly identified by a witness. Evidence that law enforcement were already considering the defendants prior to the witness interview was withheld from the defense.	19.1 Criminal history searches of the defendants performed prior to their alleged introduction to the case
20	Single victim sharp force trauma sexual homicide of a minor. Defendant was a known abuser of the victim. Evidence of alternative suspects and a coach jailhouse informant were withheld from the defense.	20.1 Alternative suspect/scenario evidence 20.1 Alternative suspect evidence 20.3 Alternative suspect evidence (named suspects) 20.4 <i>Evidence the prosecution coached an informant</i>
21	Double victim arson homicide. Defendant was an occupant of the house that burned down. Evidence that the defendant was not a future danger was withheld from the defense.	21.1 Pretrial expert report indicating lack of future dangerousness of defendant
22	Single victim sexual homicide. Defendant was the victim's significant other. Evidence of alternative suspects was withheld from the defense.	22.1 Alternative suspect evidence

Appendix C – Case Classification Methods

We began by categorizing evidence as confirmed or alleged *Brady* material. We further refined these measures by cataloguing them by the type of evidence at issue, such as expert report, police memo, or witness statement. We then situated each piece of evidence by the point in the investigation at which it was discovered and which party (police or prosecution) was responsible for the failure to disclose. We also identified how and when the defense became aware of the withheld evidence.

Whereas the previous questions could be answered directly from each case's decision tree, the remaining issues—questions of motivation and effect of nondisclosure—relied on classification rules developed by a team of five researchers and then applied to each case by the researcher with responsibility for its timeline. Those decisions were then checked by two of the researchers and, where there were disagreements or confusion, brought back to the full team of five for additional consideration.

We directly addressed the issue of intentional nondisclosure by examining whether the criminal justice official identified as the responsible party withheld evidence deliberately. We purposefully employed conservative judgments deferential to criminal justice officials.²⁶³ Thus, we classified withholding as intentional only when a court, police or prosecutors clearly stated it as so. We further probed the mindset of the responsible parties by examining the likely reason for withholding. For some cases, judges specifically answered this question in their rulings. In others, we reasoned inferentially given the full information available to us from court and case documents, media accounts, and interviews with lawyers involved in the cases. Again, we were careful to give the responsible party the benefit of the doubt by ascribing the most benign interpretation possible to their actions.

Finally, we examined how the withheld evidence could have affected the case by considering how the case might have progressed had the evidence been known to relevant criminal justice officials as material and exculpatory. In some circumstances, the alternate path came directly from a detective's investigation, where he failed to fully investigate a witness whose identity was later declared to constitute *Brady* evidence. In more instances, though, the path looked to what the defense would have done with the evidence had the state properly disclosed its existence. In some cases, attorneys or even judges described the likely paths forward

263. We acknowledge that a conservative approach may undercount our estimates for intentional nondisclosure, but since we hold no official capacity to rule on nondisclosure, we think it more appropriate to err on the side of caution and not overclaim.

if the evidence had been disclosed. In others, however, we pieced together the potential paths through the available court documents and the defense's reported trial strategy. Again, we employed conservative judgments by not overstating the potential effect of any single piece of evidence.