

JUDGING INNOCENCE

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This empirical study examines for the first time how the criminal system in the United States handled the cases of people who were subsequently found innocent through postconviction DNA testing. The data collected tell the story of this unique group of exonerees, starting with their criminal trials, moving through levels of direct appeals and habeas corpus review, and ending with their eventual exonerations. Beginning with the trials of these exonerees, this study examines the leading types of evidence supporting their wrongful convictions, which were erroneous eyewitness identifications, forensic evidence, informant testimony, and false confessions. Yet our system of criminal appeals and postconviction review poorly addressed factual deficiencies in these trials. Few exonerees brought claims regarding those facts or claims alleging their innocence. For those who did, hardly any claims were granted by courts. Far from recognizing innocence, courts often denied relief by finding errors to be harmless. Criminal appeals and postconviction proceedings brought before these exonerees proved their innocence using DNA testing yielded apparently high numbers of reversals—a 14% reversal rate. However, that reversal rate was indistinguishable from the background reversal rates of comparable rape and murder convictions. Our system may produce high rates of reversible errors during rape and murder trials. Finally, even after DNA testing was available, many exonerees had difficulty securing access to testing and ultimately receiving relief. These findings all demonstrate how our criminal system failed to effectively review unreliable factual evidence, and, as a result, misjudged innocence.

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INTRODUCTION

Postconviction DNA testing changed the landscape of criminal justice in the United States. Actors in the criminal system long doubted whether courts ever wrongly convicted people; for example, Judge Learned Hand famously called “the ghost of the innocent man convicted . . . an unreal dream.”¹ With the benefit of DNA testing, we now know our courts have convicted innocent people and have even sentenced some to death. This has happened, as Justice Souter recently

1. *United States v. Garsson*, 291 F. 646, 649 (S.D.N.Y. 1923); cf. *Herrera v. Collins*, 506 U.S. 390, 420 (1993) (O’Connor, J., concurring) (“Our society has a high degree of confidence in its criminal trials, in no small part because the Constitution offers unparalleled protections against convicting the innocent.”).

noted, “in numbers never imagined before the development of DNA tests.”² Since 1989, when postconviction DNA testing was first performed, 208 people have been exonerated by postconviction DNA testing in the United States.³

Exoneration cases have altered the ways judges, lawyers, legislators, the public, and scholars perceive the criminal system’s accuracy. Courts now debate the legal significance of these exonerations, with the U.S. Supreme Court in the last term engaging in its first “empirical argument” on the subject.⁴ Lawyers, journalists, and others have established an “innocence network” of projects, including clinics at dozens of law schools, all designed to locate more innocence cases.⁵ Public distrust of the criminal system has increased as a result of exonerations.⁶ Popular television shows, books, movies, and plays have dramatized the stories of exonerations.⁷ States have declared moratoria on executions, citing examples of

2. *Kansas v. Marsh*, 126 S. Ct. 2516, 2544 (2006) (Souter, J., dissenting).

3. See The Innocence Project Home Page, at <http://www.innocenceproject.org> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*) (providing count of U.S. postconviction DNA exonerations; the number as of November 2007 is 208).

4. *Marsh*, 126 S. Ct. at 2544–45 (Souter, J., dissenting) (citing “a growing literature” regarding exonerations in capital cases). Justice Thomas, writing for the majority, questioned any “new empirical demonstration of how “death is different”” and called the subject an “incendiary debate.” *Id.* at 2528 (majority opinion) (quoting *id.* at 2545 (Souter, J., dissenting)). Justice Scalia responded that DNA exonerations arise from self-correction in our system and their numbers suggest only “insignificant” risks of error. *Id.* at 2536–38 (Scalia, J., concurring). But see *Harvey v. Horan*, 285 F.3d 298, 305–06 (4th Cir. 2002) (Luttig, J., concurring) (“[S]cientific advances [permitting DNA testing] must be recognized for the singularly significant developments that they are”); *U.S. v. Quinones*, 205 F. Supp. 2d 256, 268 (S.D.N.Y. 2002) (declaring Federal Death Penalty Act unconstitutional and citing to examples of postconviction DNA exonerations), *rev’d*, 313 F.3d 49, 69–70 (2d Cir. 2002).

5. See The Innocence Network Home Page, at <http://www.innocencenetwork.org> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*).

6. Cf. James S. Liebman, *The New Death Penalty Debate: What’s DNA Got to Do with It?*, 33 *Colum. Hum. Rts. L. Rev.* 527, 534–41 (2002) (arguing DNA exonerations have been “central feature” of “catalyzing narrative” that has helped shift public opinion against death penalty based on distrust of criminal adjudication’s accuracy); *infra* note 136 (noting increasing belief that innocence cases justify opposing death penalty).

7. For example, *The Exonerated*, a play based on the stories of six DNA exonerees, has toured internationally and is now a Court TV movie. See Court TV, *The Exonerated*, at <http://www.courtstv.com/movie/exonerated/main.html> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*). John Grisham’s recent book, his first nonfiction work, tells the story of two DNA exonerees’ wrongful convictions. See John Grisham, *The Innocent Man: Murder and Injustice in a Small Town* 62 (2006) (discussing local investigators’ adoption of “knee-jerk theory” that led to wrongful convictions of Ron Williamson and Dennis Fritz). For additional books detailing accounts of wrongful capital convictions, see *infra* note 139. The syndicated ABC series *In Justice* depicted the casework of a fictionalized Innocence Project. See ABC, *In Justice: About the Show*, at <http://abc.go.com/primetime/injustice/about.html> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*). PBS also produced a documentary on DNA exonerations, focusing on the wrongful conviction of Ronald Cotton. See *Frontline: What Jennifer Saw* (PBS television broadcast Feb. 25, 1997) (transcript on file with the *Columbia Law Review*).

wrongful convictions.⁸ Moreover, forty-three states and the District of Columbia have passed legislation providing access to post-conviction DNA testing.⁹ Six states have created innocence commissions designed to investigate possible innocence cases, and others have enacted reforms aimed at improving the accuracy of criminal investigations and trials.¹⁰ In 2000, Congress passed the DNA Analysis Backlog Elimination Act to grant the states additional funding for DNA analysis, and then in 2004 passed the Innocence Protection Act to encourage postconviction DNA testing.¹¹ Social scientists have begun to study the causes of wrongful convictions,¹² and legal scholars are beginning to reassess our constitutional criminal procedure's efficacy in light of exonerations.¹³

Despite the attention now devoted to the problem of wrongful convictions, no one has studied how postconviction DNA exonerees fared in our criminal system. This Article presents the results of an empirical

8. See, e.g., Governor's Comm'n on Capital Punishment, State of Ill., Report of the Governor's Commission on Capital Punishment i-iii, 1, 187-200 (2002), available at http://www.idoc.state.il.us/ccp/ccp/reports/commission_report/complete_report.pdf (on file with the *Columbia Law Review*) (describing reasons for Illinois moratorium on executions, noting that "DNA evidence continues to reveal evidence of . . . wrongful convictions," and recommending reforms).

9. See The Innocence Project, Fix the System: National View, at <http://www.innocenceproject.org/fix/National-View2.php> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*) [hereinafter Innocence Project, Fix] (summarizing efforts to improve access to DNA tests in states); *infra* Part III.A (describing reform efforts and reform proposals).

10. See Innocence Project, Fix, *supra* note 9; *infra* Part III.A (describing reform efforts and reform proposals).

11. See Innocence Protection Act of 2004, Pub. L. No. 108-405, § 411, 118 Stat. 2278, 2278-80 (codified at 18 U.S.C. § 3600 (Supp. 2004)) (describing conditions under which court "shall order DNA testing of specific evidence" upon motion of defendant); DNA Analysis Backlog Elimination Act of 2000, Pub. L. No. 106-546, 114 Stat. 2726, 2726-37 (codified at 42 U.S.C. §§ 14135-14135e (2000)) (providing for federal grants to state and local governments for DNA testing programs).

12. See *infra* notes 82, 85, 93 and accompanying text (referring to different social science studies of causes of wrongful convictions).

13. Criminal justice scholars increasingly examine the implications of wrongful convictions for our criminal system's accuracy. See, e.g., Darryl K. Brown, The Decline of Defense Counsel and the Rise of Accuracy in Criminal Adjudication, 93 Cal. L. Rev. 1585, 1590-91, 1644 (2005) (describing impact of wrongful convictions on criminal trials and investigations); Brandon L. Garrett, Aggregation in Criminal Law, 95 Cal. L. Rev. 383, 449-50 (2007) [hereinafter Garrett, Aggregation] (exploring systemic reform efforts in courts and innocence commissions aiming to remedy wrongful convictions); Brandon L. Garrett, Innocence, Harmless Error, and Federal Wrongful Conviction Law, 2005 Wis. L. Rev. 35, 82-85, 99-110 [hereinafter Garrett, Federal Wrongful Conviction Law] (describing possible transformative effect of wrongful conviction cases on underlying criminal procedure rules); Daniel S. Medwed, Innocence Lost . . . and Found: An Introduction to *The Faces of Wrongful Conviction* Symposium Issue, 37 Golden Gate U. L. Rev. 1, 1 (2006) (introducing symposium); Richard A. Rosen, Reflections on Innocence, 2006 Wis. L. Rev. 237, 237 [hereinafter Rosen, Reflections] (introducing symposium and discussing "Criminal Justice in the Age of Innocence"); *infra* notes 255, 261 (presenting other scholarship on implications of wrongful convictions for criminal justice system).

study that examines how our criminal system handled, from start to finish, the cases of the first 200 persons exonerated by postconviction DNA testing in the United States.¹⁴ This study looks in depth at the reasons why these people were wrongfully convicted, the claims they asserted and rulings they received during their appeals and postconviction proceedings, how DNA testing eventually proved their innocence, and how they were exonerated.

To carry out the study, several bodies of data were assembled. First, data were compiled regarding the first 200 people exonerated by postconviction DNA testing in the United States. The study period stretches from 1989, when Gary Dotson became the first person exonerated by postconviction DNA in the United States, through the exoneration of Jerry Miller on April 23, 2007, the 200th person exonerated by postconviction DNA testing in the United States.¹⁵ Information was coded ranging from the demographics of the 200 exonerees, the evidence introduced during their trials, each criminal procedure claim they raised postconviction, each ruling a court rendered on each of their claims, and the details of how DNA testing ultimately freed them. Because courts issued decisions in two-thirds of the cases, these data can tell us quite a bit about how courts judged innocence.

In addition to the innocence group, a matched comparison group of cases was constructed. An unsuccessful effort was initially made to compare the innocence group with the fascinating group of people for whom postconviction DNA testing confirmed guilt. As Justice Scalia described

14. The lone study to date of exonerations includes non-DNA cases and examines the characteristics of 340 cases from 1989 through 2003. See Samuel R. Gross et al., *Exonerations in the United States 1989 Through 2003*, 95 *J. Crim. L. & Criminology* 523, 523–24, 525 n.7, 551–53 (2005) [hereinafter Gross et al., *Exonerations*] (explaining selection of 340 cases and summarizing conclusions about them). The Gross study provides a landmark examination of the characteristics of exonerations, such as race of the exoneree, crime of conviction, rates of exoneration, and mental illness of the exoneree, but perhaps most importantly, it constructs and examines the category of exonerations beyond DNA cases. Other works, like the Gross study, examine general characteristics of types of exonerated individuals and include non-DNA cases. See Hugo Adam Bedau & Michael L. Radelet, *Miscarriages of Justice in Potentially Capital Cases*, 40 *Stan. L. Rev.* 21, 57 (1987) (providing influential examination of characteristics of erroneous capital convictions); Steven A. Drizin & Richard A. Leo, *The Problem of False Confessions in the Post-DNA World*, 82 *N.C. L. Rev.* 891, 901–07 (2004) (surveying past studies of false confession cases, consolidating their findings, and offering analysis of “causal role of false confession in wrongful conviction cases,” including non-DNA cases). In contrast, this study examines only postconviction DNA exonerations. This study analyzes not only general characteristics of the cases, but also how they were handled by the criminal system through trial and appeals.

15. Clarence Page, *The 200th Reason to Test DNA*, *Chi. Trib.*, Apr. 25, 2007, at 23. Each of the 200 cases is described in Appendix A. While in practice with Cochran Neufeld & Scheck, LLP from 2002–2004, the author had the privilege to represent four exonerees included in this study with respect to subsequent civil wrongful conviction actions, but not with respect to the criminal appeals analyzed here. None of the specifics of those four civil cases are discussed in this Article.

in *Kansas v. Marsh*, prisoners inculpated by DNA testing have not received the same attention as those exonerated by DNA testing.¹⁶ These cases were difficult to locate, as there was no preexisting list maintained of them. Sixty-three cases in which postconviction DNA testing confirmed guilt were located, but only thirty-six received decisions. The group's characteristics are described in Appendix C. However, the small size of the group prevented any direct statistical comparison and the unusual self-selection of the group raises additional problems. As a result, the group played a marginal role in this study.

For that reason, the matched comparison group was created by pairing each of the exonerees with a case in which no DNA testing was conducted.¹⁷ These matched cases were selected at random among the body of reported decisions with the same criminal charges, in the same state, and in the same time period, as each innocence group case.

This study examines the trials, appeals, postconviction proceedings, and exonerations of the 200 convicts in the innocence group. First, it identifies the crimes with which the exonerees were charged and what evidence supported their convictions. All were convicted of rape or murder, and all but the nine who pleaded guilty were convicted after a trial. A few predictable types of unreliable or false evidence supported these convictions. The vast majority of the exonerees (79%) were convicted based on eyewitness testimony; we now know that all of these eyewitnesses were incorrect. Fifty-seven percent were convicted based on forensic evidence, chiefly serological analysis and microscopic hair comparison.¹⁸ Eighteen percent were convicted based on informant testimony and 16% of exonerees falsely confessed.

Second, this study examines the efforts by exonerees to challenge their convictions. Unfortunately, courts did not effectively review the unreliable and false evidence that supported these convictions. While Justice O'Connor has hailed our Constitution as offering "unparalleled protections against convicting the innocent,"¹⁹ this study illuminates fail-

16. See 126 S. Ct. 2516, 2533 (2006) (Scalia, J., concurring) ("The dissent makes much of the new-found capacity of DNA testing to establish innocence. But in every case of an executed defendant of which I am aware, that technology has confirmed guilt.").

17. Use of a matched comparison group is a technique accepted in scientific research when a randomized control group is not available, as is the case here, because one could not practically (or ethically) conduct experiments observing randomly selected actually innocent and guilty defendants during real criminal trials through appeals. See, e.g., Ronet Bachman & Russell K. Schutt, *The Practice of Research in Criminology and Criminal Justice* 180 (3d ed. 2007) ("[U]sually the best alternative to an experimental design is a quasi-experimental design . . . [in which] the comparison group is predetermined to be comparable to the treatment group in critical ways . . ."); Richard A. Leo, *Rethinking the Study of Miscarriages of Justice*, 21 *J. Contemp. Crim. Just.* 201, 217 (2005) (calling for use of matched comparison sample methodology to study the problem of wrongful convictions, due to impossibility of obtaining randomized sample).

18. Exonerees typically had more than one type of evidence supporting their convictions, so these figures add up to more than 100%.

19. *Herrera v. Collins*, 506 U.S. 390, 420 (1993) (O'Connor, J., concurring).

ures of those safeguards during our elaborate appellate and postconviction process. Exonerees rarely received new trials based on factual claims challenging the evidence supporting their wrongful convictions. Moreover, they often did not even raise factual claims challenging that evidence. No conviction was reversed based on a challenge to an eyewitness identification. None of the exonerees brought federal claims directly challenging forensic evidence, and while half of those who falsely confessed raised claims challenging the confession, none received relief.

Courts reversed the convictions of the exonerees at a 14% rate, or a 9% rate if only noncapital cases are included. That rate is much higher than the nominal 1% to 2% reversal rates during criminal review generally.²⁰ The matched comparison group of noncapital rape and murder cases received a reversal rate of 10%, with a statistically insignificant difference from the reversal rate in the innocence group. One implication is that all rape and murder cases that proceed to trial and result in a conviction are highly prone to reversible error. One cannot know how many in the matched comparison group are innocent, but these data show a high incidence of factual and not just procedural error in the matched comparison group; approximately half of reversals in both innocence and matched comparison groups were granted by courts based on factual claims.

Criminal appeals and postconviction proceedings also provide information about how judges assess innocence. Lacking the perfect hindsight of DNA evidence, judges often weigh the evidence of criminal defendants' guilt or innocence, typically when deciding if an error was harmless. In many of the innocence cases examined in this study, courts denied claims after finding that evidence of guilt offset error, sometimes even referring to "overwhelming" evidence of guilt.²¹ Prior to obtaining DNA testing, only a handful of exonerees asserted newly discovered evidence of innocence claims and none received a reversal. In short, the appellate and postconviction process did not effectively ferret out innocence. This should trouble us all the more given evidence of high reversal rates in rape and murder trials.

Third, this study explores how DNA testing was finally obtained, how the exonerations themselves occurred, and what happened afterwards. Even after DNA testing became available our system imposed a series of

20. See *infra* Part II.B.3.a (comparing reversal rates in innocence cases with those in criminal cases generally). Capital cases are excluded because they have very high reversal rates in contrast to criminal cases in general. See *infra* note 168 and accompanying text (discussing high reversal rates in capital cases).

21. See *infra* notes 195–198 and accompanying text (discussing cases where courts denied claims based on conclusions that evidence of guilt outweighed trial court errors). Several of those cases collected in this study were cited in the Innocence Network's amicus brief to the Supreme Court regarding innocence and harmless error. Brief of Innocence Network as Amicus Curiae in Support of Petitioner at 14–16, *Fry v. Pliler*, 127 S. Ct. 763 (2007) (No. 06-5247), 2007 WL 173682 (presenting cases of Dennis Brown, Frederick Daye, Larry Holdren, and Leonard McSherry).

barriers to relief. For one, known exonerees remain only a subset of innocent convicts; many cases do not or cannot receive DNA testing.²² Within the innocence group, many exonerees faced law enforcement refusal of access to the evidence for testing. Furthermore, many still could not obtain relief even after the DNA testing exonerated them, and, lacking any judicial recourse, they required an executive pardon. This final set of findings suggests that not only do known innocence cases represent the tip of an iceberg, but that even at the tip, once DNA testing became available, many exonerees faced obstacles even as they finally approached their exoneration.

Finally, this study does not try to estimate the size of the iceberg or its tip, that is, how many innocent people have been convicted. Other innocent people may have received an acquittal or reversal such that they never needed postconviction DNA testing. Still others may not have sought DNA testing, or may have failed to obtain access to DNA testing, or they may have lacked any probative or preserved biological evidence to test. This is a study of known failures, not of the failures and successes of our criminal system that remain undetected.²³ Rather than try to estimate how many additional innocent people still languish in our prisons,²⁴ this study instead identifies and studies the select few who were exonerated through postconviction DNA testing. Any larger inferences are drawn only by comparison to the matched comparison group, which suggests that other serious rape and murder trials are similarly prone to reversal based on serious factual errors.

The Article proceeds as follows. Part I explains the study design, methodology, and characteristics of the innocence group as well as the matched comparison group, and notes why the DNA confirmation cases were not suitable for comparison. Part II presents the results in three stages. Part II.A examines criminal trials of the exonerees, including their convictions; the chief types of evidence introduced at their trials; whether the exonerees raised claims related to that evidence, and data regarding exonerees who were sentenced to death. Part II.B examines appeals brought by exonerees, including: which stages of review they pursued; which claims they litigated; reversals obtained; the statistically

22. See *infra* part II.C.1 (discussing how DNA is not available in many cases).

23. For analysis of the problems inherent in studying the frequency of false convictions where they remain “hidden from view,” see Samuel R. Gross & Barbara O’Brien, *Frequency and Predictors of False Conviction: Why We Know So Little, and New Data on Capital Cases 1* (Univ. Mich. Law Sch. Pub. Law and Legal Theory Working Paper Series, Paper No. 93, 2007) (on file with the *Columbia Law Review*).

24. Scholars have done so for discrete groups of convicts. See *id.* at 15 (examining capital exonerations, including those in non-DNA cases, and estimating at least 2.3% exoneration rate between 1973 and 1989); D. Michael Risinger, *Convicting the Innocent: An Empirically Justified Wrongful Conviction Rate 14–15* (Sept. 16, 2006), at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=931454 [hereinafter Risinger, *Convicting the Innocent*] (on file with the *Columbia Law Review*) (examining capital rape-murder exonerations and estimating range of 3.3% to 5% for wrongful conviction rate in 1980s).

insignificant difference in the matched comparison group's reversal rate; cases where the exonerees received reversals; relief granted beyond reversals; procedural rulings versus merits rulings, and treatment of guilt-based doctrines and harmless error versus innocence-based claims. Part II.C examines DNA testing, and exoneration, including how the exonerees obtained postconviction DNA testing, how their convictions were ultimately vacated, and whether they received any compensation.

Part III explores larger implications of these findings for our criminal system. The Part first reviews a range of criminal investigation and trial reforms aimed at developing a more accurate record, both to prevent errors and to make the task of assessing innocence less onerous postconviction. Though jurisdictions have increasingly adopted such reforms in response to DNA exonerations, our criminal system has long discouraged review of factual claims. The findings regarding high reversal rates in serious rape and murder cases suggest further gains are possible in adopting measures to reduce errors that produce reversals. DNA exonerations and wrongful convictions will persist unless we secure greater reliability at all levels of our criminal system, from criminal investigations through trials, appeals, and postconviction review.

I. POSTCONVICTION DNA TESTING: STUDY DESIGN

A. *The Innocence Group*

DNA testing was first used to exonerate an innocent man in 1989, clearing Gary Dotson, who had been wrongly incarcerated for ten years in Illinois.²⁵ Since then the numbers of DNA exonerations have steadily increased as DNA testing has become more sophisticated.²⁶ Two hundred and eight persons have been exonerated by postconviction DNA testing and were released from prison if still serving their sentences.²⁷

Using the modern polymerase chain reaction (PCR) method and the short tandem repeat (STR) test, scientists can determine whether one person in billions or trillions (many more than all humans who have ever lived) could randomly match a particular DNA profile.²⁸ DNA testing

25. See Rob Warden, *Ctr. on Wrongful Convictions*, Nw. Univ. Law Sch., *The Rape That Wasn't: The First DNA Exoneration in Illinois*, at <http://www.law.northwestern.edu/depts/clinic/wrongful/exonerations/Dotson.htm> (last modified June 26, 2006) (on file with the *Columbia Law Review*) (discussing exoneration of Gary Dotson).

26. The Gross study found a steady increase in the number of DNA exonerations, "from one or two a year in 1989 to 1991, to an average of six a year from 1992 through 1995, to an average of twenty a year since 2000." See Gross et al., *Exonerations*, *supra* note 14, at 527.

27. See *supra* note 3 (discussing Innocence Project's running tally of persons exonerated by postconviction DNA testing).

28. Using the short tandem repeat (STR) test on thirteen distinct and independent regions of the DNA molecule (loci), DNA is capable of uniquely identifying a person's genetic profile with random match probabilities that can be greater than one out of all humans who have ever lived. In other words, the probability that another person matches a given profile may be more than even one in a trillion, many more than the 50–125 billion

can now be performed on even a single cell.²⁹ However, human error or misconduct can lead to unreliable results and non-random matches. Indeed, in three innocence cases studied here, faulty DNA evidence was introduced at trial and contributed to wrongful convictions.³⁰ Systemic problems, indeed scandals, have occurred at DNA laboratories in at least seventeen states.³¹ Nevertheless, DNA testing provides the most accurate and powerful scientific proxy available to establish biological identity; it sets the “gold standard” for other forms of forensic analysis.³²

By May 2007, postconviction DNA testing had exonerated 200 persons in the United States. This study’s dataset contains all of the first 200 DNA exonerees (presented at Appendix A below).³³ This is termed the

humans who have ever lived. See John M. Butler, *Forensic DNA Typing: Biology, Technology, and Genetics of STR Markers* 7, 498–500, 510–13 (2d ed. 2005); 4 David L. Faigman et al., *Modern Scientific Evidence: The Law and Science of Expert Testimony* § 31:35 (2005) (“The combination of all STRs used in CODIS yields frequencies of occurrence of about 1 in 575 trillion Caucasians and 1 in 900 trillion African Americans.”); Nat’l Comm’n on the Future of DNA Evidence, Nat’l Inst. of Justice, *The Future of Forensic DNA Testing* 19 (2000), available at <http://www.ncjrs.gov/pdffiles1/nij/183697.pdf> (on file with the *Columbia Law Review*) (noting that statistical probability of thirteen loci STR-DNA match between two unrelated persons in Caucasian American population has been conservatively estimated at one in 575 trillion).

29. See I. Findlay et al., *DNA Fingerprinting from Single Cells*, 389 *Nature* 555, 555 (1997) (referring to “system for determining STR profiles from single cells using six forensic STR markers”). Testing is more commonly performed on as few as 50–100 cells. Jeremy Travis & Christopher Asplen, U.S. Dep’t of Justice, Nat’l Inst. of Justice, *Postconviction DNA Testing: Recommendations for Handling Requests* xiv–xv (1999), available at <http://www.ncjrs.gov/pdffiles1/nij/177626.pdf> (on file with *Columbia Law Review*).

30. See *infra* note 109 and accompanying text (discussing three wrongful convictions due to DNA error).

31. See Maurice Possley, Steve Mills & Flynn McRoberts, *Scandal Touches Even Elite Labs: Flawed Work, Resistance to Scrutiny Seen Across U.S.*, *Chi. Trib.*, Oct. 21, 2004, at C1; see also Erin Murphy, *The New Forensics: Criminal Justice, False Certainty, and the Second Generation of Scientific Evidence*, 95 *Cal. L. Rev.* 721, 725 (2007) (referring to “series of scandals that have already besieged DNA typing”).

32. See, e.g., Michael J. Saks & Jonathan J. Koehler, *The Coming Paradigm Shift in Forensic Identification Science*, 309 *Science* 892, 893 (2005) (describing how DNA typing serves as “model for the traditional forensic sciences” where, unlike other forms of forensic science, DNA “offer[s] data-based, probabilistic assessments of the meaning of evidentiary ‘matches’”); see also *supra* note 28 (describing high degree of accuracy in DNA testing).

33. In this context, “exonerated” means that either a court vacated the conviction or an executive action, such as a pardon, invalidated the conviction. This list excludes, however, cases in which DNA evidence undermined the conviction and led to a vacatur or pardon, but was not substantially probative of innocence. The list also excludes cases in which DNA evidence substantially undermined the conviction and convincingly demonstrated innocence but no vacatur or pardon has as yet been forthcoming. This list of DNA exonerations appears complete and accurate. See Appendix A below for a complete list. The Innocence Project at Cardozo Law School (“Innocence Project”), founded by Peter Neufeld and Barry Scheck, maintains an authoritative list on its website. See *supra* note 3 (citing Innocence Project’s running list of DNA exonerations). The list here was cross-checked against two separate lists. The first was assembled by Professor Samuel Gross as part of his study. This list in turn relied upon both the Innocence

“innocence group” throughout, for convenience. An Illinois case provides an example.

Ronnie Bullock, a black twenty-seven-year-old man, was convicted in 1984 of the rape and kidnapping of a nine-year-old girl on the south side of Chicago and sentenced to sixty years in prison. The victim identified him in a lineup and then at trial, after a police officer noticed Bullock’s similarity to a composite sketch; a twelve-year-old girl, the victim of a similar attack in the neighborhood, also identified him in a lineup.³⁴ On direct appeal, the court dismissed as meritless his claims regarding a suggestive eyewitness identification, prosecutorial misconduct, improper admission of evidence of another crime, and various evidentiary arguments.³⁵ After two state postconviction petitions were unfruitful, Bullock finally pursued a federal habeas petition, which was dismissed in 1991 for failure to exhaust and procedural default.³⁶

In 1994, at the request of his postconviction attorney, Bullock obtained access to crime scene evidence which had been lost; DNA testing of the victim’s underwear exonerated him after eleven-and-a-half years in prison.³⁷ The trial court vacated his conviction. Four years later, he received a Governor’s pardon on the ground of innocence, which under

Project’s list, and two others that were also cross-checked: Ctr. on Wrongful Convictions, Nw. Univ. Law Sch., The Exonerated: Exonerations in All States, at <http://www.law.northwestern.edu/depts/clinic/wrongful/exonerations/States.htm> (last modified Jan. 22, 2003) (on file with the *Columbia Law Review*) (listing exonerations by state), and the Death Penalty Info. Ctr., The Innocence List, at <http://www.deathpenaltyinfo.org/article.php?scid=6&did=110> (last updated on May 22, 2007) (on file with the *Columbia Law Review*). The list was also cross-checked against a list prepared by the law firm Winston & Strawn, LLP, which has assembled and shared with me a database of documents relating to the cases of DNA exonerees. The Innocence Project’s list has been complete and accurate as measured against those other lists. The Innocence Project secured or helped to secure many of the 208 DNA exonerations to date, and has consulted on many others secured by postconviction attorneys or other innocence projects that are part of a larger Innocence Network. News searches did not locate any additional postconviction DNA exonerations. Finally, this list of the first 200 postconviction DNA exonerees does not include the case of Harold Buntin, who was formally exonerated by court order in 2005. This order was never entered or distributed due to a court clerical error. As a result, the exoneration did not come to light and Buntin was not released until April 2007, as reported on April 24, 2007, just a day after the study period ended with Jerry Miller’s postconviction DNA exoneration, which was reported as the 200th. See Tim Evans, “I Never Should Have Been in Jail,” *Indianapolis Star*, Apr. 24, 2007, at A1.

34. See *People v. Bullock*, 507 N.E.2d 44, 45–46 (Ill. App. Ct. 1987) (describing identification of Bullock). Demographic information regarding Bullock is available at Ctr. on Wrongful Convictions, Nw. Univ. Law Sch., The Illinois Exonerated: Ronnie Bullock: Convicted of Rape on the Strength of Mistaken Identification by Two Little Girls, at http://www.law.northwestern.edu/depts/clinic/wrongful/exonerations/Bullock_IL.htm (last modified May 18, 2006) (on file with the *Columbia Law Review*).

35. See *Bullock*, 507 N.E.2d at 45.

36. See U.S. ex rel. *Bullock v. Roth*, No. 91-C-0680, 1991 WL 127582, at *1–*2 (N.D. Ill. July 5, 1991) (discussing procedural posture of Bullock’s postconviction petitions).

37. See Jeffrey Bills, *Accusers Finally Agree: He’s Innocent*, *Chi. Trib.*, Nov. 24, 1994, at 1.

Illinois law entitled him to compensation from the Illinois Court of Claims.³⁸

Like Bullock, the other 199 individuals each had, before DNA testing, private information regarding their actual innocence—that is, each presumably knew they were innocent. This study examines how well these convicts conveyed that information to criminal justice actors at each stage, from trial through their appeals and post-conviction reviews. This study does not speculate how many other innocent convicts received relief without needing DNA testing, nor how many others have not requested DNA testing.

Information was collected for all 200 in the innocence group at the trial level. This included information regarding the demographics of the innocence group (race, age, race of victim, age of victim, county of trial, date of trial, sentence, etc.), what charges the prosecutor made against each person, and the crimes for which each was convicted. This information was gathered from reported decisions, and any gaps were filled with information from news reports.³⁹ From the same sources, information was collected regarding what types of physical or testimonial evidence were introduced at trial.⁴⁰ Appendix A provides a summary table of these data.

The demographics of the innocence group are not representative of the prison population, much less the general population: Twenty-two were juveniles (11%), 12 were mentally retarded (6%), and all except 1 were male. Fifty-seven were White (29%), 124 were Black (62%), 17 were Hispanic (9%), and 1 was Asian.

While minorities are overrepresented in the prison population and also among rape and murder convicts, these data show a troubling pattern: Many more exonerees were minorities (71%) than is typical even among average populations of rape and murder convicts.⁴¹ Most strik-

38. See Edgar Pardons Man Freed from Prison in 1994 by DNA Testing, *St. Louis Post-Dispatch*, Mar. 28, 1998, at 11.

39. The Innocence Project website provided descriptions that filled in some missing data and provided a useful source to check against news reports and details from reported judicial decisions. Maddy Delone at the Innocence Project provided the race of approximately thirty exonerees whose race was not described in any public source.

40. Examples include an eyewitness identification (by the victim or a witness), forensic evidence (blood serology, DNA, fingerprint, hair comparison), physical evidence, non-eyewitness testimony (inculpatory comments short of a confession, informant and jailhouse informant testimony, codefendant testimony), and confessions.

41. See Matthew R. Durose & Patrick A. Langan, U.S. Dep't of Justice, Bureau of Justice Statistics, *Felony Sentences in State Courts, 2002*, at 6 tbl.5 (2004), available at <http://www.ojp.usdoj.gov/bjs/pub/pdf/fssc02.pdf> (on file with the *Columbia Law Review*) [hereinafter Durose & Langan, *Felony Sentences*] (examining survey data from 300 counties selected to be nationally representative and reaching several conclusions: 63% of rape convicts were White and 45% of murder convicts were White; only 8% of rape and murder convicts were under twenty years old, and rape convicts were 33% Black and 4% Other). In contrast to that 37% figure (33% Black and 4% Other), in the innocence group, 73% of rape convicts were minorities (91 Black, 11 Hispanic, and 38 White). While

ingly, 73% of innocent rape convicts were Black or Hispanic, while one study indicates that only approximately 37% of all rape convicts are minorities.⁴² Possible explanations for why such disparities exist among known false convictions appear below.⁴³

The 200 exonerees are not evenly distributed geographically, but rather across thirty-one states and the District of Columbia. The highest numbers of exonerations were in Texas (28), Illinois (27), New York (23), Virginia (10), California (9), Louisiana (9), Massachusetts (9), Pennsylvania (9), Oklahoma (8), Missouri (7), Georgia (6), Florida (6), Ohio (6), and West Virginia (6). Many of those states have large death rows and many have established innocence projects, suggesting a combination of reasons for their higher numbers of exonerations.⁴⁴ Several counties also had particularly high numbers of exonerations, with the

the BJS reported 55% of murder convicts as non-White, in the innocence group 65% of murder and rape-murder convicts were minorities (30 Black, 5 Hispanic, 1 Asian, 19 White). Thus, as scholars suggest, disproportionate conviction of minorities alone does not explain their proportion among those exonerated. See Gross et al., Exonerations, *supra* note 14, at 547–48; Karen F. Parker, Mari A. Dewees, & Michael L. Radelet, Racial Bias and the Conviction of the Innocent, *in* *Wrongly Convicted: Perspectives on Failed Justice* 114, 114–28 (Saundra D. Westervelt & John A. Humphrey eds., 2001).

In contrast, the BJS study of seventy-five large urban counties found more racial disparities than the 300 county study. The seventy-five county study found that 85% of felony defendants in murder cases were minorities and 68% of felony rape defendants were minorities. See Thomas H. Cohen & Brian A. Reaves, U.S. Dep't of Justice, Bureau of Justice Statistics, *Felony Defendants in Large Urban Counties, 2002*, at 4 tbl.3 (2006), available at <http://www.ojp.usdoj.gov/bjs/pub/pdf/fdluc02.pdf> (on file with the *Columbia Law Review*) [hereinafter Cohen & Reaves, 2002 BJS Study]. Furthermore, 121 out of the 200 exonerees (61%) were convicted in one of the seventy-five largest counties in the United States by population. Eighty-seven, or 62% of those convicted of rape, were convicted in one of the seventy-five largest counties. That number exceeds the degree to which felonies occur in those counties; according to the BJS, half of felonies and 36% of forcible rapes occurred in those seventy-five counties. *Id.* at 1. Thus, some part of the racial disparity may be due to geography, though the racial disparity among exonerees is greater than that reported in the seventy-five large urban counties. In addition, much of the innocence group concentration in the largest counties is due to high numbers of exonerations in New York City and Chicago. See *infra* note 45 and accompanying text.

42. See Durose & Langan, *Felony Sentences*, *supra* note 41, at 6 tbl.5 (offering statistics on convictions of minorities for rape).

43. See *infra* Parts II.A.2 and III.D.

44. See Gross et al., *Exonerations*, *supra* note 14, at 541 (analyzing similar list but including non-DNA exonerations, and noting that though list corresponds in part to population and size of death rows, New York and Illinois both have established innocence projects and were first two states to provide right to postconviction DNA testing). The states with the highest numbers of exonerations do not match the states with the highest capital reversal rates. See James Liebman, Jeffrey Fagan, Valerie West, & Jonathan Lloyd, *Capital Attrition: Error Rates in Capital Cases, 1973–1995*, 78 *Tex. L. Rev.* 1839, 1857 fig.2 (2000) [hereinafter Liebman et al., *Capital Attrition*] (graphing percentage of exonerations against percentage of death sentences carried out in various states).

leaders all in urban areas: Cook County, Illinois (23), Dallas County, Texas (12), and New York, New York (7).⁴⁵

For most of the analysis of criminal justice responses, this study focuses on the 133 members of the innocence group who received written decisions during their appeals and postconviction proceedings. One cannot determine results reached or the bases on which the courts ruled for the sixty-seven cases without a written decision.⁴⁶ Only a few studies of criminal appeals and postconviction review have examined the types of claims brought and success rates, with leading studies by the National Center for State Courts (NCSC) and the Bureau of Justice Statistics.⁴⁷ Where relevant, these studies are cited for comparison.

45. As noted *supra* note 41, 121 out of the 200 (61%) were convicted in one of the seventy-five largest counties in the United States by population.

46. By “written decisions” this study refers to decisions available on Lexis-Nexis or Westlaw that provided a reason for the decision, regardless whether they were characterized as “reported” or “unreported.” Decisions were excluded if they did not provide a reason for a disposition. Many postconviction decisions are unpublished, and judges often rule on *pro se* petitions and face difficulties in deciphering claims. See Victor E. Flango, Nat’l Ctr. for State Courts, *Habeas Corpus in State and Federal Courts* 45–60 (1994), available at http://www.ncsconline.org/WC/Publications/KIS_StaFedHabCorpStFedCts.pdf#search=%22habeas%20study%22 (on file with the *Columbia Law Review*) [hereinafter Flango, 1994 NCSC Study] (“[P]etitioner claims are difficult to classify because most habeas corpus petitions are raised without counsel and claims raised are not always clear.”). Similarly, published decisions often report only claims perceived to have merit or to be worthy of discussion.

47. See Flango, 1994 NCSC Study, *supra* note 46, at 45–59; Roger A. Hanson & Henry W.K. Daley, U.S. Dep’t of Justice, Bureau of Justice Statistics, *Federal Habeas Corpus Review: Challenging State Court Criminal Convictions* 17 (1995), available at <http://www.ojp.usdoj.gov/bjs/pub/pdf/fhrcrccc.pdf> (on file with the *Columbia Law Review*) [hereinafter Hanson & Daley, 1995 BJS Study] (providing statistics concerning outcome of sample of habeas corpus petitions filed in eighteen federal districts in 1992); Nancy J. King, Fred L. Cheesman II & Brian J. Ostrom, Nat’l Ctr. for State Courts, *Final Technical Report: Habeas Litigation in U.S. District Courts* 27–31, 45–51 (2007), available at <http://law.vanderbilt.edu/article-search/article-detail/download.aspx?id=1639> (on file with the *Columbia Law Review*) [hereinafter King et al., 2007 NCSC Study] (providing empirical analysis of sampled habeas corpus petitions filed by state prisoners from 2001–2005); Paul H. Robinson, U.S. Dep’t of Justice, *An Empirical Study of Federal Habeas Corpus Review of State Court Judgments* 7 (1979) (offering “rough profile of those persons filing petitions in federal court complaining of unlawful state custody”); John Scalia, U.S. Dep’t of Justice, Bureau of Justice Statistics, *Prisoner Petitions Filed in U.S. District Courts, 2000, with Trends, 1980–2000*, at 2 (2002), available at <http://www.ojp.usdoj.gov/bjs/pub/pdf/ppfusd.00.pdf> (on file with the *Columbia Law Review*) [hereinafter Scalia, 2000 BJS Study] (providing statistics concerning petitions filed in U.S. district courts by federal and state inmates from 1980–2000); Richard Faust, Tina J. Rubenstein & Larry W. Yackle, *The Great Writ in Action: Empirical Light on the Federal Habeas Corpus Debate*, 18 N.Y.U. Rev. L. & Soc. Change 637, 677–80 (1991) (providing empirical data on habeas corpus petitions filed between 1973–1975 and between 1979–1981 in Southern District of New York); Daniel J. Meltzer, *Habeas Corpus Jurisdiction: The Limits of Models*, 66 S. Cal. L. Rev. 2507, 2528–31 (1993) (providing secondary research on habeas corpus petitions filed in select years between 1965 and 1992).

For the 133 exonerees for whom written judicial decisions were located,⁴⁸ each of the claims that the 133 exonerees raised at each stage of criminal review, from the direct appeal through federal habeas corpus,⁴⁹ was coded. Only claims raised on appeal and in postconviction proceedings are studied here, and not claims raised at or before trial.⁵⁰ By a “claim,” this study refers only to the assertion before a court of a legal right to obtain the reversal of a conviction or sentence, and not to any other type of assertion or request for relief not premised on a legal contention. How courts ruled on each claim at each stage was also coded, including whether a court reversed the conviction of an exoneree and granted a new trial, and whether such a reversal was upheld on appeal. Obviously, all of the convicts in the innocence group eventually received a vacatur or pardon and were released after the DNA testing was performed; this study focuses on whether they received any relief before the DNA testing resulted in their exonerations.⁵¹ For the vast majority (86%) who never received any relief before their ultimate exoneration, the reasons why courts denied relief were coded. Finally, the study describes how all 200 exonerees finally obtained access to DNA testing and how their convictions were ultimately vacated.

B. *The Matched Comparison Group*

A matched comparison group was assembled to provide data with which to compare the reversal rates, claims raised, and other characteristics of the innocence group. This group consists of 121 convicts whose cases resemble in several respects the 121 noncapital cases in the innocence group that had written decisions. However, the 121 matched comparison group cases lack DNA evidence later showing innocence or guilt. This group thus stands in for the vast majority of convicts who never obtain DNA testing. All 133 in the innocence group were not matched, but

48. Westlaw and Lexis-Nexis searches were run for each exoneree’s name in the state in which they were convicted. Information from news articles regarding the year of their convictions and crimes of convictions was used to rule out prisoners with the same name. When possible from judicial descriptions of procedural history, information was added regarding rulings made by other courts in unreported decisions.

49. See *infra* notes 155–156 and accompanying text (explaining coding of criminal procedure claims raised by exonerees).

50. A work in progress examines the trial transcripts in the cases of those exonerated by postconviction DNA testing to assess which claims were raised during trials. See *infra* note 99. The process of locating and assembling those trial transcripts has not been completed, however, and the sources reviewed here that enabled determination of what types of physical or testimonial evidence were introduced at trial were not adequate to enable one to identify all legal claims asserted in motions made at trial or in pretrial proceedings.

51. For cases in which there was more than one DNA test, Part II includes decisions rendered after the initial DNA testing, i.e., any testing that occurred before the DNA testing that resulted in an exoneration through a vacatur or pardon.

rather just the 121 noncapital cases, because as discussed in the next Part, death penalty cases raise separate issues.⁵²

The matched comparison group was randomly selected from decisions reporting criminal appeals or postconviction rulings, using criteria designed to obtain as near a match as possible, given the available data, to each one of the 121 innocence cases. For each of the 121 innocence cases, a search was conducted on Westlaw for all cases from the same state that had a reported decision in the same year and involved convictions for the same crimes (first-degree murder, aggravated rape, etc.).⁵³ A second Illinois case provides an illustrative example from this matched comparison group.

Daniel Holland's case was selected as a match for Ronnie Bullock's, since he was also sentenced in Illinois in the early 1980s to sixty years for rape and kidnapping and had appellate decisions in his case.⁵⁴ Holland, a white man, was convicted in 1981 of raping a suburban Cook County teenager based on the victim's identification, her boyfriend's identification, and his confessions to the police and prosecutor. The confessions were introduced despite the trial court's conclusions that there was a "very severe physical confrontation" with police and that on the day of his interrogation he suffered serious injuries including two fractured ribs.⁵⁵ The Illinois Appellate Court found his confessions coerced, reversed his conviction, and ordered a new trial. The Illinois Supreme Court reversed the appellate court, finding that Holland voluntarily confessed, that his attorney effectively represented him, and that exclusion of black jurors was not discriminatory (where he was white).⁵⁶ The U.S. Supreme Court

52. As discussed *infra* Part II.B.3.a, only the noncapital cases were matched, because for capital cases, James Liebman's study already provides comprehensive data for comparison, with data regarding every capital case from the mid-1970s to 1995. These data also provide another reason to treat capital cases separately: More than two-thirds received reversals. To study reversal rates, one must isolate capital cases, given their uniquely high reversal rates. See Liebman, et al., *Capital Attrition*, *supra* note 44, at 1846–50.

53. The first case meeting those detailed criteria was accepted. A check was later conducted to see if the conviction in that matched case was reversed. As with any matched comparison group, judgment calls had to be made in selecting similar cases. However, those decisions were made according to a common protocol and before checking to see whether each case received a reversal. Since these random cases lacked news media coverage, only the number of reversals they received and the claims they raised during appeals were examined. It was not possible to obtain much demographic data or other information about their convictions.

54. See *People v. Holland*, 520 N.E.2d 270, 271–72 (Ill. 1987) (describing procedural posture of Holland's case and presenting information about his conviction and appeal). The Westlaw search used to identify him was in the Illinois cases database for "(CONVICT! /P RAPE & DA(1987))" because the first reported decision in the Bullock case was in 1987.

55. *Id.* at 272–79 (discussing claims of physical coercion); *id.* at 287 (Simon, J., dissenting) (internal quotations omitted) (noting trial court's conclusions about police's treatment of Holland).

56. *Id.* at 278–81.

then granted certiorari and affirmed the conviction.⁵⁷ Holland's federal habeas petition was granted by the district court in 1990, but then dismissed by the Seventh Circuit Court of Appeals, which concluded that the coercive effects of any beatings he received from the police "dissipated" before his confession.⁵⁸ He sought DNA testing in 1996, but his motion was denied a year later. He apparently passed away in prison in 2005.⁵⁹

As developed in Part II.B, the matched comparison group permits an assessment of whether the reversal rate among the exonerees represents a high rate, or rather involves a rate similar to the background rate amongst similar serious rape and murder convictions. The matched comparison group also permits other comparisons with the innocence group regarding the types of claims exonerees raised and the types of rulings courts rendered. Courts reported the race of very few of the convicts in the matched comparison group (only fourteen out of 121). Only about two-thirds had courts note what evidence supported convictions in the matched comparison group; what was available is discussed in Part II. Finally, one important difference between the matched comparison group and the innocence group is that the matched comparison group included more rape cases involving acquaintances, in which identity would tend not to be litigated.⁶⁰

C. *The DNA Confirmation Group*

No study has collected, much less examined, the group of cases in which DNA testing confirms the guilt of convicted individuals. The group of DNA postconviction inculcation cases was assembled through searches of news articles and consists of sixty-three individuals identified

57. See *Holland v. Illinois*, 493 U.S. 474, 487 (1990) (holding that Holland did not have valid Sixth Amendment claim).

58. See *Holland v. McGinnis*, 963 F.2d 1044, 1050 (7th Cir. 1992).

59. See *United States ex rel. Holland*, No. 90 Civ. 4359 (N.D. Ill. May 22, 1997) (Order by Hon. Marvin E. Aspen Denying Petitioner's Motion for DNA Testing). An entry of this order, though not the order itself, is available through PACER's online docket for the Northern District of Illinois. See Public Access to Court Electronic Records: PACER Web Links, U.S. District Courts: Illinois Northern District Court, at <https://ecf.ilnd.uscourts.gov/cgi-bin/login.pl> (last visited Nov. 8, 2007) (docket on file with the *Columbia Law Review*). Information about Holland's death was made available via telephone interview. See Telephone Interview by Michelle E. Morris with Derek Schnapp, Manager, Ill. Corrs. Media Relations Dep't, in Springfield, Ill. (Jun. 1, 2007) (confirming that Holland passed away while in custody of Logan Correctional Center in Lincoln, Illinois). Thanks to Michelle Morris for her research, including contacting Illinois Corrections.

60. While 8 out of the 158 exonerees' cases involved acquaintance identifications, 18 out of 65 cases with eyewitnesses in the matched comparison group involved acquaintance identifications, typically where the rape victim was not a stranger to the perpetrator. Such acquaintance cases usually involve consent defenses but not defenses as to lack of identity. Furthermore, 5 additional cases in the matched comparison group involved stranger cases in which identity was not contested, but rather the defense was consent. The matched comparison group contains about the same proportion of guilty pleas, 6 out of 121, while the innocence group contains 9 out of 200.

as having been inculcated by postconviction DNA testing.⁶¹ Additional cases were identified with the help of the Innocence Project at Cardozo Law, the organization which secured DNA testing and assisted in exonerating many of those in the innocence group.⁶² The Innocence Project sent letter surveys to inculcated former clients asking if they would participate in this study.⁶³ I call this the “DNA confirmation group,” though just as in the innocence group, DNA testing may have been faulty in some of these cases.⁶⁴

The set of DNA confirmation cases is incomplete. Sixty-three cases have been located, including thirty-six with written decisions. At least one hundred additional DNA inculcations could not be identified through public sources.⁶⁵ No list is maintained of them. One reason may be the relative scarcity of information available. District attorneys often do not publicize such results, and the news media provide less coverage of inculcations than they do of exonerations. After all, inculcatory test results merely confirm the jury verdict. The cases with written decisions were disproportionately eleventh-hour attempts to avert executions: Fifteen of thirty-six (42%) were capital cases. These fifteen death row inmates, though actually guilty, had a strong incentive to pursue every avenue for review, regardless of whether their claims had merit.⁶⁶ Further, all members of the DNA confirmation group sought DNA testing despite their knowledge of their actual guilt. As Barry Scheck comments, perhaps they did “not want to admit it, or they [were] lying or psychopaths.”⁶⁷ They may also have hoped for an error in the DNA testing. Perhaps they wanted the attention.

61. News searches included Westnews searches for “DNA and guilt and confirm!” and “DNA and testing and guilt,” after 1989.

62. See *infra* Part ILC.1 (discussing Innocence Project’s work).

63. Sixteen individuals who were inculcated by DNA and received a letter survey from the Innocence Project regarding their willingness to participate in research efforts gave permission to have their records made available for this study as long as there was no identifying information linked to their results. Thus, only aggregate information from those cases is discussed below.

64. Indeed, in several cases included in the group, defense lawyers questioned DNA evidence and called for an independent test. See, e.g., Keith O’Brien, *Till Death Do Us Part*, *NewCity*, Feb. 2, 1998, available at http://weeklywire.com/ww/02-02-98/chicago_cover.html (on file with the *Columbia Law Review*) (describing questions raised regarding DNA testing in Willie Enoch case).

65. This is because at least until recently, in approximately 60% of the cases in which the Innocence Project requested testing, the results inculcated. See Barry C. Scheck, *Barry Scheck Lectures on Wrongful Convictions*, 54 *Drake L. Rev.* 597, 601 (2006).

66. Since fewer news stories exist for this group, information regarding causes of the trial convictions was available only in cases with written decisions and even then, such information was spotty.

67. Scheck, *supra* note 65, at 601. The case of Roger Coleman, the sole post-execution DNA inculcation, provides an example where the convict convinced some lawyers and supporters of his innocence. See John Tucker, *May God Have Mercy: A True Story of Crime and Punishment* 336 (1998).

Despite the obvious appeal of examining the DNA confirmation group, its small size and unusual selection make it unsuitable for direct comparison to the innocence group. Thus, this group plays only a marginal role in this study. Just as in the innocence group cases, the thirty-six DNA confirmation cases with written decisions were coded in a database with their case characteristics. The Appendix provides summary information about this group.

II. RESULTS: FROM TRIAL TO EXONERATION

This study provides comprehensive data regarding the cases of those found innocent through postconviction DNA testing.⁶⁸ This Part tells the story of how these unique former convicts were charged and tried. It also tells how they brought appeals, sought postconviction review, and were ultimately exonerated through postconviction DNA testing. Proceeding chronologically, Part II.A begins with their trials, Part II.B examines their appeals and postconviction review, and Part II.C develops how they obtained DNA testing. At each stage, where possible, the innocence group is compared with the matched comparison group. From trial to exoneration, our criminal system poorly addressed the types of unreliable factual evidence at issue in these wrongful convictions.

A. *Criminal Trials*

This section describes how almost all of the 200 exonerees were convicted of rape and murder, typically based on eyewitness identifications, forensic evidence, informant testimony, or confessions. Yet very few raised, much less received relief on, claims relating to these pieces of factual evidence, many of which we now know were unreliable or false.

1. *Rape and Murder Convictions.* — The 200 exonerees were charged and convicted chiefly of rape (71%), murder (6%), or both murder and rape (22%).⁶⁹ This is not surprising; rape cases in particular often have relevant biological material for DNA testing. Fourteen were sentenced to death. Fifty were sentenced to life in prison. The table below depicts this distribution.

68. The set of postconviction DNA exonerations does not include those cases in which DNA exonerated pretrial or during trial. Again, the innocence group, consisting of convicts, also cannot capture cases that did not result in a conviction, either because the prosecution ceased or because of an acquittal. See *supra* note 33 (discussing composition of innocence group); cf. Daniel Givelber, *Lost Innocence: Speculation and Data About the Acquitted*, 42 *Am. Crim. L. Rev.* 1167, 1198–99 (2004) (“If it is at least as likely that the acquitted are innocent as that they are guilty, we need to rethink both our treatment of acquittals as irrelevant to subsequent evidentiary and punishment issues and our assumptions about the extent of the problem of wrongful convictions.”).

69. The three exceptions listed in Table 1 as “Other” are S. Cowans, who was convicted of attempted murder, A. Beaver, who was convicted of robbery, and J. Ochoa, who was convicted of armed robbery and carjacking.

TABLE 1: EXONEREES' CONVICTIONS AND CAPITAL SENTENCES

Conviction	Number of cases
Rape	141
Murder	12
Rape-Murder	44
Other	3

These 200 exonerees do not reflect the typical criminal convicts in that very few suspects are charged with rape or murder and even fewer are convicted. According to the Bureau of Justice Statistics (BJS), only 0.7% of felony defendants are convicted of murder and only 0.8% are convicted of rape.⁷⁰

Only nine of the exonerees pleaded guilty.⁷¹ Presumably, some refused to accept guilty pleas because they knew they were innocent,⁷² although in these serious murder and rape cases prosecutors may not have offered plea bargains that were palatable to an innocent defendant. The members of the innocence group are thus very different from typical criminal defendants. All but the nine who pleaded guilty in the innocence group (96%) were convicted at criminal trials. In contrast, 68% of murder convictions and 84% of felony rape convictions were obtained through plea bargaining.⁷³

70. See Cohen & Reaves, 2002 BJS Study, *supra* note 41, at 27 tbl.28 (presenting statistics on conviction types of felony defendants).

71. For example, Marcellius Bradford earlier confessed and then pleaded guilty to rape and murder and was sentenced to twelve years in prison; he also agreed to testify against O. Saunders, C. Ollins, and L. Ollins. In 1991, John Dixon pleaded guilty to rape and kidnapping after the victim identified him. Though he later claimed the plea was not voluntary and requested DNA testing, he was sentenced to forty-five years in prison and was released in 2001 after DNA testing. See Mary P. Gallagher, *Why DNA Testing Isn't a Panacea*, N.J. L.J., Dec. 10, 2001, at 1, 1, 14. Chris Ochoa pleaded guilty to murder after a coerced confession, serving twelve years before DNA exonerated him. See Innocence Project, *Know the Cases: Christopher Ochoa*, at <http://www.innocenceproject.org/Content/230.php> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*). The others who pleaded guilty were Anthony Gray, Eugene Henton, James Ochoa, Jerry Townsend, David Vasquez, and Arthur Whitfield. Bradford, Gray, Chris Ochoa, Townsend, and Vasquez had falsely confessed. Only two, Dixon and Henton, were convicted of rape; the others were convicted of rape-murder or murder.

72. An NCSC study of 382 felony trials in 2000–2001 conducted a survey that found that defense counsel identified the defendant's claim of innocence as the reason why a plea was refused in about half of the jury trials examined. See Givelber, *supra* note 68, at 1177 & n.38 (citing and summarizing results of NCSC study).

73. Durose & Langan, *Felony Sentences*, *supra* note 41, at 8 tbl.9. The study of felony defendants in large urban counties shows a similar figure; there, 51% of the felony murder convictions involved plea bargains, while 90% of the felony rape convictions involved plea bargains. See Cohen & Reaves, 2002 BJS Study, *supra* note 41, at 24 tbl.23 (presenting statistics on adjudication outcomes for felony defendants in nation's seventy-five largest cities). Table 23 depicts how in the Bureau's 2002 study of convictions in seventy-five large urban counties, 41% of murder cases and 53% of rape cases were resolved through plea

Murder and rape cases are differently situated. BJS statistics show that while 16% of rape convictions were based on a trial verdict, 32% of murder convictions were based on a trial verdict.⁷⁴ Several additional features distinguish rape from murder convictions. Rape cases typically involve a victim identification and perhaps biological evidence from a rape kit. In the time before DNA testing could be performed, one would expect many stranger rape cases to plea bargain on the strength of the victim's identification, with more equivocal cases, perhaps often involving non-strangers and issues of consent, going to trial.⁷⁵ In contrast, in murder cases, if the victim was the only witness, law enforcement may face great difficulties identifying the perpetrator. Again, the more equivocal cases may go to trial, rather than result in convictions based on guilty pleas. However, given the seriousness of a murder case, police have far greater incentives to invest in their investigation and prosecution.⁷⁶ These reasons may explain why there is a higher conviction rate for felony defendants charged with murder than for those charged with felony rape, despite fewer guilty pleas in murder cases; in felony rape cases there are more dismissals, acquittals, and misdemeanor convictions.⁷⁷

2. *Trial Evidence Supporting Wrongful Convictions.* — Due to DNA testing, we know now that at least some of the evidence introduced at trial against these 200 exonerees was false or misleading. Eyewitnesses were incorrect or misled by police suggestion, a confession was false, if not

bargaining. However, those statistics include non-felony cases and cases that did not result in conviction, which are not a proper comparison to the cases of these exonerees, which all involved felony convictions. Thus, dividing the 41% of murder cases resolved through plea bargaining by the number of felony convictions reported, in 80% of cases, produces a 51% plea bargain rate for felony murder convictions. Dividing the 53% of rape cases by the 59% of cases in which there were felony convictions produces a 90% plea bargain rate for felony rape convictions. See *id.*

74. Durose & Langan, *Felony Sentences*, *supra* note 41, at 8 tbl.9.

75. The BJS data support this intuition. See *supra* notes 73–74 and accompanying text. Additional support for the intuition arises from the fact that only a third of those who pursue state postconviction review pleaded guilty. See Flango, 1994 NCSC Study, *supra* note 46, at 36 (stating that 32% of state habeas petitioners pleaded guilty compared with 24% of federal habeas petitioners).

76. Cf. Fed. Bureau of Investigation, *Crime in the United States 2002: Uniform Crime Reports § III*, at 222 fig.3.1 (2003), available at http://www.fbi.gov/ucr/cius_02/pdf/02crime3.pdf (on file with the *Columbia Law Review*) (estimating 2002 clearance rate of 64% for reported murders, 45% for rapes, and 13% for burglaries). Professor Gross has discussed why the additional resources that are invested in murder cases may produce such outcomes. See Samuel R. Gross, *Lost Lives: Miscarriages of Justice in Capital Cases*, 61 *Law & Contemp. Probs.* 125, 134–35 (1998) [hereinafter *Gross, Lost Lives*] (arguing that several factors, including ease of investigating some murders and public pressure to solve murder cases, give incentives to police to “cut corners, to jump to conclusions, and . . . perhaps to manufacture evidence” in weak cases where police nonetheless believe they have identified culprit).

77. See Cohen & Reaves, 2002 BJS Study, *supra* note 41, at 24 tbl.23 (finding that 80% of murder defendants were convicted of felony at trial or based on guilty pleas, compared with 59% of rape defendants; in rape cases, 26% were not convicted due to dismissal or acquittal and 8% were convicted of misdemeanors).

coerced, or expert testimony on hair or blood evidence was wrong or not probative. In this Part, I examine data regarding evidence supporting these wrongful convictions, including the interaction of multiple types of evidence. For example, one can assess how often the victim's testimony alone supported the conviction (in 26% of cases), or how many exonerees were sentenced to death based only on blood serology and a jailhouse informant. This assessment will provide a more complete picture of what evidence supported trial convictions of innocent defendants. The table below examines the main types of evidence that supported wrongful convictions.⁷⁸

TABLE 2: EVIDENCE SUPPORTING EXONEREES' CONVICTIONS

Type of Evidence	Percentage whose convictions were supported by type of evidence (Number) ^a	
	(of all 200 cases)	(of the 133 cases with written decisions)
Eyewitness Identification	79 (158)	78 (104)
Forensic Evidence	57 (113)	58 (77)
Informant Testimony	18 (35)	23 (30)
Confession	16 (31)	15 (20)

^a In the tables that follow, "N" stands for "Number."

The sections that follow will discuss these sources of evidence in turn: eyewitness identifications, forensic evidence, informant testimony, and confessions. The first column in Table 2 describes the percentage of the 200 exonerees whose convictions were supported by a particular type of evidence, analyzing only evidence introduced at trial.⁷⁹ The second column in Table 2 describes the same phenomenon, but narrows the pool of exonerees to the 133 exonerees whose convictions were supported by a particular type of evidence and who also received written decisions during their appeals or postconviction proceedings. These data relate to Table 3, which analyzes how many of those with written decisions asserted claims during appellate or postconviction proceedings to challenge particular types of evidence.

Table 3 demonstrates that, with the exception of defendants in cases relying on confessions, fewer than half of the defendants brought consti-

78. Not discussed here are less common sources of evidence, such as physical objects or clothing connecting a defendant to a crime, or various circumstantial evidence, such as presence in the neighborhood where the crime occurred. Nor does this study examine forensic evidence, such as autopsy evidence, that was intended to prove how a crime occurred or that it occurred, but that was not used to prove identity at trial.

79. Thus, for example, a confession or an eyewitness identification that the court ordered suppressed pre-trial would not be included here. The sections that follow explain what is meant by "eyewitness identification," "forensic evidence," "informant testimony," and "confession."

TABLE 3: FACTUAL CLAIMS BROUGHT BY EXONEREES

Type of Evidence	Percentage of those in Table 2, Col. 2, who brought a constitutional claim directly challenging the type of evidence (N)	Percentage who had their claim granted (N) ^a	Percentage who brought any claim to challenge evidence (N)	Percentage who brought any claim to challenge type of evidence and had that claim granted (N) ^a
Eyewitness Identification	28 (29)	0 (0)	45 (47)	4 (4)
Forensic Evidence	0 (0)	0 (0)	32 (25)	8 (6)
Informant Testimony	3 (1)	3 (1)	40 (12)	3 (1)
Confession	50 (10)	0 (0)	65 (13)	0 (0)

^a These columns include only cases in which the court granted a vacatur of the conviction and where that reversal was affirmed on appeal.

tutional claims challenging the types of evidence supporting their wrongful convictions. In part this is because few such constitutional claims exist.⁸⁰ Nor did many who brought such claims succeed. The two columns on the right address how exonerees not only raised constitutional claims directly challenging particular evidence, but also raised additional factual challenges using other less direct constitutional claims or state law claims. For example, rather than bring a claim that a confession was involuntary, one might indirectly assert a claim that the attorney was ineffective for failing to challenge the confession. Furthermore, state law may provide broader avenues for attacking the reliability of factual evidence at trial.

80. By a constitutional claim “directly” challenging a type of factual evidence, this study means something quite narrow: a legal contention that testimonial or physical evidence introduced at the criminal trial was false or unreliable. Not included in this category are claims regarding prosecutors’ mischaracterizations of evidence during closings, nor are rhetorical assertions regarding facts that are not claims or legal contentions. Nor does this category include claims that indirectly relate to facts at trial, such as a claim that trial counsel was ineffective for failing to challenge factual evidence. These claims are discussed next.

Few such constitutional claims exist. For eyewitness identifications, the only such constitutional challenge is a claim under *Manson v. Brathwaite*, 432 U.S. 98, 113 (1977) (adopting totality of circumstances test for admitting eyewitness identifications into evidence). Thus, in Table 3, the first two columns of row 1 refer only to *Manson* claims. Regarding forensic evidence and informant testimony, the only direct claim is a claim that the evidence was fabricated. See *Miller v. Pate*, 386 U.S. 1, 7 (1967) (holding that “state criminal conviction obtained by the knowing use of false evidence” is invalid). Regarding confessions, the first two columns refer only to *Miranda* claims and claims challenging an interrogation as involuntary, see *infra* notes 130–131, though such claims have been criticized for not making claims of unreliability sufficiently cognizable. See *infra* note 133.

All other claims that sought a new trial based on a legal contention regarding the introduction or prosecutorial use of an eyewitness identification, forensic evidence, an informant’s testimony, or a confession, are included in the third and fourth columns. The third and fourth columns, regarding any claim brought to challenge such evidence, reflect the category of what are called “factual claims.” The sections that follow list and describe which claims were brought by exonerees and which were granted.

Even including those claims, significant percentages of those exonerees falsely convicted based on a given type of factual evidence never challenged it.

Thirty-four percent of those with written decisions—forty-five exonerees—challenged *none* of the above categories of facts that supported their convictions during their appeals and postconviction proceedings. Plausible explanations include the possibilities that those exonerees had no legal contention that could provide relief, that they uncovered no new facts to support a claim, that their claims were defaulted at trial, or that they litigated without effective or resourceful counsel.

The matched comparison group, by way of contrast, included less available information in written decisions regarding the evidence supporting convictions. For eighty-six of 121, or 30%, there was no information regarding what evidence supported their convictions; after all, these matched comparison group data are based only on the written decisions, whereas the innocence group members each received news reports regarding their high profile exonerations. Of the eighty-five members of the matched comparison group for whom there was some information regarding the evidence supporting their convictions, 76% involved eyewitness identifications (65), almost the same as in the innocence group. Twenty-four percent involved forensic evidence (20), 19% involved confessions (16), and 11% involved informant testimony (9). Those figures are similar to those in Table 2 regarding the innocence group.⁸¹

In the matched comparison group, 43% of those identified by eyewitnesses brought claims challenging those identifications, 35% challenged forensic evidence, 56% challenged informants, and 62% challenged confessions. These percentages are roughly comparable to those in Table 3 regarding exonerees. While a more robust comparison may not be possible given that less information is available about the matched comparison group, these data suggest that the exonerees challenged factual evidence underlying their convictions no more than was typical at the time for a person convicted of such serious crimes.

a. *Eyewitness Misidentifications.* — The overwhelming number of convictions of the innocent involved eyewitness identification—158 of 200 cases (79%).⁸² Though fewer than a third of rape cases involve assaults by strangers, almost all of these innocence cases involved identifications

81. The main difference is fewer cases involving forensic evidence, which again may be due to a lack of news reports and a lack of challenges to forensic evidence during the criminal appeals; few of the exonerees challenged forensic evidence introduced during their trials.

82. This result exceeds the findings in Professor Gross's study that 64% of exonerations, including non-DNA exonerations, involved eyewitness error. See Gross et al., *Exonerations*, supra note 14, at 542. The higher percentage found in this study may be explained by the limitation of the data set to DNA cases, which disproportionately consist of rape cases.

by strangers; only eight involved incorrect acquaintance identifications.⁸³ In 135 cases (68%), the victim provided identification testimony, while in thirty-three cases (17%), a non-victim eyewitness provided testimony (in some cases along with the victim). In fifty-six cases (28%), the victim's identification testimony was the central evidence supporting the conviction.

The high proportion of cases involving eyewitness identifications should be no surprise, for the prosecution of stranger rape cases will typically be predicated on the victim's identification. It would be difficult to go forward, obviously, if the victim does not identify the perpetrator (at least absent DNA evidence). For that reason, of 141 rape cases, 125 involved victim identifications (89%). Indeed, 126 of the 158 eyewitness identifications were in rape cases.⁸⁴

The Innocence Project reports that 48% of exonerees convicted based on eyewitness testimony were identified cross-racially.⁸⁵ Social science studies have long shown that cross-racial identifications are particularly error prone. Cross-racial identifications may be one explanation for the disproportionate conviction of minorities among those exonerated by postconviction DNA testing.⁸⁶

83. See Cathy Maston & Patsy Klaus, U.S. Dep't of Justice, Bureau of Justice Statistics, *Criminal Victimization in the United States 2005*, Statistical Tables tbl.34(b) (2006), available at <http://www.ojp.usdoj.gov/bjs/pub/pdf/cvus05.pdf> (on file with the *Columbia Law Review*) (finding that 31.4% of rape and sexual assault cases involved stranger-perpetrators).

In the acquaintance cases in the innocence group, the misidentifications were due to alleged police coercion or suggestion, mental illness, or desire to obtain award money, but in some cases the cause was unclear. The cases are those of D. Davis, G. Davis, C. Elkins, M. Evans, K. Green, A. Hernandez, M. Williams, and A. Villasana.

84. In contrast, of forty-four rape-murder cases, six were victim identifications and one of the twelve murder cases involved a victim identification; one of the three "other" cases, an attempted murder, also involved a victim identification. The victim eyewitnesses in these murder cases were additional victims who were not killed. The additional rape-murder and murder cases with eyewitnesses involved non-victim identifications.

85. See Innocence Project, *200 Exonerated: Too Many Wrongfully Convicted* 20–21, available at http://www.innocenceproject.org/200/ip_200.pdf (last visited Nov. 8, 2007) [hereinafter *Innocence Project, 200 Exonerated*] (on file with the *Columbia Law Review*). Data from judicial decisions produced only thirty-two cross-racial eyewitness identifications (20% of the 158 cases involving eyewitness identifications), but very few decisions reported the race of the eyewitness.

86. See Christian A. Meissner & John C. Brigham, *Thirty Years of Investigating the Own-Race Bias in Memory for Faces: A Meta-Analytic Review*, 7 *Psychol. Pub. Pol'y & L.* 3, 5–13 (2001) (reviewing literature); Andrew E. Taslitz, *Wrongly Accused: Is Race a Factor in Convicting the Innocent?*, 4 *Ohio St. J. Crim. L.* 121, 123 (2006) (speculating that race effects at each stage in criminal process may explain disparity in exonerations of minorities); Gary L. Wells & Elizabeth A. Olson, *The Other-Race Effect in Eyewitness Identification: What Do We Do About It?*, 7 *Psychol. Pub. Pol'y & L.* 230, 230 (2001) ("Eyewitnesses are less likely to misidentify someone of their own race than they are to misidentify someone of another race."); see also Gross et al., *Exonerations*, supra note 14, at 548 ("[T]he most obvious explanation for this racial disparity is probably also the most powerful: the perils of cross-racial identification.").

The Supreme Court has long recognized “[t]he vagaries of eyewitness identification,” where “the annals of criminal law are rife with instances of mistaken identification.”⁸⁷ As a result, the Due Process Clause embraces a right to be free from suggestive eyewitness identification procedures, such as where police encourage the eyewitness to pick out the suspect in a lineup.⁸⁸ With the benefit of DNA evidence, we now can be confident that the eyewitnesses misidentified the defendants in the innocence cases.

A total of forty-seven exonerees brought some kind of claim attacking the eyewitness identifications, or 45% of those with written decisions identified by eyewitnesses. Few raised constitutional claims challenging the reliability of these eyewitness identifications. Twenty-nine of the exonerees raised suggestive eyewitness identification claims during their appeals or postconviction proceedings; such claims allege that the police improperly indicated to the eyewitness who their suspect was. In other words, 28% of the 104 exonerees who had written decisions and who were convicted based on eyewitnesses’ testimonies brought these claims.⁸⁹ None of the claims regarding suggestive eyewitness identifications were granted.⁹⁰ Four exonerees brought claims asserting their right, established by *United States v. Wade*, to have counsel present at a postarrest lineup; none of the claims were granted.⁹¹ Thus, thirty-one, or 30% of those exonerees with written decisions, brought constitutional claims attacking their identifications. Sixteen additional exonerees brought state law claims (9) or used other constitutional claims to indirectly challenge the identification, such as ineffective assistance of counsel claims (5), newly discovered evidence of innocence claims (4), or challenges to jury instructions (2). (Two brought multiple claims.)

The Supreme Court has ostensibly focused the constitutional inquiry on the accuracy of eyewitness identifications. However, the Court held in *Manson v. Brathwaite* that even if the police engage in suggestive procedures so potentially misleading that their conduct violates due process, the identification may still be admitted at trial if it was otherwise “reliabl[e].” A reliable identification includes, for example, situations in which the witness seemed “certain[]” and had a good opportunity to view the attacker.⁹² Social scientists studying the phenomenon of eyewit-

87. *Manson v. Brathwaite*, 432 U.S. 98, 119 (1977) (Marshall, J., dissenting) (internal quotations omitted) (quoting *United States v. Wade*, 388 U.S. 218, 228 (1967)).

88. See *id.* at 113 (“The standard, after all, is that of fairness as required by the Due Process Clause of the Fourteenth Amendment.”).

89. Four brought *Wade* claims regarding the right to counsel at the lineup; two of the four did not also raise a suggestive identification claim. See *infra* app. A.

90. One suggestive identification claim was ruled harmless error, three were dismissed for procedural reasons, and the others were dismissed as lacking merit.

91. See *Wade*, 388 U.S. at 236–37 (holding that Sixth Amendment requires counsel’s presence at postconviction lineups).

92. See *Manson*, 432 U.S. at 114; see also *supra* note 87 and accompanying text (discussing *Manson*).

ness memory have long argued that the Court's decision in *Manson* exacerbated the risks of error because the Court ruled that even identifications resulting from highly suggestive procedures may nevertheless be admitted given other indicia of eyewitness certainty. These additional indicia of certainty, however, may in turn represent false confidence that was precisely the product of police suggestion.⁹³

The results in these innocence cases show that most exonerees had no successful basis for challenging what we now know to be incorrect eyewitness identifications. Courts denied relief on all suggestive eyewitness identification claims, even in instances where we know in retrospect that the eyewitness was not "reliable," but instead was in error. Moreover, only four exonerees succeeded in bringing indirect challenges to the eyewitness identification.

b. *Faulty Forensic Evidence*. — Forensic evidence was the second leading type of evidence supporting these erroneous convictions.⁹⁴ In many cases, little more than flimsy forensic evidence supported the conviction.⁹⁵ Some had more than one type introduced. One hundred and thirteen cases (57%) involved introduction of forensic evidence at trial, with serological analysis of blood or semen the most common (79 cases), followed by expert comparison of hair evidence (43 cases), soil comparison (5 cases), DNA tests (3 cases), bite mark evidence (3 cases), fingerprint evidence (2 cases), dog scent identification (2 cases), spectrographic voice evidence (1 case), shoe prints (1 case), and fiber comparison (1 case).

The forensic evidence was often fairly central to the prosecution's case even though it may have been known to have limited probative power at the time of trial. For example, exonerations in cases involving serology may not show misconduct, but rather either the limitations of old-fashioned serology as compared with more advanced DNA testing technology or unintentional error in conducting such testing. Serologi-

93. See Garrett, Federal Wrongful Conviction Law, *supra* note 13, at 82–85 (discussing how *Manson* standard focuses on guilt, not on due process); see also Rosen, Reflections, *supra* note 13, at 250 (noting that science empirically shows that courts are incorrect in their assessments of reliability of certain identification factors); Gary L. Wells, Eyewitness Identification: Systemic Reforms, 2006 Wis. L. Rev. 615, 620–22 (discussing studies of eyewitness false confidence in inaccurate identifications); Gary L. Wells, What Is Wrong with the *Manson v. Braithwaite* [sic] Test of Eyewitness Identification Accuracy? 2 (2004), at <http://www.psychology.iastate.edu/faculty/gwells/Mansonproblem.pdf> (on file with the *Columbia Law Review*) (arguing that psychological studies demonstrate that two-pronged *Manson* test is flawed).

94. Of the 113 convictions based on forensic evidence, 80 were rape cases, 24 were rape-murder cases, 7 were murder cases, and 2 were "other."

95. For works regarding flawed forensic evidence, see Paul C. Giannelli, The Supreme Court's "Criminal" *Daubert* Cases, 33 Seton Hall L. Rev. 1071, 1072–73 (2003) (discussing difference between civil and criminal applications of *Daubert* standard); Michael J. Saks, The Legal and Scientific Evaluation of Forensic Science (Especially Fingerprint Expert Testimony), 33 Seton Hall L. Rev. 1167, 1170–86 (2003) (discussing courts' incorrect applications of *Daubert* test to forensic evidence).

cal testing sorts individuals into just a handful of different blood types, typically using the A, B, and H antigens, each shared by high percentages of the population; for example, approximately 40% of the population possesses only the H antigen, making them the O type.⁹⁶ In contrast, DNA testing can provide random match probabilities greater than all humans who have ever lived (for example, one in 100 trillion).⁹⁷

Despite its relative lack of probative power, serological evidence was often all that law enforcement could use at the time of the investigation. In this group of cases, which chiefly consist of rape convictions in the pre-DNA era, serological evidence was the most common type of forensic evidence introduced at trial, and it typically involved analysis of materials from a rape kit prepared after an assault. Serological evidence was usually not the only evidence at trial—though in one case the serological evidence was the central evidence at trial and in another case serology and hair evidence were the central evidence at trial.⁹⁸ In forty-six of the exonerees' cases (23%), there was an eyewitness identification added to the serological evidence. In four cases, the serology was added to a confession. In three more it was added to alleged self-inculpatory remarks. In two cases, the serological evidence was added to informant testimony. Thus, despite its typical lack of probative power, serological evidence often bolstered other evidence at trial.

Many, and perhaps most, cases, however, appear to have involved not merely use of evidence with limited probative value, but the improper use of then-existing forensic science. To a surprising extent, the forensic testimony at trial was improper based on science at the time.⁹⁹ A preliminary review of serological testimony during these exonerees' trials disclosed that more than half involved improper testimony by forensic examiners.¹⁰⁰

96. Butler, *supra* note 28, at 5.

97. See *id.* at 439 (discussing use of STR markers and CODIS database by crime laboratories).

98. The cases were those of J. Richardson and P. Kordonowy (serology and hair).

99. The author is currently examining, as part of a further study, the trial transcripts of each of those wrongfully convicted in part based on forensic expert evidence at trial. As of the time of publication, a preliminary review examined the testimony of forensic experts in sixty-one trial transcripts of the 113 DNA exonerees convicted based on forensic evidence; these transcripts were obtained with the help of Winston & Strawn, LLP. Remarkably, 57%, or thirty-five of these cases, involved improper testimony by forensic experts at trial. Adding to that number twelve more cases involving misconduct beyond just the face of the trial testimony, forty-seven, or 77%, of the trial transcripts reviewed to date involved improper science. Thus, these wrongful convictions were more often than not premised on not just forensic evidence that was not probative, but rather on improper exaggeration of the probative significance of the evidence.

100. Improper serology testimony was involved in twenty-two of the forty-one trials of those exonerated by postconviction DNA testing in which transcripts have been located so far and in which there was testimony regarding serological analysis. Most of these cases involved improper testimony failing to account for the phenomenon of "masking." This phenomenon occurs when the blood type of a mixed specimen collected from the victim is consistent with the victim's own type, such that it is not possible to reach any further

The second most common type of evidence in these cases, visual hair comparison testimony, is notoriously unreliable.¹⁰¹ Absent any data regarding probabilities that hair or fiber may match visually, experts can make only a subjective assessment whether two hairs or two fibers are “consistent” and share similarities.¹⁰² Forty-three cases (22%) involved false visual hair or fiber comparison. Hair evidence was used in forty-two cases. In some cases that visual hair comparison evidence was particularly central to the prosecution’s case. Calvin Scott spent twenty years behind bars based largely on hair comparison evidence alone, in a case where the victim did not get a good look at her attacker and could not identify Scott.¹⁰³ In eleven cases, visual hair comparison testimony was added to eyewitness testimony as evidence of identity. In five cases, hair comparison testimony and an informant were presented at trial.

Just as with the serological cases, a preliminary review suggests that microscopic hair comparison testimony at trial often distorted or misstated the forensic evidence to inflate its probative significance. Errors were due not merely to the underlying unreliability of visual hair comparison, but were at a minimum compounded by improper and misleading testimony regarding comparisons conducted. Most commonly, state experts mischaracterized their results by purporting to “match” hairs or constructing the probability of such a match, rather than merely visually comparing hairs and either observing certain similarities or excluding

conclusions about the donor of the specimen without information about the quantity of the donor’s contribution to the sample. See Comm. on DNA Tech. in Forensic Sci., Nat’l Research Council, *DNA Technology in Forensic Science* 158 (1992) (“Conventional serology is further limited, in that analysis of mixed-fluid stains in which two or more contributors are involved can mask an individual donor.”).

101. See Barry Scheck, Peter Neufeld & Jim Dwyer, *Actual Innocence: Five Days to Execution and Other Dispatches from the Wrongly Convicted* 204–18 (2000) [hereinafter Scheck et al., *Actual Innocence*] (noting that proficiency testing of hair evidence has indicated error rates higher than chance); D. Michael Risinger & Michael J. Saks, *Rationality, Research and Leviathan: Law Enforcement-Sponsored Research and the Criminal Process*, 2003 Mich. St. L. Rev. 1023, 1048–50 (describing FBI study data and deriving 12.5% error rate for visual hair comparison from that data); Clive A. Stafford Smith & Patrick D. Goodman, *Forensic Hair Comparison Analysis: Nineteenth Century Science or Twentieth Century Snake Oil?*, 27 Colum. Hum. Rts. L. Rev. 227, 242–45 (1996) (discussing seminal forensic hair experiment’s problems with validity).

102. See Fed. Bureau of Investigation, U.S. Dep’t of Justice, *Proceedings of the International Symposium on Forensic Hair Comparisons* 107–10 (1985). The Symposium’s Subcommittee on Report Writing, Conclusions, and Court Testimony concluded that there are a limited class of permissible conclusions one can draw based on forensic hair comparisons: (1) The hair “could have come from” the alleged source; (2) the hair “is consistent with having come from” the alleged source; (3) a particular source “qualifies as being the donor” of a particular hair; (4) the hair “could not have originated” from the alleged source; (5) the hair “is not consistent with having come from” the alleged source, or (6) “no conclusion” could be reached. The Subcommittee then noted the possibility of “coincidental match” and called for “[f]urther research” on whether probabilities can be used. *Id.* at 110.

103. See Jack Money, “Justice Has Been Done”: Exonerated Man Eager to Restart Life, *Oklahoman*, Dec. 4, 2003, at A1 (describing Scott’s exoneration).

any common source.¹⁰⁴ For example, in the case of Paul D. Kordonowy, convicted of rape where the victim did not see her assailant, the conviction rested on forensic evidence. Montana Forensic Science Laboratory specialist Arnold Melnikoff did not correctly explain the lack of probative power of hair comparison. Instead, he testified that he could distinguish head hairs in 99 of 100 cases, telling the jury that Kordonowy's hair and blood type matched those found at the scene.¹⁰⁵ In fact, an enzyme in the blood sample did not match Kordonowy, nor did the hairs, and yet Melnikoff's testimony contributed to Kordonowy's wrongful imprisonment for thirteen years.¹⁰⁶ Melnikoff was later fired, but not before he falsified testimony in at least one other case. In the case of Jimmy Ray Bromgard, Melnikoff used made-up probabilities that he then improperly multiplied as follows: "[T]he odds were one in one hundred that two people would have head hair *or* pubic hair so similar that they could not be distinguished by microscopic comparison and the odds of *both* head and pubic hair from two people being indistinguishable would be about one in ten thousand."¹⁰⁷ Another example is the Ron Williamson case, in which the prosecutor cited a "match" with seventeen hairs taken from the crime scene, and the State's expert opined on the additional significance of a "match" of both scalp and public hairs, though later it was determined that none of the hairs were consistent, and one actually belonged to the victim.¹⁰⁸

Each of three cases in which faulty DNA evidence was introduced at trial involved experts who offered misleading testimony and mischaracterized their own laboratory reports. Two cases involved improper analysis and testimony that resulted in false inclusions. In one case, that of Gilbert Alejandro, the criminalist claimed a DNA match even though neither he nor anyone else had even conducted the DNA testing.¹⁰⁹ Bite

104. Among the sixty-one trial transcripts located to date were thirty-three cases involving hair testimony (i.e., most of the forty-three total cases in which hair comparison testimony was introduced at trial), of which twenty-one cases, or 64%, involved improper testimony. Again, a study in progress will complete the review of this testimony and examine these cases in greater detail. The ubiquity of improper testimony, however, shows that improper testimony by analysts regarding visual hair comparison is not limited to highly publicized repeat misconduct by actors such as Arnold Melnikoff or Joyce Gilchrist, but rather that it is far more pervasive.

105. See Innocence Project, Know the Cases: Paul D. Kordonowy, at <http://www.innocenceproject.org/Content/194.php> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*).

106. *Id.*

107. *State v. Bromgard*, 862 P.2d 1140, 1141 (Mont. 1993).

108. See Scheck et al., *Actual Innocence*, *supra* note 101, at 165 (discussing use of hair samples in Williamson case); see also *Williamson v. Reynolds*, 904 F. Supp. 1529, 1558 (E.D. Okla. 1995).

109. The three cases are those of G. Alejandro, T. Durham, and J. Sutton. Timothy Durham was convicted chiefly based on a DNA test of raping an eleven-year-old girl; he was convicted and sentenced to 3,000 years in prison, though his defense lawyer elicited testimony at trial from eleven alibi witnesses who said he was in another state the day of the crime. Postconviction DNA retesting excluded Durham, and indicated lab error: "The lab

mark evidence, also notoriously unreliable, was relied on in three cases, in one providing the only evidence of guilt in a capital case.¹¹⁰

The forensic evidence was rarely challenged with any success on appeal or postconviction, though six exonerees obtained reversals based on challenges to forensic evidence at trial.¹¹¹ None of the 113 persons who were convicted based on forensic evidence raised a fabrication of evidence claim under the Due Process Clause.¹¹² However, some exonerees raised state evidence law claims (15), ineffective assistance claims (11), or prosecutorial misconduct claims (2) to challenge the forensic evidence introduced at trial. These figures represent a total of twenty-five exonerees, or 32% of the seventy-seven cases with written decisions involving convictions based on forensic evidence. One reason for the dearth of challenges to forensic evidence may be that indigent defendants could not afford to hire a forensic expert. Indigent defendants frequently fail to receive funding for such independent experts.¹¹³ Thus, until the DNA

had failed to separate completely the male and female DNA from the semen stain” See Tania Simoncelli, HR 3214 (The “Advancing Justice Through DNA Technology Act of 2003”) and the Tolling of Statutes of Limitations (Nov. 6, 2003), at <http://www.aclu.org/privacy/genetic/14995pub20031106.html> (on file with the *Columbia Law Review*). Similarly,

Josiah Sutton spent nearly five years in jail for a rape he could not have committed. Sutton’s conviction rested almost entirely on the basis of a DNA tests [sic] performed by the Houston Police Crime Laboratory. Re-analysis of the lab report showed that the lab technician had mistakenly reported that Sutton’s DNA profile was included in the profile of a semen sample taken from the back of the car, where the rape was committed, when it was not. In addition, she presented the DNA data to the jury in a misleading way that overstated its value

Id.

In the case of Gilbert Alejandro, the expert, Fred Zain, claimed a DNA match when in fact Zain had never conducted any testing beyond initial inconclusive testing, and final DNA testing conducted after the trial excluded Alejandro. Innocence Project, Know the Cases: Gilbert Alejandro, at <http://www.innocenceproject.org/Content/47.php> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*).

110. The cases are those of R. Brown, W. Jackson, and R. Krone.

111. See *infra* notes 161–175 and accompanying text (discussing reasons for reversals among exonerees’ cases).

112. See *Miller v. Pate*, 386 U.S. 1, 7 (1967) (citing *Mooney v. Holohan*, 294 U.S. 103 (1935), for proposition that conviction knowingly obtained through use of false evidence runs afoul of Fourteenth Amendment); *Mooney*, 294 U.S. at 112 (holding that due process “is a requirement that cannot be deemed to be satisfied . . . if a State has contrived a conviction . . . through a deliberate deception of court and jury by the presentation of testimony known to be perjured”). Regarding civil rights claims brought concerning fabricated evidence, see Garrett, *Federal Wrongful Conviction Law*, *supra* note 13, at 95–99 (describing circumstances under which fabrication of evidence claims typically arise and manner in which courts generally evaluate such claims).

113. See, e.g., Am. Jur. 2d Criminal Law § 1276 (1998) (“[T]he right of an indigent defendant to the appointment of an expert witness at the state’s expense generally rests in the discretion of the trial court.”). The Supreme Court has ruled that there is a right in capital cases to certain expert assistance, and that right has been extended to some noncapital cases. See *Ake v. Oklahoma*, 470 U.S. 68, 83 (1985) (holding that when sanity of defendant is “significant factor at trial, the State must . . . assure the defendant access to

testing was done, these exonerees may simply have been unable to show that the forensic evidence at trial was false or unreliable.

c. *False Informant Testimony*. — In thirty-five cases (18%), an informant, jailhouse informant, or cooperating alleged coperpetrator provided false testimony.¹¹⁴ In twenty-three of those cases it was a jailhouse informant. The Supreme Court has approved the use of informants so long as proper discovery is provided regarding the relationship between the informant and the defendant.¹¹⁵ Police use such informants frequently, though “jailhouse informants are considered among the least reliable witnesses in the criminal justice system.”¹¹⁶ These DNA exonerations provide cases in point. Since DNA testing proved these people innocent, we know now that they likely did not “confess” to jailhouse informants. We also know they likely could not have told these informants anything non-public about how the crimes happened, since they did not commit the crimes. Instead, we know that these informants often lied, which should not be surprising given their great incentives to cooperate with law enforcement (though any preferential treatment must be disclosed to the jury).¹¹⁷

Twelve of thirty-five, or 34%, of those convicted based on informant testimony brought claims to challenge it. No exoneree raised fabrication claims under the Due Process Clause regarding jailhouse informant testi-

a competent psychiatrist”); *Little v. Armontrout*, 835 F.2d 1240, 1245 (8th Cir. 1987) (finding that district court committed reversible error in failing to appoint expert in hypnosis to assist defendant at trial); Paul C. Giannelli, *Ake v. Oklahoma: The Right to Expert Assistance in a Post-Daubert, Post-DNA World*, 89 Cornell L. Rev. 1305, 1339–41 (2004) (exploring variations in state provision for expert assistance). A preliminary review, see *supra* note 99, has so far uncovered only two trials in which the defendants had a forensic expert.

114. Nine were rape cases, twenty-one were rape-murder cases, and five were murder cases.

115. See *Hoffa v. United States*, 385 U.S. 293, 311 (1966) (discussing “established safeguards of the Anglo-American legal system [that] leave the veracity of a witness to be tested by cross-examination, and the credibility of his testimony to be determined by a properly instructed jury”). The Court has also held that defendants have a right to have counsel present when a charged suspect is interrogated; thus, the government cannot actively place informants in or near the cell of a charged suspect for the purpose of obtaining information. Cf. *Massiah v. United States*, 377 U.S. 201, 203–06 (1964) (overturning conviction based on testimony of officer who overheard incriminating conversation between defendant and cooperating coperpetrator while informant was wearing recording and transmitting device and defendant was free on bail).

116. Steve Mills & Ken Armstrong, *Another Death Row Inmate Cleared*, Chi. Trib., Jan. 19, 2000, at N1; see also James S. Liebman, *The Overproduction of Death*, 100 Colum. L. Rev. 2030, 2088–89 n.149 (2000) [hereinafter Liebman, *Overproduction of Death*] (providing additional examples of jailhouse informants giving false testimony).

117. See Alexandra Natapoff, *Snitching: The Institutional and Communal Consequences*, 73 U. Cin. L. Rev. 645, 660–63 (2004) (examining arguments for and against use of jailhouse informants); cf. Ian Weinstein, *Regulating the Market for Snitches*, 47 Buff. L. Rev. 563, 578 (1999) (“Under the current sentencing regime, cooperation is the only option that significantly alters the most important set of considerations for most defendants—those that relate to the ultimate sentence to be imposed.”).

mony, probably because they could not locate any evidence to prove that the informants testified falsely. Two brought *Massiah* claims that they were denied the right to have counsel present during an interrogation by a government informant.¹¹⁸ Verneal Jimerson brought the only fabrication claim regarding a codefendant, and he received a reversal on it. In Jimerson's case, police concealed that they obtained the testimony of codefendant Paula Gray by offering her inducements. Gray's testimony is now known to be false: She was a juvenile, mentally retarded, innocent, and also wrongly convicted along with three others in what became known as the Ford Heights Four case.¹¹⁹ Nine additional exonerees who were convicted based on informant testimony brought a range of indirect claims challenging this testimony, such as *Brady* claims (4), state evidence law claims (3), *Strickland* claims (2), and one claim regarding the jury instruction.¹²⁰

Particularly disturbing were three cases in which the codefendant, cooperating witness, or informant had ulterior motives beyond seeking special treatment from law enforcement: DNA testing later revealed that they were the actual perpetrators.¹²¹

Jailhouse informant testimony was the central evidence leading to the conviction of Jerry Watkins. Three others were convicted based on jailhouse informant testimony together with hair or blood evidence (one,

118. For a description of a *Massiah* claim, see *supra* note 115.

119. See *People v. Jimerson*, 652 N.E.2d 278, 282–86 (Ill. 1995) (remanding for new trial “because the State allowed perjured testimony of its witness [Paula Gray] to stand uncorrected”); see also Ctr. on Wrongful Convictions, Nw. Univ. Law Sch., Police and Prosecutorial Misconduct Put Verneal Jimerson on Death Row (2004), at <http://www.law.northwestern.edu/depts/clinic/wrongful/exonerations/jimerson.htm> (on file with the *Columbia Law Review*) (summarizing Jimerson's case).

120. Some brought more than one claim. These claims are explained *infra* note 155 and Part II.B.2.

121. John Grisham's new book tells the stories of the first two cases. Grisham details Ron Williamson's and Dennis Fritz's wrongful convictions and DNA exonerations. See Grisham, *supra* note 7. The third case was that of Dana Holland, in which the actual perpetrator was a codefendant found not guilty by the judge. See Ctr. on Wrongful Convictions, Nw. Univ. Law Sch., Dana Holland Exonerated After Serving 10 Years of a 118-Year Sentence for Two Wrongful Convictions (2006), at <http://www.law.northwestern.edu/depts/clinic/wrongful/exonerations/Holland.htm> (on file with the *Columbia Law Review*).

Two other exonerees, Alejandro Hernandez and Rolando Cruz, had reversals based on claims regarding unfair prejudice from joinder of their trials; both were innocent, as DNA later showed. See Ctr. on Wrongful Convictions, Nw. Univ. Law Sch., Police Perjury and Jailhouse Snitch Testimony Put Rolando Cruz on Death Row (2005), at <http://www.law.northwestern.edu/depts/clinic/wrongful/exonerations/cruz.htm> (on file with the *Columbia Law Review*).

In one additional case, that of Arthur Mumphrey, it was a codefendant who confessed and testified against Mumphrey in exchange for a reduced sentence. Postconviction DNA testing later inculpated the codefendant along with Mumphrey's brother Charles (who had confessed to police yet was not prosecuted). See Innocence Project, Know the Cases: Arthur Mumphrey, at <http://www.innocenceproject.org/Content/3.php> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*).

Charles Fain, was sentenced to death); four more were convicted based on jailhouse informant testimony and eyewitness testimony; one was convicted based on jailhouse informant testimony and a bite mark comparison (R. Brown), and one was sentenced to death based on jailhouse informant testimony and a confession (R. Cruz). As discussed below, jailhouse informants testified in almost half of the false capital convictions in the innocence group.

None brought claims that jailhouse informant testimony was fabricated. This fact is unsurprising, since it would be very difficult for one to obtain evidence to show fabrication. In addition, despite the dangers of lying and unreliable informants illustrated by these cases, most states have not enacted any protections requiring review of informant testimony. Illinois, after experiencing heightened numbers of exonerations, is now the only state to require that trial courts conduct reliability hearings to evaluate jailhouse informants in capital cases.¹²² The Oklahoma Criminal Appellate Court requires enhanced disclosure regarding informant testimony, but so far, other states have not followed suit, though some have adopted instructions cautioning the jury regarding the reliability of informants.¹²³

d. *False Confessions*. — In thirty-one cases (16%), a false confession was introduced at trial. As noted below, this excludes cases in which the exoneree had allegedly made self-inculpatory remarks but not a confession to a crime of which he was convicted.¹²⁴ This also excludes eleven cases in which a codefendant falsely confessed.¹²⁵ Seven of those who

122. See 725 Ill. Comp. Stat. Ann. 5/115-21(d) (West Supp. 2007) (“The court shall conduct a hearing to determine whether the testimony of the informant is reliable . . .”).

123. See *Dodd v. State*, 993 P.2d 778, 784 (Okla. Crim. App. 2000) (adopting procedure for jailhouse informant testimony that ensures “complete disclosure”); see also Cal. Penal Code § 1127a(b) (West 2004) (requiring courts to instruct jury on in-custody informant testimony); *United States v. Villafranca*, 260 F.3d 374, 381 (5th Cir. 2001) (“The testimony of a plea-bargaining defendant is admissible if the jury is properly instructed.”); *State v. Bledsoe*, 39 P.3d 38, 44 (Kan. 2002) (noting that trial court “gave a cautionary jury instruction regarding the testimony of an informant”); Alexandra Natapoff, *Beyond Unreliable: How Snitches Contribute to Wrongful Convictions*, 37 *Golden Gate U. L. Rev.* 107, 112–15 (2006) (proposing model statute requiring pretrial evaluations of informant testimony).

124. There are thirteen such cases: S. Avery, K. Bloodsworth, M. Bravo, R. Criner, E. Karage, M. Mitchell, B. Nelson, M. Pendleton, F. Saecker, F. Smith, W. Snyder, C. Washington, and K. Waters. Adding those thirteen cases involving inculpatory remarks to the thirty-one involving confessions results in forty-four cases, or 22% of the 200 exonerations, a figure similar to the 25% figure that the Innocence Project cites. See Innocence Project, *False Confessions*, at <http://www.innocenceproject.org/understand/False-Confessions.php> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*).

125. This study does not include as “convictions supported by confessions” cases in which an exoneree did not confess, but instead was implicated by the false confession of another exoneree. Paula Gray’s false confession was central to the prosecution of what have become known as the Ford Heights Four (K. Adams, V. Jimerson, W. Rainge, and D. Williams) but when she later recanted she was herself tried and convicted. See *supra* note 119 and accompanying text (discussing Ford Heights Four case). Similarly, M. Bradford,

confessed were sentenced to death (half of the fourteen capital cases). Eleven of those who falsely confessed were mentally retarded (35%), but nevertheless the confession was introduced at trial and led to a wrongful conviction. Twelve of those who confessed were juveniles (39%), five of whom were also mentally retarded; there were twenty-two juveniles amongst the exonerees (five in the “Central Park Jogger” case).¹²⁶ In eighteen false confession cases, the defendant was either mentally retarded or under eighteen at the time of the offense, or both.

The confessions were particularly powerful at trial, perhaps in part because in some cases law enforcement supplied false facts to bolster false confessions. Furthermore, in most cases, having obtained a confession, the State relied on little else to convict. In seven cases, the confession was the central evidence of guilt. In nine more cases, the confession was accompanied by only one other type of evidence (a jailhouse snitch, an eyewitness, or blood or hair evidence).

In retrospect, DNA evidence tells us that these confessions were false. Courts often highlighted in their opinions the corroborated nonpublic details that made these confessions appear to be particularly credible at the time. For example, in the case of Earl Washington, the Fourth Circuit emphasized that:

Washington had supplied without prompting details of the crime that were corroborated by evidence taken from the scene and by the observations of those investigating the [victim’s] apartment. He had confessed to the crime not in a general manner, but as one who was familiar with the minutiae of its execution.¹²⁷

Now that we know that convicts like Washington were actually innocent, we may also know that they could not have, “without prompting,” offered accurate and nonpublic details in their confessions. Unless the person was an accomplice, if those details were truly nonpublic, they could have come only from law enforcement. Thus, in some cases DNA proves not only that the defendant was innocent, but also that police fed facts, asked leading questions, supplied details, and in cases such as Earl

R. Danziger, D. Halstead, R. Matthews, L. Ollins, J. Restivo, and O. Saunders were all convicted after other exonerees confessed and also implicated them to the police. These cases are included in the informant/codefendant category. As noted in that section, Jimerson successfully challenged Paula Gray’s testimony as fabricated. See *People v. Jimerson*, 652 N.E.2d 278, 282–86 (Ill. 1995) (granting new trial based on Gray’s perjured testimony).

Walter Snyder’s case raises interesting and close questions, because the police officer claimed that Snyder had not confessed to an act of rape, but had rather stated that the victim had “raped him.” See Scheck et al., *Actual Innocence*, supra note 101, at 60. Snyder explains that he never made any confession and consistently denied any involvement in any such crime, but merely expressed incredulity when police encouraged him to admit that the victim made advances on him. *Id.* at 79.

126. See *People v. Wise*, 752 N.Y.S.2d 837, 843 (N.Y. Sup. Ct. 2002) (noting that five “Central Park Jogger” defendants had confessed).

127. *Washington v. Murray*, 4 F.3d 1285, 1292 (4th Cir. 1993).

Washington's, lied later about what happened and claimed that the suspect offered the details "without prompting."¹²⁸

Confessions were obtained more frequently in murder and rape-murder cases. This may be due to victim identification of the defendants in rape cases, making confessions less necessary to secure a conviction.¹²⁹ In contrast, in murder cases, where a victim is dead, police often need to rely on other evidence. Therefore, police may pursue a confession more vigorously in murder cases. Nine out of 141 rape cases involved false confessions (6%), whereas in eighteen out of forty-four rape-murder cases (41%) there was a false confession. Three of twelve murder cases included false confessions (25%).

To deter law enforcement coercion that would violate the Fifth Amendment right against self-incrimination as incorporated against the states, the Supreme Court enacted *Miranda* protections that require police to give warnings before beginning an interrogation.¹³⁰ The Court also requires the trial court to exclude involuntary confessions from the trial. Courts must assess the voluntariness of confessions flexibly, based on "the totality of all the surrounding circumstances," including any coercion applied and the "characteristics of the accused."¹³¹

Persons who falsely confessed did not always raise constitutional claims challenging their confessions, at least as reported in written decisions. Seven of the twenty exonerees who confessed falsely and had written decisions (35%) raised Fifth Amendment claims that their confessions were involuntary. Three more (15%) alleged that their confessions were obtained in violation of *Miranda*. Thus, ten of twenty (50%) raised constitutional claims directly challenging their confessions. None who brought claims regarding *Miranda* or coercion received any relief. Three others raised state law claims or indirect constitutional claims, increasing the number of those who raised constitutional claims to 65%. One of these three received a reversal on an ineffective assistance claim.¹³² The

128. See Frank Green, \$2.25 Million Verdict in False Confession, *Richmond Times-Dispatch*, May 6, 2006, at A1 (reporting federal jury's finding that "a state police investigator fabricated [Washington's] confession").

129. See Gross et al., *Exonerations*, supra note 14, at 544 tbl.3 (finding similar correlation in exonerations, including non-DNA exonerations).

130. *Miranda v. Arizona*, 384 U.S. 436, 444 (1966). For criticisms of the Court's treatment of false confession claims, see Garrett, *Federal Wrongful Conviction Law*, supra note 13, at 88–94 (arguing that "criminal law remains hostile to scrutiny of false confessions"); Rosen, *Reflections*, supra note 13, at 244–47 (arguing that "despite language in *Miranda* condemning secret police interrogations . . . the actual *Miranda* ruling did little to change the way interrogations are carried out in this country").

131. *Schneckloth v. Bustamonte*, 412 U.S. 218, 223, 226 (1973); see also *Stein v. New York*, 346 U.S. 156, 185 (1953) (stating that determination of coerciveness "depend[s] upon a weighing of the circumstances of pressure against the power of resistance of the person confessing").

132. T. Hayes raised a Sixth Amendment claim that he should have been permitted to challenge his competence and his confession using expert testimony at trial; R. Williamson raised an ineffective assistance of counsel claim relating to failure to challenge his

others, though they falsely confessed and were intimately familiar with what had gone wrong, may have had no evidence to prove coercion under the Court's deferential voluntariness test, which examines the circumstances surrounding the examination.

There is no constitutional claim that offers relief from a false confession, as opposed to a confession secured because of coercion or lack of capacity.¹³³ The exoneree could raise a fabrication claim under the Due Process Clause if police officers told the suspect what to say, but then falsely testified at trial that the suspect volunteered nonpublic information about the crime that only the perpetrator could know.¹³⁴ No exoneree brought such a claim during appeals or postconviction proceedings. Without a recording of the interrogation and before obtaining DNA testing, these exonerees likely had no way to prove fabrication by law enforcement.

In thirteen cases the exoneree allegedly made self-inculpatory statements but not a full confession to the crime of which he or she was convicted. Five such exonerees brought coerced confession claims regarding their self-inculpatory statements to police. None of these alleged voluntary statements, as reported by police or witnesses, were successfully challenged on appeal or postconviction, likely because a claim of coercion would be difficult to make for a statement that was putatively volunteered.

3. *False Capital Convictions.* — False capital convictions are of particular salience to the administration of the death penalty. The Supreme Court has recently noted that “a disturbing number of inmates on death row have been exonerated,”¹³⁵ and polls suggest that DNA exonerations may explain lagging public support for the death penalty.¹³⁶ The study by James Liebman, Jeff Fagan, and Valerie West examining error rates in all capital cases from 1973 to 1995 found not only that the vast majority of all capital cases are reversed on appeal or postconviction, but also that

competency and confession, and Y. Salaam raised a state evidence law claim relating to interrogation of a juvenile without parents present.

133. See Richard A. Leo & Richard J. Ofshe, *The Consequences of False Confessions: Deprivations of Liberty and Miscarriages of Justice in the Age of Psychological Interrogation*, 88 *J. Crim. L. & Criminology* 429, 440–49 (1998) (critiquing inability of current doctrine to prevent or remedy false confessions).

134. See *supra* note 112 (describing fabrication claims).

135. See *Atkins v. Virginia*, 536 U.S. 304, 320 n.25 (2005); *supra* note 4 (discussing Supreme Court's debate regarding legal significance of mounting empirical evidence of wrongful convictions in capital cases); see also O'Connor *Questions Death Penalty*, *N.Y. Times*, July 4, 2001, at A9 (quoting Justice O'Connor as saying that “[i]f statistics are any indication, the system may well be allowing some innocent defendants to be executed” (internal quotations omitted)).

136. See Bureau of Justice Statistics, U.S. Dep't of Justice, *Sourcebook of Criminal Justice Statistics 2003*, at 147 tbl.2.56, available at <http://www.albany.edu/sourcebook/pdf/t256.pdf> (on file with the *Columbia Law Review*) (showing that in 1991, 11% of populace stated possibility of wrongful convictions as reason to oppose death penalty, while in 2003, 25% did so).

7% of those whose sentences were overturned later obtained a determination on retrial that they were not guilty of the capital crime.¹³⁷

Fourteen of the 200 members of the innocence group had been convicted of capital crimes.¹³⁸ Appendix B summarizes the characteristics of these erroneous capital convictions and sentences.¹³⁹ Many more capital prisoners have been released from death row based on non-DNA evidence of innocence; capital cases usually involve murders, while only a small percentage are rape-murders for which biological evidence is available to test.¹⁴⁰

Many capital convictions of the innocent were predicated on surprisingly weak evidence, perhaps because they involved difficult stranger homicide cases that tended not to have had any witnesses. As a result, these capital trials typically involved few types of evidence.¹⁴¹ Two of the cases involved death sentences resting on a single type of evidence—Ray Krone based on a mere bite mark comparison¹⁴² and Frank Smith based on eyewitness identifications by non-victims. Another troubling capital case, that of Charles Fain, involved only a jailhouse informant and hair

137. James S. Liebman, Jeffrey Fagan & Valerie West, *A Broken System: Error Rates in Capital Cases, 1973–1995*, at 5 (2000) [hereinafter Liebman et al., *Broken System*].

138. A fifteenth former death row inmate, Curtis McCarty, was exonerated by postconviction DNA testing after the study period closed, in May 2007. Jay F. Marks and Ken Raymond, *Ex Death-Row Inmate Freed*, *Oklahoman*, May 12, 2007, at 1A.

139. For book length treatments of three of these cases, see Margaret Edds, *An Expendable Man: The Near-Execution of Earl Washington, Jr.* 6 (2003) (recounting case of Earl Washington, Jr., and calling it “a prototype for many of the things that can go wrong in a capital conviction”); Grisham, *supra* note 7, at 20 (describing how Ron Williamson became wrongly suspected of murder); Tim Junkin, *Bloodsworth: The True Story of the First Death Row Inmate Exonerated by DNA* 4–5 (2004) (describing murder conviction and death sentence of Kirk Noble Bloodsworth, who was the first person on death row exonerated by DNA).

140. Postconviction DNA exonerations represent only 12% of the 124 cases since 1973 in which capital convictions were reversed based on innocence. See *Death Penalty Information Ctr., Innocence and the Death Penalty*, at <http://www.deathpenaltyinfo.org/article.php?scid=6&did=110> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*).

141. Only three of fourteen had more than two main types of evidence introduced at trial (an eyewitness, forensic evidence, an informant, and in one also a confession). The other eleven only had one or two of those types of evidence, and for many the bolstering evidence was fairly weak. Yet the quantity and quality of evidence could be quite great in a case with one type of evidence. For example, in one case a hundred eyewitnesses could have a clear view of the crime. In another case, highly probative DNA test results could be the only forensic evidence.

142. On bite mark comparisons’ unreliability, see 4 Faigman et al., *supra* note 28, § 38:33, at 485 (surveying literature investigating reasons for unreliability in bite mark testimony and predicting that “the future may contain a forensic revamping of bitemark analysis testimony where a positive identification is not allowed, but, rather, only a lesser opinion is admissible”); Fernanda Santos, *Evidence from Bite Marks, It Turns Out, Is Not So Elementary*, *N.Y. Times*, Jan. 28, 2007, at WK 4 (“In spite of the evolution of other forensic sciences, bite-mark analysis remains an inexact tool.”).

evidence. Three more capital cases involved eyewitness evidence together with an informant or jailhouse informant.

Six capital cases (43%) involved jailhouse informants. In Ron Williamson's case, the actual perpetrator was a witness testifying for the State at trial. Other studies of non-DNA cases confirm that perjury by prosecution witnesses is a leading cause of erroneous capital convictions.¹⁴³

In seven capital cases the defendant falsely confessed; three of the seven involved mentally retarded persons. (In its *Atkins* decision, the Court noted that one such case existed; there have actually been several.)¹⁴⁴ In each of the cases involving a false confession, some other evidence supported the conviction.

These data suggest that erroneous death sentences can flow from unreliable evidence ranging from jailhouse informants to unreliable forensic and eyewitness evidence. These false capital convictions already have spurred action by lawmakers. The Illinois legislature, for example, has enacted a statute barring death sentences based solely on uncorroborated eyewitness or informant testimony.¹⁴⁵

In conclusion, a few categories of evidence introduced at trial commonly supported wrongful convictions of the innocent: eyewitness identifications, forensic evidence, informant testimony, and confessions. Few exonerees raised claims relating to those types of evidence and even fewer succeeded in obtaining reversals on appeal or during postconviction proceedings. This was true even in erroneous capital convictions, which were often premised on particularly flimsy informant evidence. These findings, developed further in Part III, suggest the reluctance or inability of defendants to raise resource-intensive factual challenges during appeals and postconviction proceedings, and the reluctance or inability of courts to grant relief on claims relating to facts. The next section

143. See Bedau & Radelet, *supra* note 14, at 57 tbl.6 (noting that 117 of 350 erroneous capital convictions studied involved perjury by prosecution witness); Ctr. on Wrongful Convictions, Nw. Univ. Law Sch., *The Snitch System 3* (2004–2005), at www.law.northwestern.edu/wrongfulconvictions/documents/SnitchSystemBooklet.pdf (on file with *Columbia Law Review*) (describing informant testimony as leading cause of convictions in cases of death row exonerations, including non-DNA exonerations); see also Gross, *Lost Lives*, *supra* note 76, at 138–40 (describing evidence that “witness perjury is a far more common cause of error in murders and other capital cases than in lesser crimes”); Liebman, *Overproduction of Death*, *supra* note 116, at 2087 n.148 (2000) (describing acquittals following perjury by prosecution witness).

144. The cases are Earl Washington, Ryan Matthews (Matthews was also a juvenile), and Alejandro Hernandez (who was borderline mentally retarded). The Court referred to Earl Washington's case in *Atkins*. See *Atkins v. Virginia*, 536 U.S. 304, 320 n.25 (2002) (“[W]e cannot ignore the fact that in recent years a disturbing number of inmates on death row have been exonerated. These exonerations have included at least one mentally retarded person[, Earl Washington,] who unwittingly confessed to a crime that he did not commit.”).

145. See 720 Ill. Comp. Stat. Ann. 5/9-1(h-5) (West Supp. 2005).

explores in greater depth why the innocent failed to obtain relief during their appeals and postconviction proceedings.

B. *Appeals and Postconviction Proceedings*

This section develops how courts failed to remedy the wrongful convictions of the factually innocent. This failure flowed from the inability of appellate and postconviction courts to effectively review claims relating to the unreliable or false evidence supporting these convictions. The failure was not because courts did not examine the perceived innocence or guilt of exonerees; they typically did. Rather, current doctrine excuses constitutional error on grounds of guilt, yet does not provide innocence claims that convicts can assert. Most reversals that exonerees received were due to courts granting factual claims. Furthermore, the matched comparison group of rape or murder convictions, like the innocence group, received a relatively high 9% reversal rate, suggesting that rate is the norm during the review of rape and murder convictions.

1. *Stages of Criminal Review.* — The claims just discussed were raised at three different stages of review: direct appeal, state postconviction proceedings, and federal habeas proceedings. As of right, the direct appeal occurs immediately following the conviction, and proceeds from the trial court to state intermediate courts to the state supreme court, with an opportunity to seek certiorari from the U.S. Supreme Court.¹⁴⁶ Next, the appeal may be followed by state postconviction proceedings that run again through the state courts, with another opportunity to seek certiorari from the U.S. Supreme Court.¹⁴⁷ Once these sets of review are exhausted, a federal habeas corpus petition may be filed in a district court, with possible appeals to a circuit court, and a third opportunity to seek certiorari from the U.S. Supreme Court.¹⁴⁸ The table below summarizes the stages of review pursued by these exonerees.

All of these exonerees pursued their direct appeals, as most others for whom we lack written decisions must also have done. Less than half with written decisions filed state postconviction petitions. While 23% of these 133 exonerees filed federal habeas petitions, generally only 1% to 2% of state inmates file a habeas petition.¹⁴⁹ One explanation for the high percentage of habeas filings among these exonerees may be that they are almost all rape and murder convicts, most of whom did not

146. See, e.g., *Clay v. United States*, 537 U.S. 522, 527 (2003) (discussing direct appeal as of right and certiorari review in context of AEDPA's statute of limitations).

147. See 1 Donald E. Wilkes, Jr., *State Postconviction Remedies and Relief Handbook* 1–25 (2007 ed.) (discussing procedural progression of state postconviction remedies).

148. See Liebman et al., *Broken System*, supra note 137, at 21 (describing federal habeas review).

149. See Scalia, 2000 BJS Study, supra note 47, at 1–2 (stating that in year 2000, for every 1,000 inmates in state prisons, 17 filed habeas petitions). Of 441 judicial decisions in the innocence group, 236 were issued during direct appeals, 120 were issued during state postconviction, while 82 were issued during federal habeas corpus.

TABLE 4: STAGES OF CRIMINAL REVIEW PURSUED BY EXONEREES

Stage of Review	Percentage of 133 with written decisions who pursued review at each possible stage (N)
Direct Appeal	100 (133)
State Postconviction	45 (60)
Fed. Habeas Corpus	23 (30)
Cert. to U.S. Sup. Ct.	23 (31)

plead guilty, and who had the time and incentive to appeal during their long sentences.¹⁵⁰ However, those in the matched comparison group did not pursue postconviction review nearly as often as the group of exonerees.¹⁵¹ Perhaps the exonerees or their attorneys pursued such review more aggressively.

The Supreme Court, though the Justices did not know it at the time, summarily denied thirty petitions for certiorari filed by actually innocent exonerees.¹⁵² In the one exceptional case, that of Larry Youngblood, the Court granted certiorari and denied Youngblood relief on his claim that law enforcement failed to properly preserve biological evidence. Ironically, this evidence exonerated him twelve years later, once technology permitted testing of the degraded samples.¹⁵³

As noted, 133 of 200 exonerees (67%) received written public decisions during their criminal appeals and postconviction proceedings. These numbers are higher than in state court review generally,¹⁵⁴ but courts may tend to publish decisions in appeals of serious crimes like murder and rape.

150. The 2007 NCSC study shows that a significant number of persons who file federal habeas petitions were convicted of homicide or sexual assault and are facing long sentences. According to the study, 28.2% of federal habeas petitioners were convicted of a homicide, and 15.4% were convicted of a sexual assault. See King et al., 2007 NCSC Study, supra note 47, at 19–20. Furthermore, the study found that of those for whom sentencing information was available, 27.7% were serving life sentences and the rest were sentenced to an average of twenty years. *Id.* at 20.

151. Only 9% (11 out of 121 in the matched comparison group) filed federal habeas petitions, while 15% filed state postconviction appeals; all filed direct appeals. The matched comparison group excludes capital cases; among the exonerees with noncapital cases, 17% filed federal habeas petitions (20), and 31% filed state postconviction appeals (38).

152. This includes all certiorari petitions that were filed by exonerees after state direct appeals and after state postconviction proceedings (none reached the Court following federal habeas corpus petitions).

153. See *Arizona v. Youngblood*, 488 U.S. 51, 58–59 (1988) (denying relief); *infra* note 237–238 and accompanying text (discussing *Youngblood*).

154. According to the NCSC study, about 75% of state courts that dismissed or denied petitions (which they do about 99% of the time) did so summarily without giving any reason (while in contrast nearly 75% of the time federal courts gave reasons). See Flango, 1994 NCSC Study, supra note 46, at 65–67.

2. *Types of Criminal Procedure Claims Brought.* — This study examines which constitutional and state claims each exoneree brought. While an earlier section discussed the number of claims that challenged certain evidence at trial, this section describes all of the claims these exonerees brought. The table below provides a breakdown of the percentage of exonerees with written decisions who raised certain claims under the U.S. Constitution or state law; the claims raised by the most exonerees are listed first.

TABLE 5: CRIMINAL PROCEDURE CLAIMS RAISED BY EXONEREES

Claim: U.S. Constitution unless noted ¹⁵⁵	Percentage of the 133 with written decisions who raised each claim (N)	Percentage of those who raised each claim who received reversals (N)
State law evidence claim	60 (80)	8 (6)
<i>Jackson</i> claim	45 (60)	2 (1)
Prosecutorial misconduct	29 (38)	0
Ineffective assistance of counsel	29 (38)	11 (4)
Jury instructions unconstitutional	26 (34)	6 (2)
Suggestive eyewitness identification	22 (29)	0
<i>Brady</i> claim	16 (21)	14 (3)
Destruction of evidence	15 (20)	0
Jury selection	14 (18)	0
Coerced confession	12 (16)	0
State law newly discovered evidence	12 (16)	0
Fourth Amendment claim	12 (16)	0
Right to counsel	8 (11)	9 (1)
<i>Bruton</i> claim	5 (6)	33 (2)
<i>Herrera</i> actual innocence claim	4 (5)	0
Fabrication of evidence claim	2 (3)	33 (1)

155. All claims included in Table 5 are outlined below in order:

(1) A wide variety of state law evidence claims, statutory, common law and those asserted under state constitutions, including any evidentiary claim not asserted under the U.S. Constitution;

(2) Claims, under *Jackson v. Virginia*, 443 U.S. 307, 316 (1979), described *infra* notes 213–214 and accompanying text, that no reasonable juror could have found guilt beyond a reasonable doubt; this category includes any supplementary state law sufficiency of the evidence standards;

(3) Prosecutorial misconduct claims, including any non-*Brady* claims that prosecutors so inflamed the proceedings that they created an unfair trial, see, e.g., *Darden v. Wainwright*, 477 U.S. 168, 181 (1986);

The winning claims, namely those for which a new trial was granted and that ruling was upheld on appeal, were as follows: state evidentiary claims (6); ineffective assistance of counsel claims (4); *Brady* claims (3); claims concerning jury instructions (2); *Bruton* unconstitutional joinder claims (2); prosecutorial misconduct claims (2); *Jackson* claims (1); due process and right to counsel claims (1), and a fabrication of evidence claim (1).¹⁵⁶ As Table 5 shows, the winning claims were not necessarily the claims raised most often.

The members of the matched comparison group raised similar claims, but at lower rates across the board than the exonerees in the innocence group, though as noted, they challenged the facts underlying their convictions at similar rates.¹⁵⁷ The NCSC study of postconviction pro-

(4) Ineffective assistance of counsel claims, under *Strickland v. Washington*, 466 U.S. 668, 687 (1984), which are described further infra notes 196, 221 and accompanying text;

(5) Claims that jury instructions violated the Due Process Clause, including because the court impermissibly suggested to the jury that they could find guilt with less than proof beyond a reasonable doubt, misstated elements of the offense, or failed to include a lesser included offense instruction as required by *Beck v. Alabama*, 447 U.S. 625, 627 (1980), as well as state law claims regarding improper jury instructions, see, e.g., *State v. Cromedy*, 727 A.2d 457, 459 (1999);

(6) Suggestive eyewitness identification claims, under due process decisions such as *Manson v. Brathwaite*, 432 U.S. 98, 114 (1977), which are discussed further supra notes 92-93 and accompanying text;

(7) Claims under *Brady v. Maryland*, 373 U.S. 83, 86 (1963), alleging suppression of material exculpatory evidence, discussed further infra note 197 and accompanying text;

(8) Claims of bad faith destruction of exculpatory evidence, under *Youngblood*, 488 U.S. at 58-59, discussed further infra notes 237-238 and accompanying text;

(9) Claims of racially discriminatory jury selection, under *Batson v. Kentucky*, 476 U.S. 79, 89 (1986), or other constitutional claims concerning jury selection;

(10) Claims of a coerced interrogation, under the totality of the circumstances or a violation of *Miranda v. Arizona*, 384 U.S. 436, 444 (1966), discussed supra notes 130-132 and accompanying text;

(11) Claims under a state statute or rule that sufficient newly discovered evidence of innocence should result in the grant of a new trial, see, e.g., N.Y. Crim. Proc. § 440.10(1)(g) (McKinney 2005);

(12) Fourth Amendment claims, including lack of probable cause for arrest;

(13) Sixth Amendment right to counsel claims;

(14) Claims under *Bruton v. United States*, 391 U.S. 123, 137 (1968), regarding prejudicial joinder of codefendants' cases for trial;

(15) Claims, only hypothetically recognized by a plurality in *Herrera v. Collins*, 506 U.S. 390, 398 (1993), under which a capital convict might secure relief based on a very persuasive showing of actual innocence, discussed further infra text accompanying notes 209-211;

(16) Claims regarding the State's knowing use of false or fabricated evidence, discussed supra note 112.

156. Some who received reversals had more than one claim granted.

157. In the matched comparison group, 45% brought state law claims (54), 38% brought *Jackson* claims (46), 21% brought ineffective assistance claims (26), 21% brought prosecutorial misconduct claims (25), 17% brought jury instruction claims (20), 12% brought Fourth Amendment claims (15), 12% brought coerced confession claims (14), 10% brought suggestive eyewitness identification claims (12), 8% brought jury selection claims (10), 7% brought *Brady* claims (9), 4% brought destruction of evidence and right to

ceedings found that the vast majority of claims raised are claims regarding ineffective assistance of trial counsel and *Brady* claims regarding suppression of exculpatory evidence by police or prosecutors, typically alongside other due process claims.¹⁵⁸ The 1994 NCSC study also concluded that in federal habeas proceedings the type of claim brought has little effect on the low chances, about 1%, that a prisoner will receive any relief.¹⁵⁹ Furthermore, although only convicts with long sentences will pursue lengthy postconviction proceedings, any zealotry is severely limited where states and federal courts have exhaustion, statute of limitation, abuse of the writ, and procedural default rules that prevent premature, late, and repetitive petitions. Routine dismissals for procedural noncompliance accompany efforts to circumvent such rules.¹⁶⁰

3. *Reversals, Retrials, and Vacated Convictions.* — This section develops a central finding that appellate or postconviction courts reversed 14% of exonerees' convictions, or 9% if one excludes capital cases. Throughout, this study defines a "reversal" as a reversal in a strong sense, that is, an order upheld on appeal that resulted in the grant of a new trial and a vacating of the conviction or convictions. The reversal rate found here, though high when compared to criminal review in general, may be no higher than the rate during the review of comparable rape or murder convictions. These complex trials thus appear to be more error-prone than the norm.

a. *Reversals in the Innocence Group.* — Eighteen exonerees of the 133 with written decisions in their cases received reversals, for a 14% reversal rate. Twelve of the exonerees were retried after reversal of the original conviction. Nine percent were tried multiple times because they received multiple reversals and each time were convicted again by new juries (ten had two trials and two had three trials before being freed as result of DNA

counsel claims (5), 2% brought *Herrera* claims (3), 2% brought newly discovered evidence of innocence claims and *Schlup* gateway claims (3), and 1% brought fabrication of evidence and *Bruton* claims (1).

Table 5 above includes capital cases. While the matched comparison group includes only noncapital cases, the results in the innocence group change very little even if one subtracts from the equation the claims brought by the twelve capital defendants with written decisions (for example, 60% still brought state law evidence claims and only 1% fewer brought ineffective assistance claims).

158. See Flango, 1994 NCSC Study, *supra* note 46, at 45–59 (discussing types of claims raised).

159. See *id.* at 62 (charting reversal rates). As the study stated, "[t]he picture in state courts is somewhat different." There, defendants prevailed at slightly higher rates for ineffective assistance of counsel claims, trial court error claims, Eighth Amendment claims, and Fourteenth Amendment claims. Once, however, the oversampling of Texas criminal appeals was accounted for, the rates in state proceedings began to look like those in federal proceedings. In particular, only Eighth Amendment claims received relief from state courts at a rate greater than 2%, and this figure owed much to the unusual case of New York, which issued a series of reversals on questions of excessive bail. *Id.* at 62–63 & tbl.18.

160. See *id.* at 65 & tbl.19 ("[S]tate courts, when they give a reason, deny petitioners on the merits or because of procedural default.").

testing).¹⁶¹ Furthermore, six more exonerees' convictions were vacated, but they had no retrials because DNA testing was conducted and exonerated them before their scheduled retrials.¹⁶² Thus, eighteen total exonerees had reversals upheld on appeal.¹⁶³

TABLE 6: EXONEREES' REVERSAL RATES

Number of cases with written decisions (N)	Number of cases receiving reversals	Percentage of cases with written decisions reversed
All Exonerees (133)	18	14
Noncapital cases (121)	11	9
Capital cases (12)	7	58

Table 6 displays the reversal rates in capital and noncapital cases. As documented in the landmark Liebman study of all capital cases from 1973 through 1995, there are extremely high (68%) reversal rates in all capital cases, both in state and federal postconviction review.¹⁶⁴ In this study, the reversal rate among all exonerees with written decisions is 14%. Removing the capital cases from the analysis, the reversal rate for noncapital cases falls from 14% to 9%. Few exonerees received capital sentences—fourteen out of 200, or 7%.¹⁶⁵ Yet the percentage of exonerees with capital sentences who received reversals was very high; seven out

161. Among the entire study group of 200 exonerees, fifteen were tried twice and five were tried three times. Eight of these, however, were excluded. Four of those excluded (R. Alexander, D. Holland, W. Nesmith, A. McGee) were tried two to three times according to news reports, but lacked written decisions. Additionally, four exonerees had retrials due to hung juries, not reversals (S. Fappiano, D. Gray, E. Lowery, J. Ruffin), and were therefore excluded. Subtracting those eight cases leaves twelve cases out of the 133 with written decisions.

An additional case, that of Michael Evans, was not counted as a reversal. The trial judge granted Evans a new trial after his conviction but before sentencing, and he was then retried several months later. See *People v. Evans*, 399 N.E.2d 1333, 1335 n.1 (Ill. App. Ct. 1979). As no written decisions could be located regarding the initial conviction and its vacatur, and only a later decision revealed that it was reversed on a *Brady* violation, it was not included.

162. They are P. Gray, L. Jean, V. Jimerson, S. Linscott, J. Watkins, and R. Williamson.

163. The conviction reversal rate is slightly different from the aggregate reversal rate because some exonerees had more than one conviction vacated. The total number of convictions reversed is twenty convictions vacated out of 142 total convictions with written decisions; 14% were reversed totally. While 133 exonerees had written decisions, 142 convictions had them (several had two or three convictions each that were reversed). Nine with written decisions had more than one conviction for which they sought review: K. Bloodsworth (2) (capital case), R. Cotton (2), R. Cruz (2) (capital case), W. Dedge (2), A. Hernandez (2) (capital case), D. Hunt (2), R. Krone (2) (capital case), W. Rainge (2), and D. Williams (2) (capital case).

164. See Liebman, et al., *Broken System*, supra note 137, at 5 (discussing reversal rates in capital cases).

165. Here, the full set of 200 exonerees is examined because sentence data were available for all cases in the group, including for those without written decisions.

of twelve with written decisions received one or more reversals (58%).¹⁶⁶ The capital attrition rate among exonerees is 58%,¹⁶⁷ which is similar to the 68% capital attrition rate found in the Liebman, Fagan, and West study.¹⁶⁸ Exonerees sentenced to life also accounted for many of the reversals; five received reversals out of fifty sentenced to life in prison, or 10%.

The table below depicts the reversals that exonerees received, broken down by crime of conviction, separating rape, rape-murder, and murder cases.

TABLE 7: REVERSALS FOR EXONEREES BY CRIME OF CONVICTION

Type of conviction	Total with written decisions	Number reversed	Percentage reversed
Rape	88	6	7
Rape-Murder	34	11	32
Murder	9	1	11

Rape cases had a lower reversal rate than murder cases. One explanation may be that in almost all rape cases, the victim identified the defendant, albeit incorrectly, making it more difficult to challenge the factual support for the conviction due to the difficulty of prevailing on a *Manson* claim. However, rape-murder cases had higher reversal rates than murder cases.¹⁶⁹ This is perhaps surprising, because one would ex-

166. Similarly, nine out of seventeen capital convictions with written decisions received reversals (or 53%).

167. The aggregate figures do not separate the reversal rates at each level of criminal appeal, or what Liebman, Fagan, and West term the “attrition” rate. See Liebman et al., *Capital Attrition*, supra note 44, at 1850 (“The result of very high rates of serious, reversible error among capital convictions and sentences, and very low rates of capital reconversion and resentencing, is the severe attrition of capital judgments.”). Criminal review is like an assembly line with three stages. At each level of review the denominator changes as some drop out either because they win or because they give up and stop pursuing review or because nothing is reported regarding any subsequent review. The attrition rate, a slightly higher 58%, is calculated as follows: DIRECT APPEAL (5 / 12 convictions = 42%) + STATE POSTCONVICTION ((1 out of 7 convictions = 14%) x (percent left from the original pool = 58%) = 8%) and FEDERAL HABEAS ((one out of 3 convictions = 33%) x (percent left from original pool = 25%) = 8%) = A TOTAL OF 58%.

Subtracting the reversals in capital cases, the innocent appellant’s non-capital attrition rate is 10%. The non-capital attrition rate is: DIRECT APPEAL (8 / 121 noncapital cases = 7%) + STATE POSTCONVICTION (0%) + FEDERAL HABEAS ((3 out of 30 cases = 10%) x (percent left from original pool = 25%) = 3%) = A TOTAL OF 10%.

168. See Liebman et al., *Broken System*, supra note 137, at 124 nn.40–41 (concluding that “[a]t least 68% of the capital judgments that were fully inspected were found seriously flawed at some stage”). The NCSC study, which did not calculate an attrition rate or review all capital sentences, found 3% reversals in state courts and 17% in federal courts in 1990. See Flango, 1994 NCSC Study, supra note 46, at 86 tbl.22.

169. The seven capital reversals were all rape-murder cases. The noncapital rape-murder reversal rate, with four reversed of twenty-one cases, is 19%.

pect that rape-murder cases would be more likely to have semen and blood evidence from the perpetrator, and thus be less prone to reversal.

During the direct appeal, more vacaturs were granted but more appeals were brought; 10% of exonerees who received vacaturs received them during the direct appeal, while 1% were granted during state postconviction and 3% were granted during federal habeas corpus.¹⁷⁰ State supreme courts ordered thirteen of the eighteen reversals. Legal change did not play an important role in these figures, since the underlying legal claims did not significantly change during this period.¹⁷¹ The passage of the Antiterrorism and Effective Death Penalty Act (AEDPA), legislation which includes a range of rules that restrict federal habeas corpus review, nevertheless did not significantly impact the habeas petitions in this innocence group, as almost all were filed before its effective date in 1996.¹⁷²

The 9% noncapital reversal rate is higher than the rate in criminal appeals generally. Studies have shown that approximately 1% of federal postconviction petitioners receive relief, with similar figures (1% to 2%) in state courts.¹⁷³ Federal habeas petitioners are disproportionately persons convicted of homicide (23%) and rape or other violent crimes (39%).¹⁷⁴ Yet 13% of federal habeas corpus petitions presented by ex-

170. Of the decisions in which vacaturs were granted and then upheld on appeal, four were granted in federal habeas petitions, fifteen were granted during the direct appeal, and one was granted during state postconviction. The total attrition rate, including capital and noncapital cases, turns out to be 14%, the same as the reversal rate: DIRECT APPEAL (13 reversed / 133 convictions in cases with written decisions = 10%) + STATE POSTCONVICTION ((1 out of 60 convictions = 2%) x (percent left from the original pool 60/133 = 45%) = 1%) and FEDERAL HABEAS ((4 reversals out of 30 cases = 13%) x (percent left from original pool 30/133 = 23%) = 3%) = A TOTAL OF 14%.

171. Only three exonerees received decisions that cited to the AEDPA's limitations. Only a handful filed federal habeas petitions after the AEDPA's 1996 enactment. The relevant precedents regarding *Brady*, ineffective assistance of counsel, and harmless error rules, see *infra* Parts II.B.5 and II.B.6, were in place during the review sought by almost all in the group. Thus, none had courts dismiss claims on nonretroactivity grounds.

172. See, e.g., 28 U.S.C. § 2254 (2000) (stating that AEDPA amendments to statute were effective on April 24, 1996).

173. This point held true for the claims at issue here. See Flango, 1994 NCSC Study, *supra* note 46, at 62–63 (showing similarly low rate in both federal and state courts for most types of habeas claims). The 1994 NCSC Study showed higher figures for certain claims that are not at issue in the vacaturs examined here (excessive bail, sentencing errors, probation/parole issues, and cruel and unusual punishment claims). See *id.* at 63 tbl.18. Table 18 of the NCSC Study shows state court reversal rates from 1% to 2%—except regarding bail and sentencing, and finally, excepting Texas death penalty cases, which sustained a series of sentencing and ineffective counsel claims following Supreme Court decisions in the 1980s. *Id.* at 63 tbl.18. The 2007 NCSC Study examined federal habeas petitions filed no earlier than 2000, after the passage of the AEDPA. That study found that 0.35% of petitions were granted, far lower than the 1% rate observed before AEDPA. See King et al., 2007 NCSC Study, *supra* note 47, at 58 (finding rate of one in 284 habeas petitions granted post-AEDPA).

174. See Hanson & Daley, 1995 BJS Study, *supra* note 47, at 11 (providing statistics and concluding that “[a]pproximately two-thirds of the sampled prisoners had been convicted of homicide or other serious, violent crimes”).

onerees received reversals. To date, studies of federal habeas corpus have not isolated reversals for particular crimes, nor have they examined reversal rates in murder and rape convictions. Therefore, in the limited set of cases involving murder and rape charges, reversal rates could be much higher than current studies suggest, just as reversal rates are much higher in capital cases.¹⁷⁵

b. *Reversals in the Matched Comparison Group.* — If average rape and murder convictions have a similarly high reversal rate, perhaps the 9% rate of noncapital reversals in the innocence group is not higher than the background rate. The matched comparison group permits examination of this question. It allows this study to isolate the 121 noncapital cases with written decisions and then compare each of them to a case located on Westlaw with an appeal brought in the same state, involving the same crimes of conviction, and having a written decision issued in the same year.

In the matched comparison group there was a 10% noncapital reversal rate (twelve reversals out of 121 cases). The claims that received reversals in the matched comparison group mirrored the claims on which exonerees received relief: five state law evidentiary claims, four ineffective assistance of counsel claims (one accompanied by a prosecutorial misconduct claim), a *Jackson* claim, a right to counsel claim, and a suggestive eyewitness identification claim.

The innocence group had just one fewer reversal, for a 9% rate (eleven reversals out of 121 noncapital cases.) This small difference between the reversal rates in the innocence and matched comparison groups is not statistically significant. Thus exonerees fared no better during review proceedings than the matched rape and murder cases.

This similarity in reversal rates could be because serious rape and murder convictions share a background reversal rate of about 9%. Under this explanation, the reversal rates might have nothing to do with judges detecting innocence, but instead arise from higher rates of procedural error in serious cases. The trials and convictions for murder and rape may simply be more error prone than other less serious or less complex criminal trials. After all, serious crimes may demand that the court make more complex criminal procedure rulings, attorneys may better defend their clients against such crimes, and the State may pursue a case with less evidence due to pressure to clear serious cases.

A second and related explanation for the statistically insignificant difference in reversal rates may be that in a subset of the reversed exonerees' cases, judges accurately detected innocence, and, in a similar percentage of the matched comparison group appeals, judges did the same. A similarity in reversal rates between the two groups suggests similarly high levels of reversals based on factual errors among rape and murder

175. See Liebman et al., *Broken System*, supra note 137, at 5, 124 nn.40–41 (calculating overall error rate nationally in capital cases at 68%).

convicts. Six of the twelve claims receiving reversals in the matched comparison group involved a ruling that the jury was seriously misled by unreliable or incomplete factual evidence at trial. Thus, half of the error rate had something to do with a perception of innocence, or relatedly, weakness of the evidence of guilt, and not just with a common rate of procedural error across all serious criminal trials.¹⁷⁶ As discussed in the next section, seven out of eleven noncapital reversals in the innocence group were based on factual challenges.

One explanation for the degree to which reversals were based on factual grounds may be that rape and murder cases disproportionately involve equivocal evidence.¹⁷⁷ Justice Department data suggest that reversal rates may be higher in those rape and murder cases that go to trial. According to BJS statistics, in the 8% of rape cases that went to trial, one-fourth resulted in acquittals, and many more had charges dismissed or resulted in misdemeanor convictions.¹⁷⁸ Murder cases also had high numbers of acquittals: 9% of those that went to trial.¹⁷⁹

Some number of those who received reversals in the matched comparison group may have been actually innocent, but we cannot know how many. While we know that most in the innocence group did not receive reversals despite their innocence, we obviously do not know whether any innocent people in the matched comparison group received reversals, because in that group none received postconviction DNA testing. The incidence of reversals on factual claims in the matched comparison group suggests, however, that in the views of appellate and postconviction judges, substantive error was prevalent in such cases. Furthermore, the similarity in reversal rates is surprising from another perspective. One might have expected there to be even higher reversal rates in the innocence group, which had fewer acquaintance rape cases than the matched comparison group. In acquaintance cases, consent is more often a de-

176. Beyond reversals on factual claims, judges often also grant a reversal for more than one reason, including both procedural error and a perception that the convict may be innocent; the latter reason may be particularly important when a judge finds a procedural error to be harmful error.

177. See Daniel Givelber, *Meaningless Acquittals, Meaningful Convictions: Do We Reliably Acquit the Innocent?*, 49 *Rutgers L. Rev.* 1317, 1349–55 (1997) (canvassing rape and murder cases with equivocal evidence and referring to study in which “[a]ll twenty-eight cases of wrongful convictions . . . involve[d] sexual assault or rape”).

178. See Bureau of Justice Statistics, U.S. Dep’t of Justice, *Sourcebook of Criminal Justice Statistics Online: Adjudication Outcome for Felony Defendants in the 75 Largest Counties, By Arrest Charge, United States, 2002*, at tbl.5.57.2002 (2002), at <http://www.albany.edu/sourcebook/pdf/t5572002.pdf> (on file with the *Columbia Law Review*) (finding 2% of rape defendants acquitted while only 8% percent of rape cases went to trial; finding additional 24% had charges dismissed pretrial while 8% more pleaded guilty to misdemeanors).

179. See *id.* (finding 4% of murder defendants acquitted where 39% of murder cases went to trial; 13% more were dismissed pretrial; 1% were convicted at trial only of misdemeanor).

fense and an identity defense would face great difficulties if raised at trial or postconviction.

The similarity in reversal rates suggests a common incidence of error in comparable appeals of rape and murder convictions, particularly factual error. Though we cannot know how many in the matched comparison group are innocent, the incidence of reversals on factual claims in these appeals of serious convictions provides cause for concern regarding the accuracy of such criminal trials.

c. *Cases Where the Innocent Received Reversals.* — The cases where persons later exonerated by postconviction DNA testing received reversals deserve further examination, because in these cases courts provided relief without the benefit of that DNA evidence. Within the select group who received reversals, courts often granted claims relating to the facts supporting the convictions. By “a factual claim,” as discussed earlier, this study does not mean an assertion about trial facts, but rather a legal contention that seeks to reverse a conviction or sentence based on the unreliability of the evidence that the State presented at trial. In the matched comparison group, half of the reversals involved granting factual claims. In the innocence group, slightly more than half of the reversals, eleven out of eighteen, involved granting factual claims. The other reversals related not to factual but to purely procedural claims, such as faulty jury instructions, ineffectiveness of counsel unrelated to failure to suppress or challenge factual evidence, or to factual evidence of innocence that the jury did not hear during trial. In four additional cases, reversals were not related to the reliability of the State’s case at trial, but were innocence related, since they were based on the trial court’s suppression of evidence of third party guilt.¹⁸⁰ This bolsters the conclusion that approximately half of the reversals in the innocence and matched comparison groups had to do with postconviction judgments of the possibility of innocence.

Four of the reversals that exonerees received related to challenges to eyewitness identifications. Among the group of eighteen exonerees that received reversals, thirteen had convictions supported by eyewitness identifications, but for none was a reversal granted based on a claim challenging the identification as unconstitutionally suggestive. Nevertheless, in four cases the claims on which a court granted a reversal related to the eyewitness identification (three state law evidence claims and one *Brady* claim related to a hypnotized victim’s statement). Six more reversals were based on challenges that related to forensic evidence introduced at

180. Two reversals were granted for *Brady* claims that alleged the state concealed police reports relating to third party guilt (K. Bloodsworth, J. Watkins), one more involved the trial court’s decision to bar evidence that another victim of similar attacks identified another person (R. Cotton), and a fourth occurred after the trial court barred evidence of a third party’s pattern of similar crimes and confessions (R. Cruz).

trial, and the last of the eleven reversals related to testimony of a cooperating codefendant.¹⁸¹

Though it was infrequent, when judges made a statement that suggested that an exoneree might be innocent, typically by way of describing how the State's case appeared quite weak, they often reversed. A court made such a statement for eight of the eighteen reversals. This was not typically an outright finding of innocence, but rather a strong acknowledgement of the flimsiness of the evidence of guilt adduced at trial. For example, in the Ron Williamson case, his so-called "dream confession" was admitted at trial despite his manifest mental illness. The federal district court vacated his conviction, citing to the "weakness of the case" against him,¹⁸² which relied on evidence the court of appeals later called "largely circumstantial and hardly overwhelming."¹⁸³ Likewise, in the Ronald Cotton case, the state court also vacated the conviction, noting that the excluded evidence "tended to show that the same person committed all of the similar crimes in the neighborhood in question on that night and that the person was someone other than the defendant."¹⁸⁴

Thus, while many exonerees did not pursue factual claims and while very few obtained any relief on any claims, the subset who did receive reversals most often received reversals on claims regarding seriously erroneous or unreliable factual evidence at their trials.

d. *Relief Provided Beyond Reversals.* — The reversal rate does not reflect all of the relief provided to exonerees. Twenty-five, or 20% of exonerees, had a court grant a vacatur at some point, though of those twenty-five, only eighteen had the grant of a new trial upheld on appeal. Thirteen exonerees had their sentences reduced.¹⁸⁵ Nine more received a remand for an evidentiary hearing, and four others received a remand

181. The eleven include the four reversals relating to eyewitness identifications. These cases involve three state law evidence claims, a reversal for failure to provide a jury instruction explaining the dangers of cross-racial misidentification (*M. Cromedy*), a state evidentiary violation relating to an eyewitness identification (*M. Webb*), an improper introduction of prior unsworn statements by an eyewitness (*D. Hunt*), and a *Brady* claim regarding hypnotism of the victim in order to elicit an identification (*L. Jean*). The seven additional reversals included: one state law evidence claim related to a dog scent identification (*W. Dedge*); another related to expert evidence on a bite mark central to the case (*R. Krone*); prosecutorial misconduct for misrepresenting hair and blood evidence (*S. Linscott*); ineffective assistance of counsel relating to expert issues regarding competence, a confession, and forensic testimony (*R. Williamson*); a fabrication claim regarding testimony of a cooperating codefendant (*V. Jimerson*), and two appeals involving ineffectiveness of counsel including failure to move to suppress central physical evidence such as hair evidence (*W. Rainge* and *D. Williams*). For just the noncapital cases, that figure is seven of eleven reversals.

182. See *Williamson v. Reynolds*, 904 F. Supp. 1529, 1546 (E.D. Okla. 1995).

183. See *Williamson v. Ward*, 110 F.3d 1508, 1520 (10th Cir. 1997) (upholding vacatur, citing limited evidence against defendant).

184. *State v. Cotton*, 351 S.E.2d 277, 280 (N.C. 1987) (awarding new trial when evidence that trial court excluded pointed toward guilt of another party).

185. None were originally capital sentences.

for merits reconsideration. Seventy percent of the exonerees with written decisions (ninety-three) received no relief of any kind during their appeals or postconviction proceedings. They had their requests and claims dismissed at every stage.

4. *Merits and Procedural Rulings.* — This study next tracked the disposition for each claim raised at each stage: direct appeal, postconviction appeal, and federal habeas corpus. All told, 86% of the exonerees with written decisions during their appeals (115) ultimately had their claims denied. Analysis of these decisions sheds light on why this happened.

Courts typically denied relief on the merits, as opposed to denying relief based also or instead on procedural grounds, at least in the claims that they discussed. Certainly, many more procedurally defaulted claims were likely rejected summarily or without any mention.¹⁸⁶ By contrast, a court reached the merits of the case in 132 out of the 133 innocence group cases with reported decisions.¹⁸⁷ Sixty-one exonerees (46%) had a court rule that a claim had merit, though for all but eighteen this ruling was reversed on appeal. In the present study, forty prisoners (30%) had at least one court during their appeals state that it relied on procedural grounds in reaching its decision. The chief reasons cited were procedural default (i.e., a failure to satisfy a procedural requirement in the state courts) and lack of exhaustion of state remedies.¹⁸⁸ Most exonerees did not pursue federal habeas petitions, however, and the high rates of merits rulings may be explained by the fact that most pursued only the first round of direct appeals, in which there is less of a chance to procedurally default claims.¹⁸⁹

Each instance in which judges dissented during the various criminal appeals was also collected, since dissents indicate disagreement of sufficient strength to preclude a judge from joining the result reached. In the innocence group, thirty-three received dissents (25%). Nineteen of those dissents were dissents from rulings denying relief; these nineteen dissents

186. The NCSC study suggests that federal courts reach the merits of a third of claims raised in habeas petitions, dismiss another third for procedural reasons, and dismiss most of the remainder summarily. See Flango, 1994 NCSC Study, *supra* note 46, at 67 (breaking down rulings by constitutional claim and not by habeas petition); see also Hanson & Daley, 1995 BJS Study, *supra* note 47, at 17 (stating that 36% of issues raised in habeas petitions were determined on merits).

187. Looking at the total numbers of claims ruled upon, the figures are similarly high. In cases with written decisions, courts reached the merits regarding 792 claims, versus 112 claims in which procedural grounds for dismissal were cited. Similarly, in the matched comparison group, 119 out of 121 exonerees received merits rulings, reaching the merits regarding 447 claims versus 47 claims in which procedural grounds were cited.

188. Procedural default was cited in fifty-one claims and lack of exhaustion in forty-six claims (the AEDPA was cited for only six claims).

189. Similarly, the 1994 NCSC Study found that when state postconviction courts give reasons for denying relief on claims, which they rarely do, they ruled that about a third of claims were procedurally defaulted and the rest lacked merit. See Flango, 1994 NCSC Study, *supra* note 46, at 65–66.

also commented on the weakness of the prosecution's case.¹⁹⁰ Other dissents commented on the merits of procedural claims, and six exonerees only received dissents from decisions in their favor, some of which commented on their guilt.¹⁹¹

5. *Guilt and Innocence Rulings.* — When they ruled on the merits, the courts that ruled on these exonerees' claims frequently had to rule on the exonerees' perceived guilt or innocence. Over the past several decades, the Supreme Court has increasingly emphasized that our complex system for appeals serves to remedy the egregious miscarriages of justice in which an innocent person might have been wrongly convicted.¹⁹² In so doing, the Court has developed several methods for assessing guilt or innocence during appeals and postconviction proceedings. The innocence cases in this study suggest that the Court's framework may not serve its intended purpose of sorting the guilty from the innocent. The table below summarizes guilt-based rulings by courts in innocence cases; some exonerees received more than one type of ruling.

Starting with the least deferential test, quite a few exonerees who received rulings on the merits during their appeals had courts rule that errors at trial were harmless. Under the *Chapman* harmless error test, a court denies relief for a constitutional error if the State can show "beyond a reasonable doubt" that the constitutional error did not contribute to the guilty verdict at trial.¹⁹³ Often courts did not explain why they deemed error to be harmless. However, when the State's case is strong, an error may be less likely to contribute to the outcome, and conversely, error may be more likely to affect the outcome when the State's case is

190. See, e.g., *Arizona v. Youngblood*, 488 U.S. 51, 72 (1988) (Blackmun, J., dissenting) ("Because semen is a body fluid which could have been tested by available methods to show an immutable characteristic of the assailant, there was a genuine possibility that the results of such testing might have exonerated respondent. The only evidence implicating respondent was the testimony of the victim."); *State v. Jean*, 311 S.E.2d 266, 274 (N.C. 1984) (Exum, J., dissenting) ("Unlike the majority, I believe the issue of defendant's guilt is close."); *State v. Goodman*, 763 P.2d 786, 789–90 (Utah 1988) (Stewart, J., dissenting) ("The evidence in this case falls far short of proving that the defendant committed the crime charged. . . . [In addition,] [t]here is *no probative evidence* at all that the defendant was at the scene of the crime").

191. See, e.g., *People v. Cruz*, 643 N.E.2d 636, 688 (Ill. 1994) (Heiple, J., dissenting) ("After two verdicts of guilty and 11 years after the murder, the defendant now gets a third roll of the dice. The pressure on the prosecutor to negotiate a plea . . . may be irresistible. In any event, justice is the loser.").

192. See, e.g., *Herrera v. Collins*, 506 U.S. 390, 420 (1993) (O'Connor, J., concurring) (arguing that Constitution offers "unparalleled protections against convicting the innocent").

193. See *Chapman v. California*, 386 U.S. 18, 24, 26 (1966); Garrett, *Federal Wrongful Conviction Law*, supra note 13, at 56–63 (discussing *Chapman* test). The *Brecht v. Abramson* test, see 507 U.S. 619, 639 (1993), which requires that the state show that error did not substantially influence the jury, applies during federal habeas corpus review, but with fewer exonerees pursuing habeas petitions and only a handful pursuing them after 1993 when *Brecht* was decided, that more stringent test was never cited in these cases.

TABLE 8: GUILT-BASED RULINGS DURING REVIEW OF EXONEREES' CONVICTIONS

Type of Appellate or Postconviction Ruling	Percentage of the 133 with written decisions who received ruling (N)
Court referred to exonerees' guilt	50 (67)
Harmless error (total rulings)	32 (43)
Claim had merit, but error was harmless	16 (21)
Claim lacked merit, and error was harmless	14 (18)
Claim lacked merit, and there was no prejudice	13 (17)
Court referred to "overwhelming" evidence of guilt	10 (13)
Claim had merit, but no prejudice	2 (2)

weak.¹⁹⁴ A harmless error ruling may also involve a judgment that the error would not have impacted the jury given outweighing evidence of guilt, though the Court has expressly cautioned against employing harmless error analysis in that improper fashion.¹⁹⁵ Of exonerees with written decisions, 32% had a court rely on harmless error, and 16% had a court agree that a claim had merit, but nevertheless deny relief due to harmless error (this occurred for twenty-two of the sixty, or about one-third, for whom a court ruled that a claim had merit).

Other tests incorporate a more stringent harmless error standard into the structure of the right itself. The *Strickland* test provides an example: A trial attorney's provision of constitutionally ineffective assistance is not a constitutional violation if that performance did not "prejudice" the outcome, given the totality of the evidence admitted at trial.¹⁹⁶ The *Brady v. Maryland* test incorporates the same standard, as do other due process

194. See, e.g., *Brecht*, 507 U.S. at 638 (holding that court should assess harmlessness "in light of the record as a whole").

195. Properly applied, harmless error analysis should ask only whether the state can demonstrate that error did not sufficiently affect the outcome at trial and not, conversely, whether evidence of guilt outweighed the impact of any error. See *Sullivan v. Louisiana*, 508 U.S. 275, 279 (1993) ("The inquiry . . . is . . . whether the guilty verdict actually rendered in this trial was surely unattributable to the error. That must be so, because to hypothesize a guilty verdict that was never in fact rendered—no matter how inescapable the findings to support that verdict might be—would violate the jury-trial guarantee."); Jason M. Solomon, *Causing Constitutional Harm: How Tort Law Can Help Determine Harmless Error in Criminal Trials*, 99 *Nw. U. L. Rev.* 1053, 1085–98 (2005) (arguing that judges should look at evidence of influence on jury rather than focusing primarily on untainted evidence of guilt).

196. See *Strickland v. Washington*, 466 U.S. 668, 693–94 (1984) (requiring defendant to show attorney error affected trial outcome in order to earn reversal).

claims.¹⁹⁷ For only two defendants did a court rule that a claim with merit would be denied because the error lacked prejudice, though for 13%, lack of prejudice was part of the merits dismissal.

The remaining rows show how often courts referred to the likely guilt of the exoneree (in 50% of cases), typically by describing the reliability of the prosecution's case. The rows also show the subset of those cases in which courts were so sure of guilt that they called the evidence of guilt "overwhelming" (10%).¹⁹⁸ Statements regarding guilt provide additional evidence that judges rarely detected innocence. Some cases citing "overwhelming" evidence of guilt or harmless error are particularly instructive (and ironic) in retrospect. An example is the case of Larry Holdren, in which the Fourth Circuit found harmless the State's forensic expert's false hair comparison testimony, even after initial DNA testing excluded Holdren.¹⁹⁹

In the matched comparison group, fewer received such rulings: 26% had a court rule that error was harmless, 11% had a court rule that a claim had merit but error was harmless, and 9% had a court rule that a claim lacked merit and error was harmless. However, 8% had a court call the evidence of guilt "overwhelming."

In addition to judging evidence of guilt, courts may rule on evidence of innocence. Courts (typically only state courts) ask whether newly discovered evidence of innocence would have changed the outcome at trial. In limited circumstances federal courts also examine new evidence of innocence. Still other hybrid tests have both guilt and innocence prongs; for instance, the *Brady* test asks whether favorable evidence was sup-

197. See *Brady v. Maryland*, 373 U.S. 83, 90–91 (1963) (affirming capital sentence where evidence improperly withheld by prosecution would not have reduced defendant's offense below murder in the first degree).

198. Those cases, alphabetically by defendant, are: D. Brown, *State v. Brown*, No. L-82-297, 1983 WL 6945, at *14 (Ohio Ct. App. Sept. 16, 1983); R. Bullock, *People v. Bullock*, 507 N.E.2d 44, 49 (Ill. App. Ct. 1987); F. Daye, *People v. Daye*, 223 Cal. Rptr. 569, 580 (Cal. Ct. App. 1986); J. Deskovic, *People v. Deskovic*, 607 N.Y.S.2d 957, 958 (N.Y. App. Div. 1994) ("There was overwhelming evidence of the defendant's guilt in the form of the defendant's own multiple inculpatory statements, as corroborated by such physical evidence as the victim's autopsy findings."); B. Godschalk, *Godschalk v. Montgomery County Dist. Attorney's Office*, 177 F. Supp. 2d 366, 367, 369 (E.D. Pa. 2001) (quoting criminal trial court); H. Gonzalez, *State v. Gonzalez*, 696 N.Y.S.2d 696, 697 (N.Y. App. Div. 1999); L. Holdren, *Holdren v. Legursky*, 16 F.3d 57, 63 (4th Cir. 1994); D. Hunt, *State v. Hunt*, 457 S.E.2d 276, 293 (N.C. Ct. App. 1994); L. McSherry, *People v. McSherry*, 14 Cal. Rptr. 2d 630, 636 (Cal. Ct. App. 1992) (referring to "the unusual circumstances in this case, overwhelmingly identifying appellant as the perpetrator") (depublished); A. Newton, *Newton v. Coombe*, No. 95-9437, 2001 WL 799846, at *6 (S.D.N.Y. July 13, 2001) (noting evidence of guilt "extremely strong"); D. Pope, *Pope v. State*, 756 S.W.2d 401, 403 (Tex. App. 1988); A. Robinson, *Robinson v. State*, No. C14-87-00345-CR, 1989 WL 102335, at *7, *10 (Tex. App. Sept. 7, 1989); Y. Salaam, *People v. Salaam*, 590 N.Y.S.2d 195, 196 (N.Y. App. Div. 1992).

199. See *Holdren*, 16 F.3d at 61 ("Although the DNA testing produced results that were opposite to the trial testimony regarding the hairs, we are of opinion that the discrepancy was not prejudicial and was at most harmless error.").

pressed by the State and whether, given other evidence of guilt in the case, that evidence was material.²⁰⁰ Added to these various constitutional tests, states have developed state constitutional law²⁰¹ and statutory tests regarding relief based on newly discovered evidence of innocence.²⁰²

Only thirty-three exonerees, or 25% of those with written decisions, raised innocence-related claims (*Brady*, *Schlup*, *Herrera*, or newly discovered evidence claims); several of those exonerees raised more than one innocence-related claim. Of those, three received vacatur. These results are summarized in the table below.

TABLE 9: EXONEREES AND INNOCENCE CLAIMS

Type of Claim	Percentage of 133 with written decisions who raised claim (N)	Percentage with claim granted and upheld on appeal (N) ²⁰³
<i>Brady</i> claim	16 (21)	1 (3)
State law newly discovered evidence	12 (16)	0 (0)
<i>Herrera</i> actual innocence claim	4 (5)	0 (0)
<i>Schlup</i> (habeas only)	0 (0)	0 (0)

Not one exoneree was granted a freestanding claim that they should be released based on newly discovered evidence of their innocence; only twenty asserted such innocence claims, or 15% of those with written decisions.

Only three exonerees out of the thirty-three who brought innocence-related claims had reversals granted, all on *Brady* claims.²⁰⁴ Again, though *Brady* claims do not provide relief expressly on the ground that the petitioner is innocent, they do relate closely to innocence. *Brady*

200. See, e.g., *Kyles v. Whitley*, 514 U.S. 419, 435 (1995) (concluding that *Brady* violation is premised on “showing that the favorable evidence could reasonably be taken to put the whole case in such a different light as to undermine confidence in the verdict”).

201. See, e.g., *Miller v. Comm’r*, 700 A.2d 1108, 1132 (Conn. 1997) (affirming grant due to “clear and convincing evidence” of actual innocence); *People v. Washington*, 665 N.E.2d 1330, 1336–37 (Ill. 1996) (concluding that claim of innocence based on newly discovered evidence raises constitutional issue under state Due Process Clause).

202. For example, New York requires a reasonable probability of a different outcome, and a motion may be made at any time. N.Y. Crim. Proc. Law § 440.10 (McKinney 2005). In contrast, Virginia bars motions for relief due to newly discovered evidence made twenty-one days after trial, unless one can satisfy restrictive conditions for filing a writ of actual innocence. Va. Code Ann. § 19.2-327.1 to -327.6 (Supp. 2003); Va. Code Ann. Rule 1:1 (2007) (providing Virginia Supreme Court rule). For an overview of rules across jurisdictions, see Brandon L. Garrett, *Claiming Innocence*, 92 Minn. L. Rev. (forthcoming 2008) (manuscript at app., on file with the *Columbia Law Review*) [hereinafter Garrett, *Claiming Innocence*].

203. Three more *Jackson* claims, three more *Brady* claims, and two state law newly discovered evidence claims received reversals that were not upheld on appeal.

204. Put differently, of the eighteen exonerees whose convictions were reversed, only three won on innocence-related claims (i.e., 2% of all exonerees with written decisions and 17% of those who won reversals).

claims require a showing that the prosecutor concealed from the defense material exculpatory evidence and a reasonable probability that suppressing the evidence of innocence prejudiced the outcome at trial.²⁰⁵ This study does not include a statistic regarding how many exonerees were convicted based in part on prosecutorial or police misconduct involving suppression of exculpatory evidence, because the number of known cases would be at best highly incomplete. The number may be far higher than just those who brought *Brady* claims, because improper concealment of evidence may often avoid detection even after an exoneration.²⁰⁶

Directly asserting freestanding innocence claims, sixteen exonerees raised state law claims seeking a new trial based on newly discovered evidence of their innocence. None received relief during proceedings prior to obtaining DNA testing. Typically these claims require a reasonable probability that the newly discovered evidence would have changed the outcome at trial and, moreover, many include short statutes of limitation.²⁰⁷

None raised *Schlup*, the “innocence gateway” that excuses procedural defaults of constitutional claims on the basis of newly discovered evidence. Under the *Schlup* standard, a petitioner must show a reasonable probability of innocence to obtain federal review of a constitutional claim in the face of a state procedural default.²⁰⁸ Prior to DNA testing, most exonerees likely did not have new evidence of their innocence to bring forward, and thus they could not assert a *Schlup* theory or a newly discovered evidence claim.

Five exonerees raised claims under *Herrera v. Collins* that their conviction should be vacated based solely on their actual innocence (4%),

205. While 16% of all exonerees with written decisions raised such claims, perhaps more relevant is that 35% of the sixty who pursued state postconviction appeals brought such claims; *Brady* claims are raised less often during direct appeals. See *supra* tbls. 4, 9 (summarizing levels of criminal review pursued by exonerees, noting that sixty pursued state postconviction appeals, and summarizing exonerees’ innocence claims, respectively).

206. A number of such cases in which police or prosecutorial suppression of exculpatory evidence have been discussed. These cases involve forensic fraud, suggestion with respect to eyewitnesses, and fabrication. See *supra* note 181. Again, one reason why relatively few exonerees brought *Brady* claims is that suppression of exculpatory evidence is difficult to uncover. Absent discovery of the police and prosecution files, even after exoneration potential *Brady* violations may not come to light. Furthermore, even where police or prosecutors did in fact conceal exculpatory evidence, the *Brady* materiality and prejudice standard may not be violated.

207. See *supra* note 202 (discussing various jurisdictions that require reasonable probability of different outcome had newly discovered evidence been introduced at trial); see also Garrett, Claiming Innocence, *supra* note 202 (manuscript at Part II.C) (reviewing limits and standards imposed on use of DNA testing by various states’ DNA statutes); Daniel S. Medwed, Up the River Without a Procedure: Innocent Prisoners and Newly Discovered Non-DNA Evidence in State Courts, 47 *Ariz. L. Rev.* 655, 667–86 (2005) (discussing historical and contemporary treatment of newly discovered evidence).

208. *Schlup v. Delo*, 513 U.S. 298, 326–27 (1995).

and none received relief. This comes as no surprise: No petitioner has ever received relief under a constitutional theory that they were actually innocent.²⁰⁹ The Supreme Court only hypothetically indicated in *Herrera* that a petitioner might receive relief in a capital case if he or she could provide a “truly persuasive” demonstration of innocence.²¹⁰ The Court thus did not reach whether a freestanding actual innocence claim exists under the Constitution. Any actual innocence right remains so conjectural that the five innocent petitioners who raised such claims were denied relief. Only one of the twelve innocent capital petitioners brought, unsuccessfully, a *Herrera* claim that he was actually innocent.²¹¹

These exonerees, lacking any means to claim innocence, did assert in large numbers sufficiency of the evidence claims governed by the Court’s ruling in *Jackson v. Virginia*.²¹² In contrast to the thirty-two who raised innocence claims, sixty exonerees (45%) brought a *Jackson* claim, based not on allegations of new evidence of innocence, but rather based on a claim that there was not sufficient evidence presented during their trial to convict them. Such sufficiency claims sometimes highlighted unreliable factual evidence at trial, thereby providing a quasi-factual challenge, though one was based on the context of the entire trial record.²¹³ In bringing a *Jackson* claim, a petitioner must show that, viewing the evidence in the light most favorable to the prosecution, no rational juror could find beyond a reasonable doubt that the prosecution proved the essential elements of the crime.²¹⁴ Perhaps due to this stringent standard (though states have more relaxed sufficiency standards), only one of the exonerees received a reversal upheld on appeal.

Thus, the above shows just how difficult it remains to obtain relief on a claim of innocence, which explains why few of these actually innocent people raised such claims and why none succeeded.²¹⁵ In addition to analyzing such claims, this study collected instances where courts made

209. See Nicholas Berg, *Turning a Blind Eye to Innocence: The Legacy of Herrera v. Collins*, 42 Am. Crim. L. Rev. 121, 135–37 (2005) (surveying more than 170 cases in which actual innocence claims were asserted and concluding that no court has granted relief solely on basis of such claims).

210. See *Herrera v. Collins*, 506 U.S. 390, 417 (1993) (assuming arguendo that persuasive demonstration of actual innocence would render execution unconstitutional, but stating that if such claim existed, threshold would be “extraordinarily high”).

211. The four others were not facing execution and therefore did not even fall under the limited claim the Court considered in *Herrera*; their claims were dismissed.

212. See 443 U.S. 307, 324 (1979) (holding that habeas relief is available if petitioner shows that no rational trier of fact “could have found proof of guilt beyond a reasonable doubt” based on evidence presented at trial).

213. Twelve exonerees who did not bring suggestive eyewitness identification claims highlighted the weakness of eyewitness evidence when bringing a sufficiency of the evidence claim. A handful highlighted the weakness of confession or forensics evidence.

214. See *Jackson*, 443 U.S. at 319 (describing sufficiency of evidence review).

215. See King et al., 2007 NCSC Study, *supra* note 47, at 29–30 (concluding that 3.9% of noncapital cases and 10.8% of capital cases raised new evidence of innocence claims and none received relief).

statements in their decisions that referred to the guilt or innocence of the exonerees, even if these statements were not necessarily connected to a particular claim. As noted earlier, sixty-three exonerees had statements referring to their perceived guilt (twelve courts noted “overwhelming” evidence of guilt). In contrast, courts only made statements that in a way correctly perceived the innocence of thirteen. That is, none of the statements directly asserted outright innocence in the way that judges frequently directly asserted outright guilt. Instead, judges found error to be prejudicial, and, in doing so, referred to the weakness of the prosecution’s case. For nine of the eighteen who received reversals, a court referred to innocence in that manner.²¹⁶ This is most likely because in order to reverse, judges must almost always find prejudice, and can more readily do so if the State’s case is weak.²¹⁷

Exonerees did not frequently raise innocence claims, but, as described, legal avenues for claiming innocence remain extremely narrow. Absent a sound legal theory, simply raising a claim of innocence could signal their innocence, but raising a claim that lacked factual or legal support might negatively color judges’ perceptions of their other claims. These exonerees may have felt that the claims were futile, which is borne out by the experience of those who raised innocence claims, none of which received any relief. In addition, state statutes of limitations restrict assertion of innocence claims. Moreover, prior to obtaining DNA evidence, most may have lacked any probative new evidence of innocence that could plausibly support an innocence claim; for some such evidence may have been concealed by law enforcement.²¹⁸ Again, this group of known DNA exonerations does not include innocent convicts who obtained reversals without DNA testing, perhaps because some had substantial non-DNA evidence of their innocence.

In the matched comparison group, fewer raised innocence claims, just as fewer raised other claims. Nine raised *Brady* claims, or 7%. Two percent raised *Herrera* claims, state newly discovered evidence claims, and *Schlup* claims. Judges referred to innocence in three of the decisions that granted reversals in the matched comparison group.²¹⁹

216. See, e.g., *Jean v. Rice*, 945 F.2d 82, 87 (4th Cir. 1991) (“Apart from the identifications, there was little independent corroborating evidence to sustain Jean’s conviction”); *State v. Hunt*, 378 S.E.2d 754, 760 (N.C. 1989) (“Although there were three witnesses who identified defendant as the one they had seen with the victim the morning of her murder, the record reflects doubt about the testimony of each”); *State v. Cotton*, 351 S.E.2d 277, 280 (N.C. 1987) (“The excluded evidence therefore tended to show that the same person committed all of the similar crimes in the neighborhood in question on that night and that the person was someone other than the defendant.”).

217. See *Strickland v. Washington*, 466 U.S. 668, 696 (1984) (“[A] verdict or conclusion only weakly supported by the record is more likely to have been affected by errors than one with overwhelming record support.”).

218. Indeed, the decisions for the thirty-three who raised innocence related claims indicated not all actually had new evidence of innocence to offer prior to the DNA testing.

219. See *Leonard v. Michigan*, 256 F. Supp. 2d 723, 734 (W.D. Mich. 2003) (“There is a reasonable probability that had defense counsel offered any defense to the State’s DNA

6. *Ineffective Assistance of Counsel*. — Many states and localities have long provided inadequate indigent defense funding, with predictably persistent poor assistance of trial counsel as a result.²²⁰ The Supreme Court ruled in *Strickland v. Washington* that indigent defendants are constitutionally entitled to minimally effective representation. This representation, however, need only fall “within the wide range of reasonable professional assistance.”²²¹ Studies of postconviction filings show that ineffective assistance of counsel is the most commonly raised claim during appeals. The NCSC study found that 41% to 45% raised such claims.²²² Only thirty-eight exonerees (29%) raised ineffective assistance of counsel claims.²²³

The majority of the thirty-eight exonerees in the innocence group who raised ineffective assistance of counsel claims did not raise procedural errors by counsel. Instead, they presented claims based on ineffectiveness of counsel relating to important evidence introduced at trial, including failures to use blood evidence, to present alibi witnesses, and to challenge eyewitness identification or informant testimony. Of the thirty-eight, four received reversals of their convictions due to grossly ineffective representation of trial counsel.²²⁴ Ron Williamson’s claim related to fail-

experts, the trial judge would have found Petitioner not guilty. In light of the lack of evidence against Petitioner, this is the only conclusion that can reasonably be reached.”); *People v. Tillman*, 589 N.E.2d 587, 598 (Ill. App. Ct. 1992) (“[T]he totality of counsel’s deficient performance establishes ineffective assistance of counsel. But for those errors, there was a reasonable probability that the defendant would not have been convicted.”); *People v. Colas*, 619 N.Y.S.2d 702, 706 (N.Y. App. Div. 1994) (“The evidence of defendant’s guilt in this case is far from strong.”).

220. See, e.g., The Spangenberg Group, *State and County Expenditures for Indigent Defense Services in Fiscal Year 2002*, at 34–37 (2003), available at <http://www.abanet.org/legalservices/downloads/sclaid/indigentdefense/indigentdefexpend2003.pdf> (on file with the *Columbia Law Review*) (showing annual state expenditures on indigent defense); Standing Comm. on Legal Aid and Indigent Defendants, Am. Bar Ass’n, *Gideon’s Broken Promise: America’s Continuing Quest for Equal Justice 7–9* (2004) (citing reports and testimony on “grave inadequacies in the available funds and resources for indigent defense”); Stephen B. Bright, *Counsel for the Poor: The Death Sentence Not for the Worst Crime but for the Worst Lawyer*, 103 *Yale L.J.* 1835, 1866–70 (1994) (discussing adverse effects of low compensation for indigent defense lawyers).

221. *Strickland*, 466 U.S. at 689–90.

222. See Flango, 1994 NCSC Study, *supra* note 46, at 46–47 (providing these data and citing to additional studies finding similarly high percentages of ineffective assistance of counsel claims). The 2007 NCSC Study of federal habeas petitions found that 50.4% of noncapital cases and 81% of capital cases raised ineffective assistance of trial or appellate counsel claims. King et al., 2007 NCSC Study, *supra* note 47, at 28. In the matched comparison group, 21% raised ineffective assistance of counsel claims, fewer than in the innocence group and the NCSC results.

223. The figure is higher using only the seventy-eight who filed state postconviction petitions that more typically include ineffective assistance of trial counsel claims (41%). Five additional exonerees raised ineffectiveness of appellate counsel.

224. Those are: P. Gray, W. Rainge, D. Williams, and R. Williamson. In other words, 11% of the exonerees who raised ineffective assistance of counsel claims received reversals. This is in contrast to the 1% of state and federal habeas corpus petitioners who raise

ure of trial counsel to develop evidence of his lack of mental competency and to the confession of another man.²²⁵ The other three, Paula Gray, William Rainge, and Dennis Williams, were all represented by the same lawyer, who was later disbarred in an unrelated matter. Rainge and Williams had their convictions reversed for ineffectiveness, including failure to move to suppress central physical evidence, such as hair evidence.²²⁶ Gray's reversal related instead to conflicts created by the joint representation.²²⁷

To prevail on an ineffectiveness claim, a convict must show that the attorney's ineffectiveness materially prejudiced the outcome at trial, so that "there is a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different."²²⁸ In retrospect, however, some courts appear to have improperly conducted that inquiry in cases where ineffectiveness implicated areas of evidence that centrally supported the convictions. For example, the federal district court granted Willie Jackson relief because his trial lawyer failed to hire an expert to challenge the bite mark evidence central to his trial, finding prejudice where Jackson provided a strong showing of innocence, including that his brother confessed to the crime.²²⁹ Yet the Fifth Circuit reversed without an opinion in 1997,²³⁰ and in 2006 Jackson was exonerated when DNA testing excluded him and matched his brother.²³¹ Ironically, four other exonerees specifically asserted the failure of trial counsel to request then-available DNA testing that would have proved inno-

ineffective assistance of counsel and who receive relief on ineffective assistance claims according to the 1994 NCSC study. See Flango, 1994 NCSC Study, *supra* note 46, at 63.

225. See *Williamson v. Ward*, 110 F.3d 1508, 1522 (10th Cir. 1997) (granting Williamson new trial "both on the ground that his counsel was ineffective in failing to pursue a competency determination and on the ground that counsel's failure to conduct pretrial investigation precluded him from properly dealing with the confessions at trial").

226. See *People v. Williams*, 444 N.E.2d 136, 138, 143 (Ill. 1982) (reversing after disbarment, citing "unique circumstances under which counsel . . . was operating[,]” including representing three capital defendants before two juries, and also citing failures to move to suppress central evidence including hair evidence); *People v. Rainge*, 445 N.E.2d 535, 547 (Ill. App. Ct. 1983) (reversing on similar grounds).

227. *U.S. ex rel. Gray v. Dir., Dep't of Corr.*, 721 F.2d 586, 597 (7th Cir. 1983) (reversing due to conflicted counsel).

228. *Strickland v. Washington*, 466 U.S. 668, 693–94 (1984); see also Flango, 1994 NCSC Study, *supra* note 46, at 45–50 (addressing specific claims of ineffectiveness of counsel in study in context of *Strickland* standard); John C. Jeffries, Jr. & William J. Stuntz, *Ineffective Assistance and Procedural Default in Federal Habeas Corpus*, 57 U. Chi. L. Rev. 679, 681–90 (1990) (discussing *Strickland* threshold and arguing that “[i]n essence . . . *Strickland* require[s] habeas lawyers and federal judges and magistrates to work through the equivalent of a law school exam every time a defendant tries to escape procedural default”).

229. See *Jackson v. Day*, No. CIV.A.95-1224, 1996 WL 225021, at *4–*6 (E.D. La. May 2, 1996) (describing Milton Jackson's admissions in the record).

230. *Jackson v. Day*, 121 F.3d 705 (5th Cir. 1997).

231. See Innocence Project, *Know the Cases: Willie Jackson*, at <http://www.innocenceproject.org/Content/194.php> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*).

cence.²³² One of the four, Anthony Hicks, received a reversal, but only after DNA testing had already excluded him.

While most of the ineffective assistance claims related to facts that the trial lawyer failed to develop or challenge, ten instead related to procedural ineffectiveness of counsel, including conflicts of interest and failures to make new trial motions.²³³ As noted in the previous section, for only two exonerees did the courts conclude that a claim had merit, but nevertheless denied relief due to lack of prejudice.²³⁴

This section described how, during the exonerees' criminal appeals and postconviction proceedings, courts not only failed to effectively review factual claims relating to evidence supporting convictions, but also consistently denied relief on innocence claims. In contrast, they often ruled that exonerees appeared guilty. Moreover, exonerees and the rape and murder cases in the matched comparison group received a similar reversal rate of about 9%. Furthermore, the groups had similar rates of reversals based on claims of factual error. The next section describes how similar failings were manifested even when postconviction courts were confronted with DNA evidence of innocence.

C. DNA Testing and Exoneration

This section examines how exonerees obtained the DNA tests that ultimately exonerated them in order to understand how these miscarriages of justice were ultimately remedied. This third set of results describes how the known exonerees are only a subset of innocent convicts, as we only know about the cases in which convicts sought and successfully obtained DNA testing. Even after DNA testing became available, courts and law enforcement imposed obstacles to conducting DNA testing and then denied relief even after DNA proved innocence. These data show how reluctant our criminal system remains to redress false convictions.

1. *Access to DNA Testing.* — First, DNA evidence is not available or probative in the vast majority of criminal cases. DNA testing can only be used to show identity when biological evidence from the perpetrator has been left at the scene of the crime; the vast majority of criminal cases lack such biological evidence.²³⁵ In addition, DNA testing may only be conducted when such evidence was preserved after trial. Even given its po-

232. The four are M. Bravo, A. Hicks, B. Piszczek, and J. Sutton.

233. For nine additional exonerees, it was not clear from the decisions what alleged ineffectiveness was asserted.

234. See *supra* notes 197–198 and accompanying text.

235. See *Protecting the Innocent: Proposals to Reform the Death Penalty: Hearing Before the S. Comm. on the Judiciary, 107th Cong. 221 (2002)* (statement of Prof. Barry Scheck, Co-Dir. of the Innocence Project) (“The vast majority (probably 80%) of felony cases do not involve biological evidence that can be subjected to DNA testing.”); Nina Martin, *Innocence Lost*, *S.F. Mag.*, Nov. 2004, at 78, 105 (noting that “only about 10 percent of criminal cases have any biological evidence—blood, semen, skin—to test”). However, advancements in DNA technology will likely continue to produce new exonerations in cases that currently cannot be tested. See Seth F. Kreimer, *Truth*

tential as exculpatory biological evidence, in a high percentage of cases DNA evidence is not preserved.²³⁶ Often only in rape and murder cases does law enforcement traditionally deem such biological evidence sufficiently relevant to collect it. Nor does law enforcement have a strong legal incentive to preserve evidence properly. In 1989 the Supreme Court ruled that Larry Youngblood could not obtain any relief because he could not show that the police had acted in bad faith when they improperly stored biological evidence from the victim, causing the evidence to degrade.²³⁷ In 2000 the science of DNA testing had advanced such that the degraded evidence could be tested; it exonerated Youngblood and produced a “cold hit” with another individual.²³⁸ During their appeals and postconviction, seventeen exonerees raised destruction of exculpatory evidence claims without any success. Like Youngblood, each was later fortuitously able to test degraded evidence or to locate other evidence that could be subjected to DNA testing.

Second, even if relevant DNA evidence exists, a prisoner might not obtain access to testing. Our criminal justice system has long been hostile toward postconviction claims of innocence and requests for DNA testing. For sixteen exonerees, courts at least initially denied motions for DNA testing (sometimes multiple times), often referring to evidence of their guilt. For example, in the case of Bruce Godschalk, the court denied DNA testing because “appellant’s conviction rests largely on his own confession which contains details of the rapes which were not available to the public.”²³⁹ This practice is changing, not because many courts have reconsidered when postconviction discovery should be granted, but because forty-four jurisdictions have passed statutes providing a right to postconviction DNA testing. Most of these statutes were enacted in the

Machines and Consequences: The Light and Dark Sides of ‘Accuracy’ in Criminal Justice, 60 N.Y.U. Ann. Surv. Am. L. 655, 658–59 (2005).

236. According to data gathered by Huy Dao of the Innocence Project, about 36% of requests for DNA evidence did not provide usable DNA. However, that figure is based on a still-in-progress survey of all closed Innocence Project cases. Ringer, *Convicting the Innocent*, supra note 24, at 13; see also Richard A. Rosen, *Innocence and Death*, 82 N.C. L. Rev. 61, 73 (2003) (observing “that for every defendant who is exonerated because of DNA evidence, there have been certainly hundreds, maybe thousands” whose cases lack physical evidence). Twenty-two states and the District of Columbia currently have statutory requirements to preserve biological evidence taken from crime scenes. Innocence Project, *Preservation of Evidence*, at <http://www.innocenceproject.org/Content/253.php> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*). For examples of DNA evidence used to exonerate as well as to locate actual perpetrators, see Cynthia E. Jones, *Evidence Destroyed, Innocence Lost: The Preservation of Biological Evidence Under Innocence Protection Statutes*, 42 Am. Crim. L. Rev. 1239, 1267 n.133 (2005).

237. *Arizona v. Youngblood*, 488 U.S. 51, 57–59 (1988) (“[U]nless a criminal defendant can show bad faith on the part of the police, failure to preserve potentially useful evidence does not constitute a denial of due process of law.”).

238. See Innocence Project, *Know the Cases: Larry Youngblood*, at <http://www.innocenceproject.org/Content/303.php> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*).

239. *Commonwealth v. Godschalk*, 679 A.2d 1295, 1297 (Pa. Super. Ct. 1996).

last five years.²⁴⁰ However, many require difficult preliminary showings to obtain DNA testing, much less relief.²⁴¹ Absent such a statute or court order, DNA testing may often not be obtained unless law enforcement consents to it.²⁴²

Despite those many obstacles to obtaining relief, these 200 former prisoners were able to obtain DNA testing and vacatur of their convictions. In order to shed light on how DNA testing allowed those exonerees to prove their innocence, data were compiled on how exonerees requested DNA testing. For the vast majority of the innocence cases, 158 (79%), the prisoner sought DNA testing by contacting an innocence project or requesting it through postconviction attorneys.²⁴³ While innocence projects and postconviction attorneys do not request DNA testing for every prisoner who makes a request, the Innocence Project, for example, pursues DNA testing in all cases in which DNA evidence exists and could be probative.²⁴⁴ Twenty-three exonerees (12%) initially pursued DNA testing pro se, either by filing petitions in states that had statutory or court-made rules permitting postconviction DNA testing or by seeking out legal assistance independent of any court-appointed lawyer.

Law enforcement deserves credit for its role in exoneration. Though most exonerees contacted an innocence project or postconviction attorney, in twenty-two cases (12%) police or prosecutors or the FBI initiated the DNA testing. This occurred where law enforcement conducted DNA testing as part of a project to test backlogged evidence, or as part of a program to retest cases where a forensic scientist engaged in a pattern of misconduct, or as part of an unrelated criminal investigation, or, in one case, as a result of an anonymous phone tip. In these cases, the State

240. See Garrett, *Claiming Innocence*, supra note 202 (manuscript at app.).

241. See Kathy Swedlow, *Don't Believe Everything You Read: A Review of Modern "Post-Conviction" DNA Testing Statutes*, 38 Cal. W. L. Rev. 355 (2002) (reviewing innocence statutes and arguing that their effectiveness is limited by traditional limitations on postconviction relief).

242. See Seth F. Kreimer & David Rudovsky, *Double Helix, Double Bind: Factual Innocence and Postconviction DNA Testing*, 151 U. Pa. L. Rev. 547, 554 (2002) ("After trial . . . in the states that have not adopted statutes giving convicted defendants the right to seek DNA testing, the disposition of physical evidence rests largely in the discretion of prosecutors, police officers in evidence rooms, and court clerks." (citation omitted)).

243. It is difficult to separate those exonerees that were represented solely by postconviction attorneys from those that also received assistance from an innocence project. For example, the Innocence Project at Cardozo Law was counsel of record or, alternatively, consulted with postconviction attorneys on most of the exonerees' cases. Other Innocence Network groups similarly represented exonerees but also consulted on additional cases.

244. See The Innocence Project, *About the Organization: FAQs*, at <http://www.innocenceproject.org/Content/103.php> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*) ("The Innocence Project has a very specific mandate: we accept cases where postconviction DNA testing can yield conclusive proof of innocence. The Innocence Project does not require evidence to be found before we accept a case. In 2006, we received about 200 new requests each month.").

presented the exoneree with the news that DNA testing proved their innocence.

Importantly, seventy-four DNA exonerations (37%) resulted in the inculcation of the actual perpetrator, providing a significant law enforcement benefit. The degree to which DNA exonerations have resulted in inculcation has not been sufficiently appreciated and should affect the cost-benefit analysis of devoting resources to preventing wrongful convictions.²⁴⁵ In forty-nine cases a “cold hit” in a DNA database resulted in identification of the actual perpetrator.²⁴⁶ In twenty-five more cases, the actual perpetrator was identified in other ways, such as where the actual perpetrator came forward and was subjected to DNA testing. In the remaining 126 cases, the perpetrator remains at large.

Lest one think that these exonerees all aggressively litigated their innocence, many exonerees waited for quite some time before they or their lawyers sought DNA testing. They served an average of twelve years before ultimately being exonerated, for a total of 2,475 years in prison.²⁴⁷ Almost all of the 200 were exonerated long after DNA testing had already been available.²⁴⁸

What explains the delay? Many exonerees faced difficulties obtaining access to DNA testing absent willing cooperation of law enforcement. In at least seventy-one out of 200 exonerations (36%), the exoneree applied for a court order to gain access to DNA testing.²⁴⁹ In at least twenty-four instances, the exoneree obtained testing pursuant to a state statute providing for postconviction DNA testing; as noted, states have increasingly enacted such statutes. In the largest category, however, 119 exonerees (60%) received access to DNA testing through the consent of law enforcement or prosecutors. This finding credits law enforcement for its role in correcting miscarriages of justice. Access to testing sometimes came from overlapping sources, however, making these statistics less than definitive. For example, law enforcement sometimes consented only after a court reversed the conviction or was planning to order test-

245. See Jones, *supra* note 236, at 1262–69 (arguing that “integrity of the criminal system” outweighs any “fiscal and administrative burden that preservation [of biological evidence] would impose” as well as any governmental “interest in finality of judgments”).

246. Law enforcement can search for a match (a “cold hit”) with a DNA sample in the Combined DNA Index System (CODIS), pooling fifty state databanks with the federal databank the FBI created in 1990. See Fed. Bureau of Investigation, CODIS Program: Mission Statement & Background, at <http://www.fbi.gov/hq/lab/codis/program.htm> (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*) (defining CODIS program); Fed. Bureau of Investigation, CODIS Program: Participating States, at <http://www.fbi.gov/hq/lab/codis/partstates/htm> (Aug. 2007) (on file with the *Columbia Law Review*) (displaying participating states).

247. Innocence Project, 200 Exonerated, *supra* note 85, at 2–3.

248. For example, only thirteen of the 200 were exonerated by the end of 1993, when more advanced PCR DNA testing was available. Even a few years later, at the end of 1997, only forty-nine had been exonerated. *Id.* at 2–11.

249. That figure is “at least” seventy-one exonerees because information on how DNA testing was obtained was not available in press reports for all 200 exonerees.

ing. However, in approximately half of the cases law enforcement did not cooperate, at least initially, and the exonerees had to secure DNA testing through other means. These findings highlight the need for a broader right of access to postconviction DNA testing.

Upon obtaining DNA test results, the still-incarcerated among the 200 exonerees were finally released. Nevertheless, some waited for quite some time before obtaining their release. Twelve had already been convicted at trial, despite DNA testing performed at the time that excluded them; they were all later exonerated after DNA testing identified another person.²⁵⁰ Others obtained DNA testing during their appeals. Many lacked a judicial forum in which to argue that “actual innocence” should provide grounds for a vacatur. Strikingly, courts denied at least twelve exonerees relief despite at least preliminary DNA test results excluding them; each was later exonerated after an executive or higher court granted relief.²⁵¹ Forty-one (21%) received a pardon from their state executive, often because they lacked any available judicial forum for relief. Only two received DNA testing and a vacatur through federal habeas corpus. The others received a vacatur in state courts, typically on the basis of newly discovered evidence of innocence. Thus, for some, even once DNA evidence excluded them, our judicial system was unwilling or unable to provide a remedy.²⁵²

2. *Compensation.* — To date most exonerees have not obtained civil compensation for injuries suffered. Eighty-two (41%) have thus far received some kind of compensation for their years of imprisonment for crimes they did not commit, according to news reports located for most of the 200 exonerees. One explanation may be that to pursue a federal civil rights action, exonerees must be able to show that government offi-

250. There is analysis of these cases in Garrett, *Claiming Innocence*, supra note 202 (manuscript at 1–15). An example is the case of Leonard McSherry, who, in 1988, before his sentencing, introduced RFLP DNA testing results that excluded him, yet the trial court denied the new trial motion. In 1991, after Dr. Edward Blake conducted more sophisticated PCR testing that again excluded McSherry, the California appellate court concluded that the evidence of guilt was still “overwhelming[.]” *People v. McSherry*, 14 Cal. Rptr. 2d 630, 633–36 (Cal. Ct. App. 1992) (depublished). The court emphasized the seeming certainty of the victim’s identification and all of the details she offered describing the perpetrator’s house, which matched McSherry’s, stating that “[i]n these circumstances, the fact that a scientific test establishes appellant was not the source of semen stains on the victim’s panties does not undermine the entire structure of the prosecution case, point unerringly to innocence or show that appellant did not commit the charged crimes.” *Id.* at 636. McSherry was released after yet another round of DNA testing in 2001, which excluded him and also resulted in a “cold hit” with a convict in a DNA database. See Daniel Hernandez & Monte Morin, *Man Is Cleared in 1 Case, but Jailed in Another*, L.A. Times, May 1, 2003, at B1.

251. Those are: S. Avery, R. Criner, W. Dedge, C. Elkins, D. Halstead, A. Hicks, L. Holdren, D. Hunt, J. Kogut, L. McSherry, J. Restivo, and J. Watkins.

252. Even the more recently enacted postconviction DNA testing statutes typically present obstacles to relief. See Garrett, *Claiming Innocence*, supra note 202 (manuscript at Part II.C) (cataloguing range of restrictions enacted by statute or created by judicial interpretation, including barriers to access to postconviction DNA testing and relief).

cials acted with sufficient fault.²⁵³ Seventy-eight exonerees filed civil claims, mostly in federal courts. Several were dismissed; however, forty-nine who brought wrongful conviction lawsuits have received favorable judgments or settlements. These few judgments or settlements are often for many millions of dollars; consequently, an important impact of post-conviction DNA testing may be that civil rights actions filed by a select group of exonerees disproportionately deter law enforcement and prosecutors from violating fair trial rights.²⁵⁴ Finally, some states have passed no-fault compensation statutes for those exonerated by DNA,²⁵⁵ which have provided compensation for eighteen exonerees, and fifteen more received compensation through special legislative bills.

To conclude this section, not only do we only know about the limited subset of convicts for whom DNA evidence was relevant, preserved, and sought, but also we know that even those few who were later exonerated often faced obstacles in successfully obtaining DNA testing. Indeed, many faced obstacles obtaining relief even after the DNA exonerated them. Furthermore, more than half have so far not received any compensation for their injuries.

III. INNOCENCE, SOURCES OF ERROR, AND IMPLICATIONS

While U.S. Supreme Court Justices debate whether false convictions remain “extremely rare,”²⁵⁶ or instead exist in “disturbing number[s]”²⁵⁷ that we “never imagined,”²⁵⁸ innocent persons have been convicted in sufficiently large numbers that they provide a unique set of data from criminal trials through the many levels of criminal appeals designed to remedy trial error. At each stage, facts that could have shed light on innocence were not developed. Such was the reluctance to question the findings of guilt at trial that even after DNA was obtained the state frequently resisted exoneration. This Part discusses the larger implications of those failings for future scholarship and reform efforts, focusing in particular on reforms that create a more accurate factual record at the front end, so that our system does not later place actors in the difficult position of judging innocence based on an insufficient record.

253. See Garrett, *Federal Wrongful Conviction Law*, *supra* note 13, at 54 (noting that “wrongful conviction . . . is actionable under civil rights law only if it was the result of official misconduct, and not only coincidence, mistake, or negligence”).

254. See *id.* at 111–13 (arguing that wrongful conviction suits may lead to systematic reform of criminal procedure).

255. See Adele Bernhard, *Justice Still Fails: A Review of Recent Efforts to Compensate Individuals Who Have Been Unjustly Convicted and Later Exonerated*, 52 *Drake L. Rev.* 703, 704–06 (2004) (discussing state adoption of compensation schemes).

256. *Schlup v. Delo*, 513 U.S. 298, 321 (1995).

257. *Atkins v. Virginia*, 536 U.S. 304, 320 n.25 (2002).

258. *Kansas v. Marsh*, 126 S. Ct. 2516, 2544 (2006) (Souter, J., dissenting).

A. Criminal Investigation and Trial Reform

Postconviction DNA exonerations provide a unique opportunity to conduct a “post mortem” investigation into the sources of wrongful convictions.²⁵⁹ At the trial court level, four types of evidence often supported these 200 erroneous convictions: eyewitness identification evidence, forensic evidence, informant testimony, and confessions. The types of evidence supporting rape convictions versus murder convictions differed, as one might expect, with rape convictions more typically involving eyewitnesses. Common to all cases, however, were errors that might have been avoided had additional steps been taken to create a more accurate record during the criminal investigation.

A series of reforms have been advanced to improve accuracy during criminal investigations and trials, particularly in the areas of eyewitness identifications, false confessions, and forensic science. Though “[d]ue process does not require that every conceivable step be taken, at whatever cost, to eliminate the possibility of convicting an innocent person,”²⁶⁰ research increasingly suggests that procedures such as videotaping interrogations, conducting double blind and sequential eyewitness identifications, and implementing oversight of forensic crime laboratories, could have prevented many such costly miscarriages, without reducing correct conviction rates.²⁶¹

259. See Barry Scheck, Closing Remarks, 23 *Cardozo L. Rev.* 899, 902–03 (2002).

260. *Herrera v. Collins*, 506 U.S. 390, 399 (1993) (internal quotations omitted) (quoting *Patterson v. New York*, 432 U.S. 197, 208 (1977)).

261. See, e.g., Ad Hoc Innocence Comm. to Ensure the Integrity of the Criminal Process, ABA Criminal Justice Section, *Achieving Justice: Freeing the Innocent, Convicting the Guilty* xv–xxix (Paul Giannelli & Myrna Raeder eds., 2006) (offering overview of ABA resolutions on systematic remedies, false confessions, eyewitness identification procedures, forensic evidence, jailhouse informants, defense counsel practices, investigative policies and personnel, prosecution practices, and compensation for wrongfully convicted); Bruce W. Behrman & Sherrie L. Davey, *Eyewitness Identification in Actual Criminal Cases: An Archival Analysis*, 25 *Law & Hum. Behav.* 475, 480–84 (2001) (providing statistics on suspect identification rates in variety of situations including photographic lineups, field showups, live lineups, delay, same versus cross-racial conditions, weapon presence, and witness type); Drizin & Leo, *supra* note 14, at 932–43, 997–98 (compiling proven cases of false confessions and advocating for taped confessions as prevention method); Garrett, *Federal Wrongful Conviction Law*, *supra* note 13, at 87–88, 93–94, 98–99 (arguing that civil actions for wrongful conviction would encourage measures to prevent use of unreliable eyewitness accounts, coerced confessions, and fabrication of evidence); Amy Klobuchar, Nancy Steblay & Hilary Caligiuri, *Improving Eyewitness Identifications: Hennepin County’s Blind Sequential Lineup Pilot Project*, 4 *Cardozo Pub. L. Pol’y & Ethics J.* 381, 411 (2006) (testing blind sequential identification in practice and finding that it results in increased protection for innocent suspects); Otto H. MacLin, Laura A. Zimmerman & Roy S. Malpass, *PC_Eyewitness and Sequential Superiority Effect: Computer-Based Lineup Administration*, 3 *Law & Hum. Behav.* 303, 317–20 (2005) (discussing the accuracy of sequential identification and computerized identification as compared to simultaneous identification and paper and pencil identification, respectively); Gary L. Wells et al., *From the Lab to the Police Station: A Successful Application of Eyewitness Research*, 55 *Am. Psychologist* 581, 581–87 (2000)

Some jurisdictions have adopted these reforms at the investigative stage, and though most still have not done so, there has been remarkable change in recent years, partly in response to these postconviction DNA exonerations.²⁶² Police and prosecutors increasingly consider whether additional steps before trial can avoid costly appeals or reversals later. A number of police departments have begun videotaping interrogations, with many more considering it and increasing numbers of states contemplating legislation to require it.²⁶³ Six jurisdictions now require videotaping of at least some interrogations by statute, and in five more state supreme courts have either required or encouraged electronic recording of interrogations.²⁶⁴ A wave of eyewitness identification reform legislation has been seen across the country, with several states recently enacting

(describing psychological research on variables affecting eyewitness accounts in light of Department of Justice guidelines).

262. See Darryl Fears, *Exonerations Change How Justice System Builds a Prosecution*, Wash. Post, May 3, 2007, at A3 (discussing reforms to criminal procedure as response to DNA exonerations); Solomon Moore, *DNA Exoneration Leads to Change in Legal System*, N.Y. Times, Oct. 1, 2007, at A1 (“State lawmakers across the country are adopting broad changes to criminal justice procedures as a response to the exoneration of more than 200 convicts through the use of DNA evidence.”); see also Garrett, *Federal Wrongful Conviction Law*, supra note 13, at 45–46 & n.34, 87–88 & n.262 (describing systemic reforms adopted in response to civil wrongful conviction suits brought by exonerees).

263. See Thomas P. Sullivan, *Police Experiences with Recording Custodial Interrogations 4–6* (2004), available at http://www.state.il.us/defender/CWC_article_with%20Index.final.pdf (on file with the *Columbia Law Review*) (surveying 238 law enforcement agencies nationwide that adopt videotaping of interrogations); Fears, supra note 262, at A3 (noting that more than 500 departments have adopted videotaping of interrogations and twenty states are considering legislation to require it).

264. See D.C. Code Ann. § 5-116.01 (LexisNexis Supp. 2007) (requiring police to record all custodial investigations); 725 Ill. Comp. Stat. Ann. 5/103-2.1 (West 2006) (same); Me. Rev. Stat. Ann. tit. 25, § 2803-B (2007) (mandating policy of recording “interviews of suspects in serious crimes”); N.M. Stat. § 29-1-16 (Supp. 2006) (requiring police to record all custodial investigations); Tex. Code Crim. Proc. Ann. art. 38.22, § 3 (Vernon Supp. 2007) (rendering unrecorded oral statements inadmissible); *Stephan v. State*, 711 P.2d 1156, 1158 (Alaska 1985) (“[A]n unexcused failure to electronically record a custodial interrogation conducted in a place of detention violates a suspect’s right to due process”); *Commonwealth v. DiGiambattista*, 813 N.E.2d 516, 535 (Mass. 2004) (allowing defense to point out state’s failure to record interrogation and calling unrecorded admissions “less reliable”); *State v. Scales*, 518 N.W.2d 587, 592 (Minn. 1994) (“[A]ll questioning shall be electronically recorded where feasible and must be recorded when questioning occurs at a place of detention.”); *State v. Cook*, 847 A.2d 530, 547 (N.J. 2004) (“[W]e will establish a committee to study and make recommendations on the use of electronic recordation of custodial interrogations.”); *In re Jerrell C.J.*, 699 N.W.2d 110, 123 (Wis. 2005) (“[W]e exercise our supervisory power to require that all custodial interrogation of juveniles in future cases be electronically recorded where feasible, and without exception when questioning occurs at a place of detention.”). In addition to its eyewitness reform legislation, North Carolina recently passed a law requiring recording of interrogations, making it the sixth state to do so by statute. Act of Aug. 23, 2007, 2007 N.C. Sess. Laws 434 (to be codified at N.C. Gen. Stat. § 15A-211) (requiring complete electronic recording of custodial interrogations in homicide cases).

reforms.²⁶⁵ More states have created independent bodies to review their crime laboratories in response to misconduct uncovered.²⁶⁶ Additional reforms include establishing and standardizing technical procedures, conducting further research on forensic techniques, performing regular audits, testing examiners for proficiency, enhancing disclosure obligations of analysts, and providing the defense with access to experts.²⁶⁷ Some prosecutors have also adopted reforms and conducted case reviews to locate additional erroneous convictions.²⁶⁸ In contrast, few states cur-

265. See Georgia H.R. 352 (Sub) (Apr. 20, 2007), available at http://www.legis.state.ga.us/legis/2007_08/pdf/hr352.pdf (on file with the *Columbia Law Review*) (creating commission to study eyewitness identification procedure reform); Act of May 17, 2007, 2007 Md. Laws 590, 590 (to be codified at Md. Code Ann., Pub. Safety § 3-505) (requiring law enforcement agencies to adopt written policies on eyewitness identification); Eyewitness Identification Reform Act, 2007 N.C. Sess. Laws 421 (to be codified at N.C. Gen. Stat. §§ 15A-284.50–53) (requiring reforms in eyewitness identification practices and creating task force to study additional reforms); W. Va. Code Ann. § 62-1E-2 (West, Westlaw through 2007 Second Ex. Sess.) (requiring reforms in eyewitness identification practices and creating task force to study additional reforms); Vesna Jaksic, States Look at Reforming Lineup Methods, *Nat'l L.J.*, Apr. 20, 2007 at 6, 6 (noting bills introduced in ten states); Nat'l Ass'n Criminal Def. Lawyers, State Legislation: Eyewitness Identification Reform, at http://www.nacdl.org/sl_docs.nsf/freeform/EyeID_legislation (last visited Nov. 8, 2007) (on file with the *Columbia Law Review*); see also *State v. Delgado*, 902 A.2d 888, 895–96 (N.J. 2006) (requiring that written or electronic record be made of out-of-court eyewitness identifications); Office of the Att'y Gen., N.J. Dep't of Law and Pub. Safety, Attorney General Guidelines for Preparing and Conducting Photo and Live Lineup Identification Procedures (Apr. 18 2001), available at <http://www.state.nj.us/lps/dcj/agguide/photoid.pdf> (on file with *Columbia Law Review*) (offering New Jersey model policy on conduct of eyewitness identifications); Training & Standards Bureau, Wis. Dep't of Justice, Model Policy and Procedure for Eyewitness Identification (Sept. 12, 2005), available at <http://www.doj.state.wi.us/dles/tns/EyewitnessPublic.pdf> (on file with the *Columbia Law Review*) (recommending improved eyewitness identification procedures).

266. See, e.g., Minn. Stat. § 299C.156 (2007) (establishing forensic laboratory advisory board); N.Y. Exec. Law § 995a-b (McKinney 2003) (establishing forensic science commission and requiring accreditation); Okla. Stat. Ann. tit. 74, § 150.37 (West 2007) (requiring accreditation); Tex. Code Crim. Proc. Ann. art. 38.35(d) (Vernon 2005) (requiring accreditation by Texas Department of Public Safety); Va. Code An. § 9.1-1101 (2006) (creating separate Department of Forensic Science and oversight committee); Nat'l Ass'n of Criminal Def. Lawyers, State Legislation: Crime Labs and Forensic Evidence Reform: Md. Puts Teeth in Bill to Regulate Crime Labs (May 7, 2007), at http://www.nacdl.org/sl_docs.nsf/issues/CrimeLab?OpenDocument (on file with the *Columbia Law Review*) (featuring Associated Press article describing pending Maryland bill and its provision for more rigorous enforcement of crime lab regulations than oversight efforts in other states). The federal government has encouraged reform. See 42 U.S.C. § 3797k(4) (Supp. IV 2007) (requiring that DNA laboratories receiving federal grants create mechanisms for external independent investigations).

267. See, e.g., Paul C. Giannelli, Regulating Crime Laboratories: The Impact of DNA Evidence, 15 *J.L. & Pol'y* 59, 72–76, 87–89 (2007) (discussing proficiency testing, accreditation of crime laboratories, and other avenues of reform); Henry C. Lee, Forensic Science and the Law, 25 *Conn. L. Rev.* 1117, 1124 (1993) (“Perhaps the most important issue in forensic science is the establishment of professional standards.”).

268. See Garrett, Aggregation, *supra* note 13, at 440–41 (discussing self-regulation and internal case review by prosecutors as ways to remedy systemic problems). Perhaps the most remarkable recent example has been the Dallas County prosecutor's creation of an

rently conduct reliability hearings or require disclosure or jury instructions regarding jailhouse informants.²⁶⁹

This movement represents one of the most significant efforts to reform our criminal procedure in decades, and it largely has not originated in the courts. Most state courts have not required such measures to improve the reliability of adjudication at trial, perhaps out of deference to the legislature and law enforcement. As noted, a few state supreme courts have required videotaping interrogations or eyewitness identification reform. Few state courts require instructions to juries on the unreliability of such evidence. In the case of Kirk Bloodsworth, one of the exonerees who was sentenced to death, the Court of Appeals of Maryland upheld the trial court's omission of expert testimony on the dangers of eyewitness misidentifications. The trial court excluded this testimony on the grounds that such evidence would be unnecessary and would "confuse or mislead" the jury.²⁷⁰ We now know, of course, that the jury was in fact gravely misled when it believed the eyewitnesses in that case.

On the other hand, in Michael Cromedy's appeal the New Jersey Supreme Court announced a new rule requiring jury instructions regarding the dangers of cross-racial misidentifications.²⁷¹ Still, judicial solutions involving jury instructions have downsides. In the eyewitness identification context, experts are expensive, juries may not understand instructions or expert testimony, and, more importantly, a misidentification may be very difficult for any expert, juror, or judge to detect if suggestion misled an eyewitness.²⁷² Efforts to better conduct and record eyewitness identifications, interrogations, forensic analysis, and other crucial steps during investigations may better ensure reliability.²⁷³ While the potential benefits and costs of the various types of investigative reform or enhanced factual review are beyond the scope of this piece, lawmakers and judges are increasingly considering such options as part of ongoing efforts to improve the accuracy of our system's judging of innocence.

B. *Substantive Errors and Criminal Review*

These findings also bolster scholarship contending that our criminal procedure rights skew the way lawyers litigate toward procedure and away

inhouse innocence project to review hundreds of old cases. See Sylvia Moreno, New Prosecutor Revisits Justice in Dallas, Wash. Post, Mar. 5, 2007, at A4.

269. See *supra* notes 122–123 and accompanying text (discussing fact that few states protect defendants from the unreliability of jailhouse informants' testimony).

270. *Bloodsworth v. State*, 512 A.2d 1056, 1063 (Md. 1986).

271. *State v. Cromedy*, 727 A.2d 457, 458–59 (N.J. 1999).

272. Cf. *supra* note 90 and accompanying text (stating that no exoneree received relief on suggestive eyewitness identification claim).

273. See Richard A. Leo et al., *Bringing Reliability Back in: False Confessions and Legal Safeguards in the Twenty-First Century*, 2006 Wis. L. Rev. 479, 520–35 (arguing for recording of custodial interrogations of suspects, use of hearings to assess reliability of confessions before trial, and new standard for judges to use in assessing reliability of confessions).

from substance.²⁷⁴ These exonerees often did not invoke factual claims during their appeals and postconviction proceedings, much less claims of their innocence. Once we look at state law and indirect means for challenging the facts at trial, higher percentages brought factual claims, but significant percentages still did not. Very few succeeded on any claims related to the factual evidence supporting their convictions. However, innocent convicts who did succeed on such factual claims would not have needed to later obtain DNA testing; we do not know how many innocent convicts receive relief in our system without a DNA exoneration.

Our system of criminal review certainly does not privilege factual claims. Locating an alibi witness, obtaining experts to challenge forensic evidence or undermine eyewitness identifications, or presenting evidence of defendants' lack of capacity requires substantial resources and time. Where neither law enforcement nor defense counsel develop crucial facts, perhaps due to underfunding,²⁷⁵ reviewing courts may be placed in a difficult position, tasked with judging innocence based on an inadequate record. William Stuntz has argued that our system biases appellate and postconviction advocacy toward procedural claims, which may be far more commonly raised at trial and on appeal because of their greater likelihood of success and ease of litigation, due to the fact that these claims may not require resource-intensive factual investigations.²⁷⁶ Given difficult constitutional standards, winning motions raising factual challenges remains unlikely, particularly postconviction, not only due to the doctrine, but also due to the practical difficulty of reviewing a trial record years later without documented factual investigation from closer to the time of the offense. Nor will defense lawyers likely be held accountable for their failure to develop a factual record at trial; only in unusual cases will a failure to investigate be deemed ineffective.²⁷⁷

Our system need not privilege procedural over factual claims. Most states have recently passed statutes to permit postconviction DNA testing and relief. Further reforms aimed at providing more robust factual review would come at a cost that our system has so far not been willing to bear. Reform efforts have chiefly focused on reform of law enforcement procedures during the criminal investigation and not on later assessment of the reliability of the evidence gathered. Enhanced factual review might, for example, require provision of costly investigative resources to allow trial attorneys to effectively develop facts in the first instance. If

274. See William J. Stuntz, *The Uneasy Relationship Between Criminal Procedure and Criminal Justice*, 107 *Yale L.J.* 1, 37–45 (1997) (discussing “defense attorneys’ incentive to skew their investment in the direction of more constitutional litigation and less litigation about the facts”).

275. See *supra* note 220 and accompanying text (describing underfunding).

276. See Stuntz, *supra* note 274, at 45 (describing how criminal procedure displaces “attorney investigation and litigation of the merits”).

277. See, e.g., *Wiggins v. Smith*, 539 U.S. 510, 524 (2003) (finding that “[c]ounsel’s decision not to expand their investigation . . . fell short of the professional standards that prevailed” in state at that time).

resources are provided for post-trial review, they may be best provided during the direct appeals, when convicts have counsel, and when sufficiency of the evidence claims can be raised. Most of those who did receive relief did so during the direct appeal, which bolsters the notion that factual review during direct appeals can play a crucial role in remedying miscarriages. However, given how long it took for evidence of innocence to surface in these exoneration cases, our system should also examine ways to enhance factual review during postconviction proceedings.

Reform efforts may also continue to develop alternatives to our current postconviction system that are designed to locate and prevent miscarriages of justice. Several states have responded to exonerations by creating new bodies tasked with judging innocence, called “innocence commissions,” empowered to examine possible wrongful convictions, study and propose reforms, and sometimes recommend the grant of a new trial.²⁷⁸ Such institutions may over time develop administrative expertise in judging innocence, authority to recommend measures to prevent wrongful convictions, or even formal regulatory authority. While innocence commissions remain a new and largely untested institutional approach, an investment in such specialist institutions remains entirely justified where generalist appellate and postconviction courts face such difficulties in assessing innocence.

C. *Reversal Rates in Serious Criminal Trials*

Reversal rates in serious rape and murder cases suggest reasons to invest in enhanced factual investigation and review. Regardless of how many unknown innocent convicts cannot be identified using DNA testing, these reversals themselves represent factually flawed cases. The members of the innocence group received a reversal rate of 14%, or 9% excluding capital cases. Several endured multiple criminal trials and convictions, with the cycle continuing until DNA testing finally intervened. Yet the matched comparison group, which included random rape and murder cases in the same states with the same convictions and reported decisions in the same years, had a statistically insignificant difference in the reversal rate.

Rape and murder appeals and postconviction proceedings may receive similarly high numbers of reversals due to the complexity of such cases, particularly where the evidence itself often consists of highly probative but also highly unreliable evidence such as eyewitness evidence. A second possibility is that high numbers of rape and murder convicts are innocent. Again, we cannot assess that second possibility, because we do not know how many in the matched comparison group were innocent;

278. Garrett, *Aggregation*, *supra* note 12, at 435–40 (describing development and models for innocence commissions in United States and United Kingdom, as well as alternative models for institutional reform).

none received DNA testing. We only know about the system's failures, and do not know how many other innocent convicts received reversals.

What these data show is that many serious criminal cases receive reversals on factual grounds. Half of the reversals in the matched comparison group were for errors relating to the reliability of key factual evidence at trial, and not solely procedural error. Similarly, slightly more than half of the reversals in the innocence group involved serious factual error. Studies documenting high acquittal and dismissal rates also suggest that murder and rape cases with equivocal evidence proceed to trial. Enhanced factual development and review may justify its cost if it can avert these reversals due to underlying factual errors. Though in most cases DNA testing cannot tell us whether a defendant is actually innocent, avoiding the need to redo factually flawed trials in serious criminal cases itself accomplishes an important goal.

D. *Misjudging Innocence*

Although the Supreme Court, over the past few decades, has oriented postconviction appeals away from procedural error and established the central relevance of "the likely accuracy of convictions" to the scope of habeas corpus,²⁷⁹ no claim of innocence is available under the U.S. Constitution.²⁸⁰

While both the Court and commentators agree that, in aspiration at least, "the central function of habeas is to redress constitutional errors that bear on the factual innocence of the defendant,"²⁸¹ many exonerees received rulings that error was harmless, given other error free and prejudicial evidence of their guilt. Few brought claims alleging their actual innocence, and almost none brought them with any success. Though these individuals knew they were innocent and should have desired to convey that information to courts, there may have been no cognizable claim available to do so. As discussed, federal courts lack any constitutional innocence claim, and while states have increasingly adopted postconviction DNA testing statutes, most continue to retain a series of barriers to relief. During the time period when most of these exonerees were litigating, most states had strict time limitations regarding claims based on newly discovered evidence of innocence. Until they obtained DNA evidence, many exonerees also lacked any new evidence of innocence. In

279. See *Teague v. Lane*, 489 U.S. 288, 313 (1989) (plurality opinion) ("[O]ur cases have moved in the direction of reaffirming the relevance of the likely accuracy of convictions in determining the available scope of habeas review."); *Murray v. Carrier*, 477 U.S. 478, 495 (1986) ("[P]rinciples of comity and finality . . . must yield to the imperative of correcting a fundamentally unjust incarceration." (quoting *Engle v. Isaac*, 456 U.S. 107, 135 (1982))).

280. Cf. *supra* notes 200–202 (discussing how federal courts will sometimes examine new *evidence* of innocence under, for example, *Brady* claims).

281. See Jordan Steiker, *Innocence and Federal Habeas*, 41 *UCLA L. Rev.* 303, 363 (1993) (citing *Stone v. Powell*, 428 U.S. 465, 491 n.31 (1976)).

some cases, the reason may have been that evidence of innocence was never investigated, preserved, or disclosed by law enforcement. Some may not have been ably represented, or may have lacked counsel during postconviction proceedings, in which some states do not provide counsel.²⁸² While some courts denied relief in the face of strong evidence of innocence, including DNA evidence, in other cases the fact that courts misjudged innocence is entirely understandable, given strict legal standards and the reality that, prior to DNA testing, many innocent convicts lacked meaningful evidence of innocence. Due to each of those structural features of our current system, the innocent could not successfully assert their innocence prior to obtaining DNA testing.

Even under a regime in which courts could more broadly grant relief postconviction based on evidence of innocence, neither judges nor any other actors could be expected to assess innocence absent a more comprehensively documented and reliable factual record. Developing such a record, as described, would require investment in accuracy enhancing procedures such as videotaping, providing resources for investigation, auditing of forensic evidence, and eyewitness identification reform. Most jurisdictions have not yet made these changes, though some reforms, such as blind administration of line-ups, are extremely inexpensive and may increasingly take hold.

These innocence cases include a disproportionate number of minorities, for reasons that may reflect their overrepresentation among convicts in the criminal system, as well as the role of race in rape investigations. Some scholars have suggested that a range of factors could explain this, particularly the incidence of cross-racial eyewitness identifications in these cases, as well as a relative lack of resources available to minority criminal defendants and patterns of bias in the criminal system.²⁸³ If, as described in the last section, DNA exonerations represent the tip of an iceberg, then the base of the iceberg, whatever its size, may also disproportionately consist of minority convicts. This racial justice concern should only elevate our unease over how effectively our system judges innocence.

Finally, the system did not work in some respects even after DNA technology offered the truth; rather, after many years of unsuccessful criminal appeals, most exonerees still faced obstacles to relief once DNA testing was available. Exonerees faced difficulties in obtaining DNA testing without law enforcement cooperation. Even after they obtained the DNA testing that exonerated them, forty-one had to obtain an executive pardon, often because they lacked any judicial remedy or because courts

282. See *supra* note 220 and accompanying text (discussing provision of indigent defense).

283. See Parker, Dewees & Radelet, *supra* note 41, at 127; see also Gross et al., *Exonerations*, *supra* note 14, at 548 (“[O]ne of the strongest findings of systematic studies of eyewitness evidence is that white Americans are much more likely to mistake one black person for another than to do the same for members of their own race.”).

denied relief. For example, in two cases, the Fourth Circuit denied relief to innocent men after initial DNA testing exonerated them.²⁸⁴ This reluctance suggests that our criminal system can make very poor cost-benefit decisions. After all, DNA testing is inexpensive and often provided by an innocence project, while continuing to incarcerate an innocent person is costly. Furthermore, despite the state's frequent intransigence, DNA testing provided important additional law enforcement benefits. In the DNA confirmation cases located, testing confirmed guilt, and in innocence cases, due to the reach of DNA databanks, a "cold hit" often inculpated the perpetrator.

Analysis of data regarding known innocent convicts, from their trials through their appeals and DNA exoneration, does not provide reasons to be optimistic that our system effectively prevents serious factual miscarriages at trial, detects them during appeals or postconviction proceedings, or remedies them through DNA testing. In time, as DNA testing is increasingly used earlier in the process to catch errors before criminal trials, fewer postconviction DNA exoneration cases may come to light.²⁸⁵ Nevertheless, in cases without relevant DNA evidence, the underlying sources of error, such as eyewitness misidentifications, coercive interrogations, lying jailhouse informants and unreliable forensic experts, will persist.

Moreover, a final statistic should disturb us: More than one quarter of all postconviction DNA exonerations (fifty-three) occurred in cases where DNA was available at the time of the criminal trial (the trial occurred from 1990 to the present).²⁸⁶ Even if they do not occur at the same rate, DNA exonerations may still occur in disturbing numbers. DNA exonerations may then for some time provide us with the opportunity to study miscarriages, so that we can try to prevent future miscarriages.

CONCLUSION

Though as Justice Powell wrote, "a prisoner retains a powerful and legitimate interest in obtaining his release from custody if he is innocent of the charge for which he was incarcerated,"²⁸⁷ the experiences of 200 innocent former convicts provides a body of examples in which our crimi-

284. The two cases are those of Larry Holdren, cited *supra* notes 198–199, and Darryl Hunt, where the panel found the DNA evidence "simply not sufficiently exculpatory to warrant a new trial." *Hunt v. McDade*, No. 98-6808, 2000 WL 219755, at *3 (4th Cir. Feb. 25, 2000) (unpublished opinion).

285. See Garrett, *Federal Wrongful Conviction Law*, *supra* note 13, at 110 (discussing implications of "[t]he [e]nd of [e]xoneration").

286. This data is further developed in Garrett, *Claiming Innocence*, *supra* note 202 (manuscript at 19–20). The reasons why the prisoners were wrongly convicted despite the availability of DNA at the time of the criminal trial include forensic fraud, advances in DNA technology since the time of trial, conviction despite DNA exclusion, the failure of defense counsel to request DNA testing, and the court's decision to deny the DNA request.

287. *Kuhlmann v. Wilson*, 477 U.S. 436, 452 (1986).

nal system failed to address, much less remedy, the sources of wrongful convictions. These exonerees could not effectively litigate their factual innocence, likely due to a combination of unfavorable legal standards, unreceptive courts, faulty criminal investigation by law enforcement, inadequate representation at trial or afterwards, and a lack of resources for factual investigation that might have uncovered miscarriages. Some exonerees were reconvicted by multiple juries. These innocence cases are not anomalies. Rape and murder convictions appear prone to reversals based on factual error. And lest one think that with the hindsight of DNA courts would rule differently, many exonerees had difficulty obtaining a vacatur even after DNA testing excluded them.

Our criminal system can judge innocence with greater accuracy. This study uncovers a range of areas in which courts misjudged innocence due to institutional constraints and legal doctrine. A range of policy choices can flow from these findings, and academics have begun to explore the implications of wrongful convictions for our criminal system.²⁸⁸ Our criminal system need not remain structurally averse to the correction of factual errors. However, to improve the judging of innocence by all involved in the criminal system would require an investment in additional resources for factual investigation and review, and a sustained effort to analyze the costs and benefits of such reforms. Legislators and criminal courts have begun to consider such changes, including the adoption of trial reforms, implementation of accuracy enhancing changes in law enforcement practices, and the creation of innocence commissions to investigate claims of innocence.²⁸⁹ Additional studies should be undertaken to examine the growing number of DNA exonerations, so that future efforts to reform our criminal system benefit from the lessons that we now can learn about how to better judge innocence.

288. See *supra* note 13 (offering academic perspectives).

289. See *supra* notes 258–269 and accompanying text (discussing reforms that would develop more accurate factual records).

APPENDIX A: THE FIRST 200 PERSONS EXONERATED BY POSTCONVICTION
DNA TESTING, 1989-2007²⁹⁰

Exoneree name	Convictions Reversed preDNA testing (1, 2)	Murder (M) / Rape (R) conviction / (O) Other crime of conviction	Capital Case	Claims Raised During all Appeals and Post-conviction or Nothing Reported (NR) ²⁹¹	Claims granted, resulting in reversal	Highest level of appeal reached: Direct Appeal (DA), State Postconv. (PC), Fed. Habeas (FH)	Evidence supporting the conviction: Confession (C), Eyewitness (E), Forensic Ev. (F), Informant or cooperating witness testimony (I)	State	Race (B) (C) (H) (A)
Abdal, Habib Warith (aka Vincent H. Jenkins)		R		DNA, SEI		FH	E	NY	B
Adams, Kenneth		MR		BU, EV, IAC, JC, JL, PM, SC		DA	E, F, I	IL	B
Alejandro, Gilbert		R		NR			E, F	TX	H
Alexander, Richard		R		NR			E, F	IN	B
Anderson, Marvin		R		NR			E	VA	B
Atkins, Herman		R		NR			E, F	CA	B
Avery, Steven		R		BR, FA, IAC, JC, JL, NDE, SEI		PC	E, F	WI	C
Bauer, Chester		R		EV, JS, SEI		DA	E, F	MT	C
Beaver, Antonio		O		EV, SEI		PC	E	MO	B
Bibbins, Gene		R		NR			E, F	LA	B
Bloodsworth, Kirk	1	MR	Y	BR, EV, JC, NDE, PM	BR	DA	E, F	MD	C
Booker, Donte		R		JC, PM		DA	E, F	OH	B
Boquete, Orlando		R		NR			E	FL	H

290. See *supra* Part I.A regarding methodology. This summary chart includes nine selected result columns and totals from a larger study database.

291. Abbreviations for Claims: AI (*Herrera* Actual Innocence), BR (*Brady*), BU (*Bruton*), CC (Coerced Confession), CE (Cumulative Error), CS (Improper Capital Sentencing Instructions), CU (Cruel and Unusual), DE (Willfull Destruction of Material Evidence), DP (Due Process Claim of Fundamental Unfairness at Trial), DJ (Double Jeopardy), DNA (Motion for DNA Testing), EV (State Law Evidence Claim), FA (Fourth Amendment (Search, Seizure, Arrest, etc.)), FAB (Fabrication of Evidence, IAAC (Ineffective Assistance of Appellate Counsel), IAC (Ineffective Assistance of Counsel), JC (*Jackson* Claim Regarding Insufficient Evidence for Reasonable Doubt), JI (Jury Instructions), JM (Jury Misconduct), JS (Jury Selection), MF (*Miranda* or *Edwards* Claim), NDE (State Court Newly Discovered Evidence Claim), PM (Prosecutorial Misconduct), PP (Pre-trial Publicity), RC (Sixth Amendment Right to Counsel), SC (Sentencing—Noncapital), SEI (Suggestive Eyewitness Identification), SCH (*Schlup* Claim to Excuse Default), WD (*Wade* Counsel at Lineup Claim), O (Other). State law evidentiary claims were not broken down, due to high levels of variation, while federal constitutional claims were itemized. See *supra* note 155 (describing these claims).

Exonerate name	Convictions Reversed preDNA testing (1, 2)	Murder (M) / Rape (R) conviction / (O) Other crime of conviction	Capital Case	Claims Raised During all Appeals and Post-conviction or Nothing Reported (NR)	Claims granted, resulting in reversal	Highest level of appeal reached: Direct Appeal (DA), State Postconv. (PC), Fed. Habeas (FH)	Evidence supporting the conviction: Confession (C), Eyewitness (E), Forensic Ev. (F), Informant or cooperating witness testimony (I)	State	Race (B) (C) (H) (A)
Bradford, Marcellius		MR		NR			C, F	IL	B
Bravo, Mark		R		EV, IAC, JC, JM, PM		FH	E, F	CA	H
Briscoe, Jonny		R		DJ, EV		DA	E, F	MO	B
Brisson, Dale		R		BR, DNA, JC		DA	E, F	PA	B
Bromgard, Jimmy Ray		R		IAC, JC, JM		PC	E, F	MT	C
Brown, Danny		MR		CE, EV, IAAC, JC, JI, SEI		PC	E	OH	B
Brown, Dennis		R		NR			C, E, F	LA	B
Brown, Roy		M		EV		PC	F, I	NY	C
Bullock, Ronnie		R		BR, DE, EV, FA, IAAC, JI, PM, RC, SC, SEI		FH	E	IL	B
Butler, A.B.		R		IAAC		PC	E	TX	B
Byrd, Kevin		R		EV		DA	E, F	TX	B
Callace, Leonard		R		DNA, JC, SC, SEI		PC	E, F	NY	C
Capozzi, Anthony		R		EV, JC, JI, SEI		DA	E	NY	C
Chalmers, Terry		R		JC, SEI		DA	E	NY	B
Charles, Clyde		R		CC, EV, FA, JS, PM, SEI, WD		FH	E, F	LA	B
Charles, Ulysses Rodriguez		R		NR			E	MA	B
Clark, Robert		R		NR			E	GA	B
Coco, Allen		R		NR			E, F	LA	B
Cotton, Ronald	1	R		EV	EV	DA	E	NC	B
Cowans, Stephan		O		EV, JC, JI		DA	E, F	MA	B
Criner, Roy		R		JC		DA	F	TX	C
Cromedy, McKinley	1	R		JI	JI	DA	E	NJ	B
Crotzer, Alan		R		NR			E, F	FL	B
Cruz, Rolando	2	MR	Y	BU, EV, JC	BU, EV	DA	C, I	IL	H
Dabbs, Charles		R		EV		DA	E, F	NY	B
Danziger, Richard		R		NR			F, I	TX	C
Davidson, Willie		R		NR			E	VA	B
Davis, Dewey		R		EV, JC, SC		DA	E	WV	C
Davis, Gerald		R		EV, JC, JI, PM, SC		PC	E, F	WV	C

Exonerée name	Convictions Reversed preDNA testing (1, 2)	Murder (M) / Rape (R) conviction / (O) Other crime of conviction	Capital Case	Claims Raised During all Appeals and Post-conviction or Nothing Reported (NR)	Claims granted, resulting in reversal	Highest level of appeal reached: Direct Appeal (DA), State Postconv. (PC), Fed. Habeas (FH)	Evidence supporting the conviction: Confession (C), Eyewitness (E), Forensic Ev. (F), Informant or cooperating witness testimony (I)	State	Race (B) (C) (H) (A)
Daye, Frederick Renee		R		EV, FA, IAC, JC, JI, JS, NDE, SC, SEI		FH	E, F	CA	B
Dedge, Wilton	1	R		DNA, EV, NDE, SC	EV	DA	E, F, I	FL	C
Deskovic, Jeff		MR		CC, DP, EV, 5th Am., 6th Am.		FH	C	NY	C
Diaz, Luis		R		EV, NDE		PC	E	FL	H
Dixon, John		R		NR			E	NJ	B
Dominguez, Alejandro		R		NR			E, F	IL	H
Doswell, Thomas		R		NR			E	PA	B
Dotson, Gary		R		JC, NDE, PM, SC		PC	E, F	IL	C
Durham, Timothy		R		NR			E, F	OK	C
Echols, Douglas		R		NR			E, F	GA	B
Elkins, Clarence		MR		EV, IAC, JC, NDE, PM		PC	E	OH	C
Erby, Lonnie		R		IAC, SC		PC	E	MO	B
Evans, Michael		MR		JC, JI, PM		DA	E	IL	B
Fain, Charles Irvin		MR	Y	CS, DE, EV		PC	F, I	ID	C
Fappiano, Scott		R		BR, JC, NDE, PM, SC, SEI		DA	E, F	NY	C
Fountain, Wiley		R		NR			E	TX	B
Fritz, Dennis		M		BR, CE, EV, IAAC, IAC, JC, JI, JS, PM, SC		FH	F, I	OK	C
Fuller, Larry		R		NR			E, F	TX	B
Godschalk, Bruce		R		DNA		PC	C, E, F, I	PA	C
Gonzalez, Hector		M		EV, IAAC, JC		PC	E, F	NY	H
Good, Donald Wayne	1	R		PM	PM	DA	E, F	TX	C
Goodman, Bruce Dallas		MR		JC		DA	E, F	UT	C
Gossett, Andrew		R		JC		PC	E	TX	C
Gray, Anthony		MR		NR			C	MD	B
Gray, David A.		MR		EV, IAAC, JC, JS, PM, SC		FH	E, I	IL	B
Gray, Paula	1	MR		DNA, IAC, JC, SC	IAC	FH	C, E, F, I	IL	B
Green, Anthony		R		EV, IAC, JI, PM, SEI		DA	E, F	OH	B
Green, Edward		R		NR			E, F	DC	B

Exonerree name	Convictions Reversed preDNA testing (1, 2)	Murder (M) / Rape (R) conviction / (O) Other crime of conviction	Capital Case	Claims Raised During all Appeals and Post-conviction or Nothing Reported (NR)	Claims granted, resulting in reversal	Highest level of appeal reached: Direct Appeal (DA), State Postconv. (PC), Fed. Habeas (FH)	Evidence supporting the conviction: Confession (C), Eyewitness (E), Forensic Ev. (F), Informant or cooperating witness testimony (I)	State	Race (B) (C) (H) (A)
Green, Kevin Lee		M		NR			E	CA	C
Gregory, William		R		NR			E, F	KY	B
Halstead, Dennis		MR		BU, EV, JC		DA	F, I	NY	C
Harris, William		R		NR			E, F	WV	B
Harrison, Clarence		R		EV, JC, SC		DA	E	GA	B
Hayes, Travis		M		EV, JC, RC		DA	C, E	LA	B
Henton, Eugene		R		NR			E	TX	B
Hernandez, Alejandro	2	MR	Y	BU, JC	BU	DA	C, E, I	IL	H
Hicks, Anthony		R		NR			E, F	WI	B
Holdren, Larry		R		DE, DJ, EV, IAC, JC, JI, PM, SEI		FH	E, F	WV	C
Holland, Dana		MR		NR			E	IL	B
Honaker, Edward		R		NR			E, F	VA	C
Hunt, Darryl	1	M		AI, BR, EV, IAC, JI, PM, SEI, WD	EV	FH	E, I	NC	B
Jackson, Willie		R		IAC, NDE, SC		FH	E, F	LA	B
Jean, Lesly	1	R		BR, DP, EV, JC, RC, SEI	BR, DP, RC	FH	E, F	NC	B
Jimerson, Vermeal	1	MR	Y	CS, EV, FAB, IAC, JC	FAB	PC	I	IL	B
Johnson, Albert K.		R		IAC, JI, SC		FH	E	CA	B
Johnson, Calvin Crawford		R		EV, JI, SC		PC	E, F	GA	B
Johnson, Larry		R		JS		DA	E, F	MO	B
Johnson, Richard		R		NR			E	IL	B
Jones, David Allen		MR		NR			C, F	CA	Unknown
Jones, Joe		R		BR, NDE, RC		DA	E	KS	B
Jones, Ronald		MR	Y	CC, CS, EV, FA, JI, JC, PM		DA	C, E	IL	B
Karage, Entre Nax		M		JC		DA		TX	A
Kogut, John		MR		CC, PM		DA	C, F, I	NY	C
Kordonowy, Paul D.		R		EV, JC		DA	F	MT	C
Kotler, Kerry		R		SC		DA	E, F	NY	C
Krone, Ray	1	MR	Y	EV, JI	EV, JI	PC	F	AZ	C

Exonerée name	Convictions Reversed preDNA testing (1, 2)	Murder (M) / Rape (R) conviction / (O) Other crime of conviction	Capital Case	Claims Raised During all Appeals and Post-conviction or Nothing Reported (NR)	Claims granted, resulting in reversal	Highest level of appeal reached: Direct Appeal (DA), State Postconv. (PC), Fed. Habeas (FH)	Evidence supporting the conviction: Confession (C), Eyewitness (E), Forensic Ev. (F), Informant or cooperating witness testimony (I)	State	Race (B) (C) (H) (A)
Laughman, Barry		MR		NR			C	PA	C
Lavernia, Carlos Marcos		R		AI, IAC, JC, SEI		FH	E, F	TX	H
Linscott, Steven	1	MR		BR, DE, JC, JM, JS, PM	JC, PM	DA	C, F	IL	C
Lloyd, Eddie Joe		MR		BR, CC, EV, MF		FH	C	MI	B
Lowery, Eddie		R		NR			C	KS	C
Mahan, Dale		R		EV, JS		DA	E	AL	C
Mahan, Ronnie		R		EV, JS		DA	E	AL	C
Maher, Dennis		R		NR			E	MA	C
Mathews, Ryan		M	Y	NR			E, I	LA	B
Mayes, Larry		R		EV, JC, PM, SC		DA	E	IN	B
McCray, Anton		R		CC, EV		DA	C, F, I	NY	B
McGee, Arvin		R		NR			E, F	OK	B
McMillan, Clark Jerome		R		AI, BR, DNA, EV, FAB, IAC, JC, SEI		FH	E, F	TN	B
McSherry, Leonard		R		JC, NDE, SC		PC	E	CA	C
Mercer, Michael		R		DNA, IAC, SC		PC	E	NY	B
Miller, Billy Wayne		R		NR			E	TX	B
Miller, Neil		R		NR			E, F	MA	B
Miller, Jerry		R		FA, IAAC, IAC, PM, RC, SEI		FH	E	IL	B
Miller, Robert		MR	Y	NR			C, F	OK	B
Mitchell, Marvin		R		CC		DA	E, F	MA	B
Mitchell, Perry		R		EV		DA	E	SC	B
Moon, Brandon		R		NR			E, F	TX	C
Moto, Vincent		R		AI, DP, EV, IAC, SC		PC	E	PA	B
Mumphrey, Arthur		R		EV		PC	E, F, I	TX	B
Nelson, Bruce		MR		MF, RC		FH	I	PA	B
Nesmith, Willie		R		NR			E	PA	Unknown
Newton, Alan		R		IAC, JI, SC, SEI		FH	E	NY	B
O'Donnell, James		R		NR			E	NY	C

Exonerate name	Convictions Reversed preDNA testing (1, 2)	Murder (M) / Rape (R) conviction / (O) Other crime of conviction	Capital Case	Claims Raised During all Appeals and Post-conviction or Nothing Reported (NR)	Claims granted, resulting in reversal	Highest level of appeal reached: Direct Appeal (DA), State Postconv. (PC), Fed. Habeas (FH)	Evidence supporting the conviction: Confession (C), Eyewitness (E), Forensic Ev. (F), Informant or cooperating witness testimony (I)	State	Race (B) (C) (H) (A)
Ochoa, Christopher		MR		NR			C, F	TX	H
Ochoa, James		O		NR			E, F	CA	H
Ollins, Calvin		MR		FA, CC		FH	C, F, I	IL	B
Ollins, Larry		MR		CE, EV, PM		DA	F, I	IL	B
Ortiz, Victor		R		EV, IAC, JC, JI, SC		DA	E	NY	H
Pendleton, Marlon		R		RC		DA	E	IL	B
Peterson, Larry		MR		NR			F, I	NJ	B
Pierce, Jeffrey Todd		R		EV, IAC, JI, JM, NDE, PM		DA	E, F	OK	C
Piszczek, Brian		R		IAC, JC, SEI		DA	E	OH	C
Pope, David Shawn		R		EV, JI		DA	E, F	TX	C
Powell, Anthony		R		NR			E	MA	B
Rainge, Willie	1	MR		EV, FAB, IAC, JC, JI, JS, PM, SC	IAC, SC	DA	E, F, I	IL	B
Restivo, John		MR		BR, EV, JC		DA	F, I	NY	C
Reynolds, Donald		R		DNA, SC		DA	E	IL	B
Richardson, James		MR		NR			F	WV	B
Richardson, Kevin		R		JC, MF, RC		DA	C, F, I	NY	B
Robinson, Anthony		R		EV, FA, JI, JS, PM, WD		DA	E	TX	B
Rodriguez, George		R		DJ, SC		DA	E, F	TX	H
Rollins, Lafonso		R		NR			C	IL	B
Rose, Peter		R		NR			E	CA	C
Ruffin, Julius		R		IAC, JS		FH	E, F	VA	B
Saecker, Frederic		R		NR				WI	C
Salaam, Yusef		R		BR, BU, EV, JM		DA	C, F, I	NY	B
Salazar, Ben Santana, Raymond Sarsfield, Eric Saunders, Omar		R R R MR		NR NR NR BU, EV, PM, SC		 DA	E, F C, F, I E F, I	TX NY MA IL	H B C B
Scott, Calvin Lee		R		FA, SC		DA	F	OK	B
Scott, Samuel		R		NR			E, F	GA	B
Scruggs, Dwayne D.		R		IAAC		FH	E	IN	B

Exonerée name	Convictions Reversed preDNA testing (1, 2)	Murder (M) / Rape (R) conviction / (O) Other crime of conviction	Capital Case	Claims Raised During all Appeals and Post-conviction or Nothing Reported (NR)	Claims granted, resulting in reversal	Highest level of appeal reached: Direct Appeal (DA), State Postconv. (PC), Fed. Habeas (FH)	Evidence supporting the conviction: Confession (C), Eyewitness (E), Forensic Ev. (F), Informant or cooperating witness testimony (I)	State	Race (B) (C) (H) (A)
Shepard, David		R		NR			E, F	NJ	B
Smith, Billy James		R		NR			E, F	TX	B
Smith, Frank Lee		MR	Y	CS, DNA, EV, IAC, JC, NDE, PM		PC	E	FL	B
Smith, Walter D.		R		BR, DNA, EV, IAC, JC, PM, SEI		DA	E	OH	B
Snyder, Walter		R		CC, FA, SEI		DA	E, F	VA	B
Sutherlin, David Brian		R		EV, JC, SC		DA	E, F	MN	B
Sutton, Josiah		R		IAC		DA	E, F	TX	B
Terry, Paul		MR		JC, JI, PM		DA	E	IL	B
Thomas, Victor Larue		R		NR			E	TX	B
Thurman, Phillip Leon		R		NR			E, F	VA	B
Tillman, James		R		EV, IAAC, IAC, JI, JS, JI		PC	E, F	CT	B
Toney, Steven		R		DNA, DP, EV, IAC, JI, JS, PM, SC, SEI		FH	E	MO	B
Townsend, Jerry		MR		EV		DA	C	FL	B
Turner, Keith		R		PM		DA	E	TX	B
Vasquez, David		M		NR			C, E, F	VA	H
Velasquez, Eduardo		R		NR			E, F	MA	H
Villasana, Armand		R		NR			E	MO	H
Waller, James		R		NR			E	TX	B
Wallis, Gregory		R		NR			E, I	TX	C
Wardell, Billy		R		EV, JC, SC, SEI		DA	E	IL	B
Warney, Douglas		M		EV, IAC, MF, RC		FH	C, F	NY	C
Washington, Calvin		MR		EV, FA, PM		DA	E, I	TX	B
Washington, Earl		MR	Y	BR, CC, CS, EV, IAC, MF, PP, RC		FH	C, F	VA	B
Waters, Kenneth		M		BR, CC, EV, JC, JI		DA	F	MA	C
Waters, Leo		R		BR, EV, JI, SEI		PC	E, F	NC	C
Watkins, Jerry	1	MR		BR, EV, NDE	BR	FH	I	IN	C
Webb, Mark	1	R		DJ, EV, JC	EV	DA	E, F	TX	C

Exonerate name	Convictions Reversed preDNA testing (1, 2)	Murder (M) / Rape (R) conviction / (O) Other crime of conviction	Capital Case	Claims Raised During all Appeals and Post-conviction or Nothing Reported (NR)	Claims granted, resulting in reversal	Highest level of appeal reached: Direct Appeal (DA), State Postconv. (PC), Fed. Habeas (FH)	Evidence supporting the conviction: Confession (C), Eyewitness (E), Forensic Ev. (F), Informant or cooperating witness testimony (I)	State	Race (B) (C) (H) (A)
Webb, Thomas		R		EV, JC, JI, SEI		DA	E, F	OK	B
Webb, Troy		R		JS		DA	E, F	VA	B
Webster, Bernard		R		WD		DA	E, F	MD	B
Whitfield, Arthur Lee		MR		NR			E	VA	B
Whitley, Drew		M		DNA, EV, IAC, PM		PC	E, F, I	PA	B
Williams, Dennis	1	MR	Y	EV, FA, IAC, JC, JS, PM	IAC	DA	E, F, I	IL	B
Williams, Michael Anthony		R		NR			E	LA	B
Williams, Willie		R		EV		DA	E	GA	B
Williamson, Ronald	1	MR	Y	BR, CS, EV, IAAC, IAC, JC, JI, JM, RC	IAC	FH	C, E, F, I	OK	C
Willis, Calvin		R		NR			E, F	LA	B
Willis, John		R		DNA, EV, NDE		PC	E	IL	B
Wise, Kharey		R		FA, JC, MF		DA	C, F, I	NY	B
Woodall, Glen		R		DJ, DNA, EV, JC, JI, JM, SC, SEI		PC	E, F	WV	C
Woods, Anthony		R		JI, JS		PC	E, F	MO	B
Wyniemko, Kenneth		R		EV, IAC, PM		FH	E, F	MI	C
Yarris, Nicholas		MR	Y	AI, BR, CC, CS, DE, DNA, DP, EV, IAC, JC, JI, JM, JS, NDE, PM, RC, SC, SEI		FH	C, E, F, I	PA	C
Youngblood, Larry		R		DE		DA	E	AZ	B

**APPENDIX B: PERSONS SENTENCED TO DEATH AND THEN EXONERATED BY
POSTCONVICTION DNA TESTING, 1989-2006**

Exoneratee name	Convictions Reversed (0, 1, 2)	Murder (M) / Rape (R) conviction	Claims Raised During all Appeals And Postconviction or Nothing Reported (NR)	Claims granted, resulting in reversal	Highest level of appeals reached: Direct Appeal (DA), State Post-Conv. (PC), Federal Habeas (FH)	Evidence supporting the conviction: Confession (C), Eyewitness (E), Forensic Evidence (F), Informant or cooperating testimony (I)	State	Race (B), (C), (H), (A)
Bloodsworth, Kirk	1	MR	BR, EV, JC, NDE, PM	BR	DA	E	MD	C
Cruz, Rolando	2	MR	BU, EV, JC	BU, EV	DA	C, I	IL	H
Fain, Charles Irvin		MR	CS, DE, EV		PC	F, I	ID	C
Hernandez, Alejandro	2	MR	BU, JC	BU	DA	C, E, I	IL	H
Jimerson, Vermeal	1	MR	CS, DP, EV, FAB, IAC, JC	FAB	PC	I	IL	B
Jones, Ronald		MR	CC, CS, EV, FA, JC, JL, PM		DA	C, E	IL	B
Krone, Ray	1	MR	EV, JI	EV, JI	PC	F	AZ	C
Matthews, Ryan		M	NR			E, I	LA	B
Miller, Robert		MR	NR			C, F	OK	B
Smith, Frank Lee		MR	CS, DNA, EV, IAC, JC, NDE, PM		PC	E	FL	B
Washington, Earl		MR	BR, CC, CS, EV, IAC, MF, PP, RC		FH	C, F	VA	B
Williams, Dennis	1	MR	EV, FA, IAC, JC, JS, PM	IAC	DA	E, F, I	IL	B
Williamson, Ronald	1	MR	BR, CS, EV, IAAC, IAC, JC, JL, PM, RC	IAC	FH	C, E, F, I	OK	C
Yarris, Nicholas		MR	AI, BR, CC, CS, DE, DNA, DP, EV, IAC, JC, JL, JM, JS, NDE, PM, SC, SEI, RC		FH	C, E, F, I	PA	C

APPENDIX C: CHARACTERISTICS OF THE DNA CONFIRMATION GROUP

The group of individuals for whom DNA testing confirmed guilt raises selection issues, because the cases uncovered, chiefly through news reports, involved higher percentages of rape-murders, murders, and capital sentences than the innocence group. Fifty-seven percent, or thirty-six, of the sixty-three DNA confirmation cases located had written decisions. Unlike the innocence group, which is dominated by rape convictions, this group of thirty-six involves fifteen rape convictions, eleven murder convictions, ten rape-murder convictions, and fifteen death sentences. Perhaps for this reason, a substantially higher percentage of these guilty convicts persisted in filing federal habeas corpus petitions—fourteen of thirty-six with written decisions (39%).

Far less information was available about the cases in which DNA evidence confirmed the conviction. From what could be gathered from written decisions, eyewitness testimony supported the convictions of twelve, forensic evidence supported the convictions of seventeen, and confessions supported the convictions of at least five. Few raised claims regarding eyewitness identifications, destruction of evidence, or fabrication of evidence, though all who confessed raised claims on appeal.

The thirty-six with written decisions in their cases received two reversals, but they raised similar claims, including innocence claims,²⁹² and did so in far higher percentages than exonerees.²⁹³ The selection issues noted may explain this, including the willingness of the persons in this group to seek DNA testing despite their guilt, and also the disproportionate number facing execution. Furthermore, many in this group may have had comparatively weak cases; after all, those arrested at the crime scene would be unlikely to later receive postconviction DNA testing.

There were two reversals in the DNA confirmation group, both in noncapital cases. One involved an improper jury instruction and the

292. Eighteen, or half of those with written decisions, raised *Jackson* claims, and none received relief. Five raised actual innocence claims and one a state newly discovered evidence claim; 17% of those with written decisions raised such claims and none received relief. Four raised *Brady* claims and none received any relief. Twelve statements were made by judges regarding guilt, three noting “overwhelming” evidence of guilt. One statement was made in the group regarding perceived innocence; as one might expect, fewer statements were made regarding innocence.

293. Of the thirty-six in the DNA confirmation group with written decisions, twenty-four raised state law evidentiary claims (67%), twenty raised ineffective assistance of counsel claims (56%), eighteen raised challenges to jury instructions (50%), eighteen raised *Jackson* claims (50%), thirteen raised prosecutorial misconduct claims (36%), thirteen raised suggestive eyewitness identifications claims (36%), twelve raised challenges to jury selection (33%), five raised coerced confession claims (14%), five raised *Herrera* actual innocence claims (14%), four raised *Brady* claims (11%), four raised *Schlup* claims and destruction of evidence claims (11%), and one raised fabrication of evidence and double jeopardy claims (3%). Comparing these numbers to the innocent in Table 4 shows that for many claims, the guilty were far more litigious.

other chiefly involved a violation of the Sixth Amendment right to confront adverse witnesses. None of the fifteen capital cases in the group received reversals.²⁹⁴ This suggests that the unusual selection of these cases makes them atypical, even among capital cases, because, according to the Liebman study, more than two-thirds of all capital cases receive reversals.²⁹⁵ There were only twenty-one noncapital cases in the group with written decisions, meaning that with two reversals, the noncapital reversal rate was 10%. No comparison can be made with any confidence, however, given the very small sample size and, again, the unusual selection of the DNA confirmation group.

294. The group included far more procedural default rulings and also more dissents: the higher proportion of capital cases likely explains these higher numbers. Courts dismissed fifty-five claims for procedural default reasons, indicating a high degree of procedural noncompliance. Twelve in the group, or 33% of the thirty-six with written decisions, received a dissent, indicating greater division among judges.

295. See Liebman et al., *supra* note 137, at 5, 124 nn.40–41 (finding 68% reversal rate nationally in capital cases).