# CITATIONS IN THE U.S. SUPREME COURT: AN EMPIRICAL STUDY OF THEIR USE AND SIGNIFICANCE

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*Supreme Court citations are rarely the subject of rigorous analysis. This Article presents an empirical examination of Supreme Court opinion citation practices since World War II, with a focus on the era from the Warren Court through the end of the Rehnquist Court. After theoretically analyzing the role of citations in judicial opinions and their significance, we explain how they may be used as a test of stare decisis and the Court's projection of power and legitimation of its authority. We measure both the raw number of citations in majority opinions and the significance of the cases cited (using a calculation of their network centrality at the time of the decision). Various factors significantly influence citation frequency and choice, including the type of case. After controlling for these factors, we consider the relative citation practices of the Justices of the Court since the 1950s. This method allows us to find that political legitimation of decisions is a key determinant of citations, but that legal factors also matter. We also explore the citation practices of individual Justices. Our findings are consistent with the conventional wisdom in some instances, but serve to dispel other common beliefs. For example, we find that Justices Black and Douglas showed relatively little devotion to precedents but the Warren Court more generally was concerned about stare decisis. In the recent era, Justice Souter stands out for his citation practices. Finally, we examine the implications, on future citation use,*

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*of an opinion's volume of citations to precedent, and their respective network centrality.*

Why do Justices cite cases in their opinions? Why do they choose particular citations to include in those opinions?[1] And what are the implications of those citation choices? The facile answer—they mechanistically base their decisions entirely on the best applicable precedents—cannot be sustained in its strongest version. Different Justices clearly make different citation choices, and the cases emphasized by a dissenting opinion may be quite different than those relied upon in the majority opinion.

No case is exactly identical to prior cases, conclusively governed by particular past opinions, and the Supreme Court selects the most difficult cases for resolution, so considerable discretion is necessary in evaluating the significance of prior precedents for its decisions. There are never truly binding, vertical precedents at the Supreme Court level, and the Justices occasionally even overturn their prior precedents. Justices reach very different conclusions about the correct disposition of a particular case, even though the precedents they consider are identical, and they occasionally accuse one another of manipulating or ignoring important precedent. In this Article, we provide an empirical analysis of the Justices' citation practices to assess why Justices cite cases in their opinions, how they differ, and how those decisions matter for the practical development of the law.

Citations function something like the currency of the legal system. An opinion's references to authoritative legal materials, most often the Court's own prior decisions, form the fundamental justification for a judicial decision. Of all citations, those to prior opinions are the most common, demonstrating the Court's respect for stare decisis.[2] The doctrine of stare decisis is said to reflect "the fundamental values of the legal process."[3] Alexander Hamilton declared that it was "indispensable that

1. An early law review article observed that "[t]he reader of a judicial opinion seldom finds any clear indication of the reasons for citation of authorities in it." John Henry Merryman, *The Authority of Authority: What the California Supreme Court Cited in 1950*, 6 STAN. L. REV. 613, 614 (1954) [hereinafter Merryman, *Authority of Authority*]. The citations in opinions have "great practical and theoretical importance," but our understanding of citation practice has not advanced much since this time. John Henry Merryman, *Toward a Theory of Citations: An Empirical Study of the Citation Practice of the California Supreme Court in 1950, 1960, and 1970*, 50 S. CAL. L. REV. 381, 381 (1977) [hereinafter Merryman, *Toward a Theory of Citations*]. Judge Posner has argued for increased empirical study of citations to improve our understanding of judicial decisions. *See generally* Richard A. Posner, *An Economic Analysis of the Use of Citations in the Law*, 2 AM. L. & ECON. REV. 381 (2000). Without such study, he argues, "speculation is rampant and knowledge meager." RICHARD A. POSNER, FRONTIERS OF LEGAL THEORY 411 (2001).

2. *See* Glenn A. Phelps & John B. Gates, *The Myth of Jurisprudence: Interpretive Theory in the Constitutional Opinions of Justices Rehnquist and Brennan*, 31 SANTA CLARA L. REV. 567, 589 tbl.1, 590 (1991) (providing data showing that case citations are by far the most common source of authority invoked in opinions).

3. Jonathan R. Macey, *The Internal and External Costs and Benefits of Stare Decisis*, 65 CHI.-KENT L. REV. 93, 93 (1989).

[judges] should be bound down by strict rules and precedents" in order to "avoid an arbitrary discretion in the courts."[4] The Court has declared that "[a]dherence to precedent is, in the usual case, a cardinal and guiding principle of adjudication."[5] In the plurality opinion declining to overrule *Roe v. Wade*, Justices O'Connor, Kennedy, and Souter declared that "respect for precedent" was "the very concept of the rule of law."[6] The use and practical effect of citations has received little rigorous analysis, however.

There is a longstanding and burgeoning pattern of empirical study of judicial decisions focusing on ideological decision-making practices, but the subject of legal citations has surprisingly seen very little empirical study.[7] Few of the existing studies address "the interesting . . . questions . . . whether and how much law matters . . . how ideology and law interact with or affect each other, and how these interactions vary from case to case or from Justice to Justice."[8] Only a handful of studies attempt to systematically understand why the Justices cite cases and the implications those citations have for the future development of law.[9] Yet this subject of study provides the most promising frontier for future empirical research into judicial decision making and will provide new understandings of the development of law.

We begin this Article with a theoretical analysis of the meaning of citations. Researchers have developed a variety of theories for the Court's citation practice. These include the standard legal model that stare decisis determines judicial outcomes, as well as a political model that citations are irrelevant and serve only as a mask for the Justices' political preferences.[10] A more refined theory suggests that citations are not wholly determinative of outcomes but operate as an important influence and constraint on Court decisions, because of a need for protecting the Court's political legitimacy or simply concern for the principles of stare decisis.

Part II of this Article reviews the extant research on citations. This research is far more limited than studies of other aspects of judicial decision making, and it has almost entirely omitted analysis of comparative judicial citation practice in opinions. The past research, however, lends

4. THE FEDERALIST No. 78, at 471 (Alexander Hamilton) (Clinton Rossiter ed., 1961).

5. California v. Fed. Energy Regulatory Comm'n, 495 U.S. 490, 499 (1990).

6. Planned Parenthood of Se. Pa. v. Casey, 505 U.S. 833, 854 (1992).

7. *See* Stefanie A. Lindquist & Frank B. Cross, *Empirically Testing Dworkin's Chain Novel Theory: Studying the Path of Precedent*, 80 N.Y.U. L. REV. 1156, 1157 (2005) (reporting that "[p]erhaps the most important, yet understudied, area of legal research involves precedent").

8. Carolyn Shapiro, *Coding Complexity: Bringing Law to the Empirical Analysis of the Supreme Court*, 60 HASTINGS L.J. 477, 487 (2009).

9. For the most comprehensive empirical study of the Court's interpretation of precedent (i.e., a citation to a case that has potential legal effect on the cited case), see THOMAS G. HANSFORD & JAMES F. SPRIGGS II, THE POLITICS OF PRECEDENT ON THE U.S. SUPREME COURT 13–14 (2006) (providing a theory for why the Court interprets precedent and testing their theory on all the Court's treatments of precedent between the Court's 1946 and 1999 terms).

10. *See infra* Part I.A–B.

crucial support to our analysis. The prior empirical analyses have demonstrated that precedent does indeed exert some influence on Supreme Court decisions.[11] Moreover, research has suggested that the Justices' choice of precedents to cite can have a significant impact on the course of the law, as reflected by later decisions.[12] This research confirms the value of studying citation practice.

Part III presents our own empirical analysis of citation practice at the Court. We consider citation rates in Supreme Court opinions over time and other factors that may influence the number of citations in an opinion (such as type of case). Once we isolate these influences on citation counts, we explore whether the number of citations is associated with the need to legitimize decisions that may be entirely ideological in nature or whether other factors, including the law, influence the cases cited.

In Part IV, we examine the different citation practices of the Justices of the Vinson, Warren, Burger, and Rehnquist Courts. Commentators have opined on the relative devotion of different Justices to stare decisis, and our methods enable an empirical test of these opinions. We conduct a comparison of the citation practices of the different members of the Vinson, Warren, Burger, and Rehnquist Courts and obtain a rough list of the relative commitment to stare decisis for the Justices of those time periods. There are very substantial differences among the Justices of this period.

Our concluding Part examines the significance of the citations in an opinion for the development of the law. We examine the association between the number and nature of citations in an opinion and the number of subsequent citations received by that opinion, at the Supreme Court and in lower courts. There is a statistically significant association between citation practice and the future impact of an opinion, though the nature of the citations is far more important for this effect than the simple number of citations in a majority opinion for the Court.

## I. THE MEANING OF CITATIONS

Citation to prior cases is not an inevitability. In France, "no precedent is ever quoted by the judgments of the *Cour de Cassation*."[13] Nor did the Supreme Court of the United States cite much precedent in the early decades of the nation.[14] Yet the practice of citing prior opinions

11. *See infra* Part II.

12. *See infra* text accompanying notes 194–201.

13. Michele Taruffo, *Institutional Factors Influencing Precedents*, *in* INTERPRETING PRECEDENTS: A COMPARATIVE STUDY 437, 454 (D. Neil MacCormick & Robert S. Summers eds., 1997).

14. James H. Fowler et al., *Network Analysis and the Law: Measuring the Legal Importance of Precedents at the U.S. Supreme Court*, 15 POL. ANALYSIS 324, 333 & fig.4a (2007) (using network analysis to create measures of case centrality based on citation patterns in Supreme Court opinions and showing that early Court opinions cited relatively few precedents).

as a basis for Supreme Court decisions is now the rule, and opinions typically cite a number of prior cases as precedents. This Part explores the possible reasons for the practice.

An opinion's citations are the operationalization of the practice of stare decisis. Justices place their holding in the existing body of the law by demonstrating that prior decisions directed their opinion. The precedents serving as citations "may be viewed as the principal asset of a judicial system," and the higher their quality, "the better the judicial system may be said to be."[15] In our common law tradition, stare decisis is apparently central to judicial decision making. An "appeal to precedent is the primary justification justices provide for the decisions they reach."[16] "[T]he authority of precedent is generally thought to be one of the most important institutional characteristics of judicial decision making."[17] A recent study, for example, shows that variation in the authority of precedent influences the way in which the Court chooses to legally treat those cases; even after controlling for the ideological position of the Court and other factors related to the citation of precedent, this research finds that the Court is more likely to follow a precedent if it has greater legal authority.[18] Greater reliance on precedent is also commonly associated with judicial restraint.[19] Yet even those researchers who have studied citations have expressed "reservations about their meaningfulness."[20] Before embarking on our empirical analysis, it is important to understand the theories of why citations may or may not have practical meaning.

While citations are almost universally considered significant by legal academics, their practical meaning is still contested. This Part considers three predominant theories regarding the meaning of citations: (1) that they are the basis for the Court's decision, as stare decisis dictates;[21] (2) that they are a mere mask for the true determinants of the decision, which is actually based on ideological or other nonlegal reasons;[22] and (3) that they are essential to the Court's institutional legitimacy and provide some influence and constraint on decisions.[23] This Part concludes with a brief discussion of the implications of the Court's citation practices.[24]

15. Macey, *supra* note 3, at 106.

16. Jeffrey A. Segal & Harold J. Spaeth, *The Influence of* Stare Decisis *on the Votes of United States Supreme Court Justices*, 40 AM. J. POL. SCI. 971, 972 (1996).

17. Ernest A. Young, *Judicial Activism and Conservative Politics*, 73 U. COLO. L. REV. 1139, 1150 (2002).

18. *See* HANSFORD & SPRIGGS, *supra* note 9, at 125–27.

19. *See* Thomas W. Merrill, *Originalism, Stare Decisis and the Promotion of Judicial Restraint*, 22 CONST. COMMENT. 271, 273 (2005).

20. David J. Walsh, *On the Meaning and Pattern of Legal Citations: Evidence from State Wrongful Discharge Precedent Cases*, 31 LAW & SOC'Y REV. 337, 337 (1997).

21. *See infra* Part I.A.

22. *See infra* Part I.B.

23. *See infra* Part I.C.

24. *See infra* Part I.D.

Before moving on, let us briefly describe why, regardless of which of the below theories one subscribes to, case citations are a meaningful attribute of Court opinions. The disagreement among the theories described below has to do with the causal force of precedent on Supreme Court Justices' decisions. On the one hand, some put forward the view that the Justices are unconstrained by prior opinions, while others suggest that the law is determinative of Court outcomes, and still others contend that the Justices have considerable discretion but under certain conditions can be somewhat constrained by precedent.[25]

Scholars, however, do not necessarily disagree on the broader significance of the citation or treatment of prior Court opinions. Most scholars agree that law develops incrementally and that "the exact nature of the legal rule established by a Supreme Court opinion can change over time"[26] as "the scope of a precedent is determined by decisions in subsequent cases."[27] Because of the analogical reasoning process employed by most Justices, whereby they cite cases due to those cases' legal relevance and authority, case citations provide important information about how law develops. Case citations thus represent a latent judgment by the Justices regarding the relationship of cited cases to the legal and factual circumstances in the cases they are deciding. While legal scholars have understood this idea since time immemorial, social scientists have only recently begun to understand that one of the most pressing needs in the study of the Court is a refined understanding of how law develops.[28] Consequently, even if Justices' use of citations is post hoc (an argument we critique below), citations would still matter because they offer information on the state of the law.

### *A. Citations as Determinant of Decisions*

The view that citations are the determinant of Court decisions reflects the traditional legal model of decision making.[29] "Lawyers and judges have long taken it for granted that precedent both does and should play a frequently decisive role in constitutional adjudication . . . ."[30] This model means that decisions are grounded in "legal rea-

25. *See infra* Part I.A–C.

26. HANSFORD & SPRIGGS, *supra* note 9, at 5 (citations omitted).

27. RICHARD A. POSNER, HOW JUDGES THINK 105 (2008).

28. *See* HANSFORD & SPRIGGS, *supra* note 9, at 15 (stating that scholars need to confront "the most important question facing judicial scholars: What explains the development of the law?"); Jack Knight & Lee Epstein, *The Norm of* Stare Decisis, 40 AM. J. POL. SCI. 1018, 1021 (1996) ("[A]nalyses of courts ought to center on the law that is established by judicial decisions."); *see also* Emerson H. Tiller & Frank B. Cross, *What Is Legal Doctrine?*, 100 NW. U. L. REV. 517, 523 (2006) ("While one cannot dispute the practical significance of outcomes, a decision to ignore opinions misses the law.").

29. For a general review of this "legal model," see Frank B. Cross, *Political Science and the New Legal Realism: A Case of Unfortunate Interdisciplinary Ignorance*, 92 NW. U. L. REV. 251, 255–65 (1997).

30. Richard H. Fallon, Jr., *Constitutional Precedent Viewed Through the Lens of Hartian Positivist Jurisprudence*, 86 N.C. L. REV. 1107, 1107 (2008).

soning that can generate outcomes in controversial disputes independent of the political or economic ideology of the judge."[31] As Chief Justice Marshall prominently declared: "Courts are the mere instruments of the law, and can will nothing."[32] In general, "judicial opinions are written as if very many cases were dictated by clear rules or principles . . . ."[33] In this vision, "precedent provides the primary reason why justices make the decisions that they do."[34] Justices examine the legal authorities cited by the parties, which substantially include precedents, and render the decision that is dictated by those authorities. It is said that "respect for precedent and principled decision-making are central to Supreme Court decision-making."[35]

One would expect reliance on precedent would be weakest at the level of the Supreme Court, which has no controlling vertical precedent and the legal authority to reconsider and reverse its prior horizontal precedents, combined with the fact that it reviews only the most difficult cases. One might question why an independent Supreme Court would ever choose to let the decisions of past judges, as precedents, dictate its current decisions. The Justices have ample power to effect their own preferences by overruling or evading prior decisions. Although lower court judges may adhere to precedent out of a concern for higher court reversal, this fear obviously does not operate at the Supreme Court level. Various theories have been propounded, though, for why the Court would attend to the principles of stare decisis.

### *1. Theories Explaining Stare Decisis*

Multiple theories have been advanced for why courts would adhere to stare decisis. One is that the reliance on precedents is "easier" for the Justices than reanalyzing each case independently. Precedents are readily available information provided by prior judges, which "reduce[] individual workload and increase[] leisure time."[36] "A precedent . . . serves to economise on the costs of decision-making."[37] Judge Posner argued

31. Phillip E. Johnson, *Do You Sincerely Want To Be Radical?*, 36 STAN. L. REV. 247, 252 (1984).

32. Osborn v. Bank of the U.S., 22 U.S. 738, 866 (1824).

33. Scott Altman, *Beyond Candor*, 89 MICH. L. REV. 296, 325 (1990).

34. Knight & Epstein, *supra* note 28, at 1020.

35. Ronald Kahn, *Institutional Norms and Supreme Court Decision-Making: The Rehnquist Court on Privacy and Religion*, *in* SUPREME COURT DECISION-MAKING: NEW INSTITUTIONALIST APPROACHES 175, 178 (Cornell W. Clayton & Howard Gillman eds., 1999).

36. Sophie Harnay & Alain Marciano, *Judicial Conformity Versus Dissidence: An Economic Analysis of Judicial Precedent*, 23 INT'L REV. L. & ECON. 405, 408 (2004); *see also* Jonathan R. Macey, *Precedent*, *in* 3 THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW 68, 71 (Peter Newman ed., 1998) (suggesting that precedent enables judges "to avoid having to rethink the merits of particular legal doctrine").

37. Harnay & Marciano, *supra* note 36, at 408.

that this explains reliance on precedent.[38] Justice Stevens argued that among the "special benefits" provided to judges by stare decisis is making "their work easier."[39]

Another theory suggests that even the most willful judge "is likely to follow precedent to some extent, for if he did not the practice of decision according to precedent . . . would be undermined and the precedential significance of his own decisions thereby reduced."[40] This theory does not predict perfect adherence to precedent as a determinant, though, as judges can engage in some shirking without undermining the general practice of stare decisis, especially judges on the highest court. The hypothesis, thus, "is not that precedent is always adhered to, but that decision according to precedent will often constitute rational self-interested behavior of judges who personally disagree with the precedent in question."[41] The theory has been explicated as a maximizing principle of game theory.[42] Reinforcing the theory is a model suggesting that judges care about their standing and influence with other judges, and adherence to precedent is commonly the best approach to promote this affect.[43] While this theory falls short of claiming that precedent is an overriding determinant of decisions, it seeks to explain its influence.[44]

Yet another, commonly overlooked, theory is that Justices affirmatively value decision making according to law. In this approach, Justices gain utility from fulfilling their role and deciding according to law.[45] Judges are commonly deemed to have a "duty" to decide according to precedent.[46] While some social scientists may be skeptical of the power of such a duty to drive decisions contrary to preferences, such a duty may appear as a norm to which individuals strive to conform. Existing re-

38. RICHARD A. POSNER, OVERCOMING LAW 141 (1995); *see also* Lindquist & Cross, *supra* note 7, at 1165 (declaring that the Justices' "interest in their own leisure time may also result in more frequent reliance on precedent").

39. John Paul Stevens, *The Life Span of a Judge-Made Rule*, 58 N.Y.U. L. REV. 1, 2 (1983); *see also* Tiller & Cross, *supra* note 28, at 530 (referring to the "decision cost efficiencies resulting from the decision heuristics that legal doctrine presents").

40. William M. Landes & Richard A. Posner, *Legal Precedent: A Theoretical and Empirical Analysis*, 19 J.L. & ECON. 249, 273 (1976).

41. *Id.*

42. *See* Erin O'Hara, *Social Constraint or Implicit Collusion?: Toward a Game Theoretic Analysis of Stare Decisis*, 24 SETON HALL L. REV. 736, 745–49 (1993) (explaining how judges agree to follow each other's precedents to avoid nonproductive competition); Eric Rasmusen, *Judicial Legitimacy as a Repeated Game*, 10 J.L. ECON. & ORG. 63, 67 (1994) (arguing that stare decisis enhances judges' power vis-à-vis future judges).

43. Harnay & Marciano, *supra* note 36, at 408–09.

44. *See id.*

45. *See, e.g.*, LAWRENCE BAUM, THE PUZZLE OF JUDICIAL BEHAVIOR 61 (1997) (indicating that "it pleases judges to carry out what they conceive as the judge's role"). He argues that ideological preferences are constrained "because decision makers want to reach results that they can accept as correct." *Id.* at 65; *see also* Tracey E. George, *From Judge to Justice: Social Background Theory and the Supreme Court*, 86 N.C. L. REV. 1333, 1355–57 (2008) (discussing this role theory and its influence on judges).

46. *See* BAUM, *supra* note 45, at 57 (quoting Bd. of Educ. v. Barnette, 319 U.S. 624, 646–47 (1943) (Frankfurter, J., dissenting)).

search indicates that "judges' role orientations were strongly professional, much more professional, in fact, than political."[47] These roles serve as "norms of behavior which constrain the activities of the role occupant."[48]

Judges are "socialized" to make decisions according to law, as in stare decisis.[49] "Social scientists too blithely dismiss the possibility that judges might *desire* to enforce the law."[50] This role perception means that judges may "gain satisfaction by interpreting the law as well as they can."[51] Judges may "derive utility from legal procedures as well as from policy outcomes."[52] Even the legal realist Karl Llewellyn suggested that "[t]he force of precedent in the law is heightened by . . . that curious, almost universal sense of justice which urges that all men are properly to be treated alike in like circumstances."[53]

Some argue that "judges are likely to take the rule of law quite seriously," as "[i]t is part of their set of role expectations—their institutionally induced beliefs about the way they should carry out their official functions."[54] Some have attributed this to a "role theory" instilled in judges to follow the law. Kathleen Sullivan argues that "[m]ost judges hold deeply internalized role constraints and believe that judgment is not politics."[55] Reliance on "precedent has some intrinsic appeal to judges."[56] Because of this, there may be an ingrained norm or "practice" of attend-

47. Lauren K. Robel, *Private Justice and the Federal Bench*, 68 IND. L.J. 891, 902 (1993).

48. James L. Gibson, *Judges' Role Orientations, Attitudes, and Decisions: An Interactive Model*, 72 AM. POL. SCI. REV. 911, 917 (1978).

49. *See* Stefanie A. Lindquist & David E. Klein, *The Influence of Jurisprudential Considerations on Supreme Court Decisionmaking: A Study of Conflict Cases*, 40 LAW & SOC'Y REV. 135, 137 (2006); *see also* Madeline Fleisher, *Judicial Decision Making Under the Microscope: Moving Beyond Politics Versus Precedent*, 60 RUTGERS L. REV. 919, 954 (2008) (noting the possibility "that judges, inculcated with professional norms regarding legal process, place objective value on the act of reaching an outcome through legal reasoning based on the application of precedent"); Tiller & Cross, *supra* note 28, at 530 (discussing how the "internalization of legal model preferences comes from the socialization of judges through law school training, clerkships, law practice, and fellowship with other judges").

50. FRANK B. CROSS, DECISION MAKING IN THE U.S. COURTS OF APPEALS 45 (2007); *see also* Stephen J. Choi & G. Mitu Gulati, *Ranking Judges According to Citation Bias (As a Means to Reduce Bias*), 82 NOTRE DAME L. REV. 1279, 1282 (2007) (suggesting that "judges care about fulfilling their roles as neutral decisionmakers").

51. LAWRENCE BAUM, JUDGES AND THEIR AUDIENCES: A PERSPECTIVE ON JUDICIAL BEHAVIOR 10 (2006) (citations omitted).

52. Linda R. Cohen & Matthew L. Spitzer, *Solving the* Chevron *Puzzle*, 57 LAW & CONTEMP. PROBS. 65, 71 (1994).

53. Merryman, *Authority of Authority*, *supra* note 1, at 626 (quoting Karl Llewellyn, *Case Law*, *in* 3 ENCYC. SOC. SCI. 249 (1930)).

54. Edward Rubin & Malcolm Feeley, *Creating Legal Doctrine*, 69 S. CAL. L. REV. 1989, 2026 (1996). The authors elsewhere acknowledge that judges sometimes render decisions based "on their sense of the best public policy." MALCOLM M. FEELEY & EDWARD L. RUBIN, JUDICIAL POLICY MAKING AND THE MODERN STATE: HOW THE COURTS REFORMED AMERICA'S PRISONS 11 (1998). They argue, however, that these choices are nevertheless constrained by doctrine and other institutions. *Id.* at 209.

55. Kathleen M. Sullivan, *Foreword: The Justices of Rules and Standards*, 106 HARV. L. REV. 22, 120 (1992).

56. Lindquist & Cross, *supra* note 7, at 1167.

ing to the legal commands placed on the Justices.[57] Because of the Justices' senses of duty or their legal preferences, they might adhere to a precedent that they dislike.

These rationales for the legal model are purely theoretical rather than proven through evidence. Moreover, the explanations generally do not dictate that precedent is the sole determinant of decisions, as the Justices may have additional factors influencing their decisions. The theory of protecting the general rule of stare decisis admits the possibility of shirking, and if it is a utility-enhancing preference, that conclusion does not rule out other sources of utility that might override the legal model preference. Consequently, the theories require empirical examination.

### *2. Preliminary Evidence on the Legal Role of Stare Decisis*

There is anecdotal evidence of the role of stare decisis in at least some decisions. Justice O'Connor has disagreed with the Court's statutory interpretation in a case but accepted it for reasons of stare decisis.[58] Woodward and Armstrong describe how Chief Justice Burger's efforts to undo certain holdings of the Warren Court were obstructed by even his conservative colleagues, due to "their concern with precedent."[59] Various opinions say something on the order of: "[A]lthough I personally disagree with the outcome, I feel bound . . . ."[60] When declining to overrule *Roe v. Wade* in *Planned Parenthood of Southeastern Pennsylvania v. Casey*, Justices O'Connor, Kennedy, and Souter's plurality opinion stressed that "respect for precedent" was essential to "the very concept of the rule of law."[61] Judge Newman contends that "the accepted body of law . . . exerts a profoundly restrictive effect upon the outcome of most legal confrontations."[62]

While this theory of precedent governing decisions is often expressed, the pure legal model of Supreme Court decision making has been amply debunked by empirical research and what is generally known as the "attitudinal model" of decision making. Jeffrey Segal and Harold Spaeth produced the seminal research demonstrating that the Justices voted in accord with their ideology, which they called the attitudinal

57. *Cf.* Fallon, *supra* note 30, at 1118, 1120 ("Conceding . . . substantive disagreement concerning how judges and Justices should decide some cases, a practice-based perspective in the Hartian tradition emphasizes the breadth of the shared assumptions and intuitive understandings that seem necessary to account for convergence on so many judgments and that permit reasoned disagreement even in disputed cases.").

58. Allied-Bruce Terminix Cos. v. Dobson, 513 U.S. 265, 282–84 (1995) (O'Connor, J., concurring).

59. BOB WOODWARD & SCOTT ARMSTRONG, THE BRETHREN 69 (1979).

60. Altman, *supra* note 33, at 315 (referencing cases making such statements).

61. 505 U.S. 833, 854 (1992).

62. Jon O. Newman, *Between Legal Realism and Neutral Principles: The Legitimacy of Institutional Values*, 72 CAL. L. REV. 200, 205 (1984).

model.[63] They claimed that "precedent as a legal model provides no guide to the justices' decisions."[64] The authors embarked on a statistical analysis in which they found that the Justices' decisions could often be predicted by their ideology.[65] They found that ideology could explain seventy-six percent of the variance in the Justices' votes.[66] This finding was generally confirmed by a prospective study finding that political science models were equal or superior to legal expert predictions of the outcomes of forthcoming cases.[67]

Many have built on Segal and Spaeth's evidence and the "evidence of attitudinal influences has accumulated steadily over the years, [while] evidence of legal influences has been much harder to find."[68] "Scores of additional studies have confirmed" the ideological influence on decision making.[69] A meta-analysis of much of this research confirmed the significance of ideology, which was particularly pronounced at the Supreme Court level.[70] A professor of law has recently examined the question from a different angle, comparing Supreme Court Justice votes in criminal cases and segregating them into statutory and constitutional claims.[71] Because the legal issues and precedents for the two sets of cases were so different, they serve as a test for the influence of the law.[72] In practice, the author found that the Justices voted for criminal defendants in essentially the same percentages, regardless of the legal grounds of the claim,

63. *See* JEFFREY A. SEGAL & HAROLD J. SPAETH, THE SUPREME COURT AND THE ATTITUDINAL MODEL (1993) [hereinafter SEGAL & SPAETH, ORIGINAL ATTITUDINAL MODEL]; *see also* JEFFREY A. SEGAL & HAROLD J. SPAETH, THE SUPREME COURT AND THE ATTITUDINAL MODEL REVISITED (2002) [hereinafter SEGAL & SPAETH, ATTITUDINAL MODEL REVISITED].

64. SEGAL & SPAETH, ORIGINAL ATTITUDINAL MODEL, *supra* note 63, at 48.

65. *Id.* at 227–28.

66. *See* SEGAL & SPAETH, ATTITUDINAL MODEL REVISITED, *supra* note 63, at 323.

67. Theodore W. Ruger et al., *The Supreme Court Forecasting Project: Legal and Political Science Approaches to Predicting Supreme Court Decisionmaking*, 104 COLUM. L. REV. 1150, 1171–79 (2004).

68. Lindquist & Klein, *supra* note 49, at 136. This "legal state of mind does not necessarily mean obedience to conspicuous rules; instead, it means a sense of obligation to make the best decision possible in light of one's general training and sense of professional obligation." Howard Gillman, *What's Law Got to Do with It? Judicial Behavioralists Test the "Legal Model" of Judicial Decision Making*, 26 LAW & SOC. INQUIRY 465, 486 (2001) (reviewing HAROLD J. SPAETH & JEFFREY A. SEGAL, MAJORITY RULE OR MINORITY WILL: ADHERENCE TO PRECEDENT ON THE U.S. SUPREME COURT (1999)).

69. Tiller & Cross, *supra* note 28, at 523. Empirical studies consistently demonstrate the role of the Justices' policy preferences on all aspects of the Court's decisional process, and indeed, demonstrate that ideology generally has a larger substantive effect than any other examined variable. Nonetheless, according to many, "the attitudinal model is inaccurate in its main theoretical claim" that ideology is the only systematic influence on Court outcomes. Timothy R. Johnson, James F. Spriggs II & Paul J. Wahlbeck, *Oral Advocacy Before the United States Supreme Court: Does It Affect the Justices' Decisions?*, 85 WASH. U. L. REV. 457, 525 (2007) (showing that the Justices' final votes on the merits depend heavily on the relative quality of the litigants' oral arguments).

70. *See* Daniel R. Pinello, *Linking Party to Judicial Ideology in American Courts: A Meta-Analysis*, 20 JUST. SYS. J. 219, 233–37 (1999).

71. Ward Farnsworth, *Signatures of Ideology: The Case of the Supreme Court's Criminal Docket*, 104 MICH. L. REV. 67, 68 (2005).

72. *Id.*

suggesting that ideology was a driver of outcomes rather than governing legal materials.[73]

Considerable research has demonstrated that ideology exercises a profound influence on judicial decision making.[74] Hence, the traditional legal model of citations as a pure determinant of Court decisions is difficult to sustain in light of the empirical evidence.[75] The Justices are reaching very different conclusions in cases with identical precedents. This is not simply a matter of uncertainty about the correct application of precedent because those differences operate in systematic ways, depending on the ideology of the Justice. Some have leapt to the conclusion that citations are meaningless as determinants of decisions, maintaining that decisions are purely ideological.[76]

### *B. Citations as a Mask*

The Segal and Spaeth findings on ideological voting have led to the theory that citations serve only as a mask for Justices voting their preferences. In this view the Justices "base their decisions solely upon personal policy preferences,"[77] and "legal considerations . . . play essentially no role in the Court's decisions."[78] The attitudinal view is "that the 'law' boils down to outcomes, and that whatever rationales or justifications judges invoke are mere smokescreens designed to hide the fact that politics drives the result."[79]

This is the classical legal realist position on Supreme Court decision making and is not unique to political scientists. Henry Monaghan spoke of precedent as a "mask hiding other considerations."[80] Alexander Bickel complained that "too many federal judges have been induced to view

73. *Id.* at 70–71.

74. *See, e.g.*, SEGAL & SPAETH, ORIGINAL ATTITUDINAL MODEL, *supra* note 63, at 64–73 (explaining the development of the "attitudinal model" of Supreme Court opinion analysis).

75. Even without the empirical research, these models of judicial decision making were never seen as accurate descriptions of the reality of the process. *See, e.g.*, Oliver Wendell Holmes, *The Path of the Law*, 10 HARV. L. REV. 457, 466 (1897) ("Behind the logical form lies a judgment as to the relative worth and importance of competing legislative grounds. . . . You can give any conclusion a logical form."); Merryman, *Authority of Authority*, *supra* note 1, at 623 (addressing "the now generally conceded facts that rules mean little except in application, that the manner of application depends on current feelings about society, economics, politics, etc., and that the subjective factors in selecting, formulating and applying legal rules in the judicial process are very great").

76. *See* discussion *infra* Part I.B.

77. DAVID W. ROHDE & HAROLD J. SPAETH, SUPREME COURT DECISION MAKING 72 (1976).

78. Lawrence Baum, *The Critics: The Supreme Court and the Attitudinal Model*, L. & CTS., Spring 1994, at 3, 3; *see also* Barry Friedman, *Taking Law Seriously*, 4 PERSP. ON POL. 261, 265 (2006) (noting that "some political scientists . . . conclude that law is a chimera, a fig leaf covering up a system of complete indeterminacy, nothing but a set of words used to justify any conclusion").

79. Lee Epstein, Nancy Staudt & Peter Wiedenbeck, *Judging Statutes: Thoughts on Statutory Interpretation and Notes for a Project on the Internal Revenue Code*, 13 WASH. U. J.L. & POL'Y 305, 320 (2003).

80. Henry Paul Monaghan, *Stare Decisis and Constitutional Adjudication*, 88 COLUM. L. REV. 723, 743 (1988).

themselves as holding roving commissions as problem solvers."[81] Justice Jackson candidly conceded that "[m]any of our cases really turn on your views of political policy."[82]

Many other commentators have echoed this skepticism about the role that precedent plays at the Court. It is sometimes said that "any law student knows" that "virtually any judicial decision can be analogized to or distinguished from any other fact pattern."[83] Cass Sunstein suggested that all cases were potentially distinguishable for Justices.[84] Frederick Schauer declared that "it will always be possible to distinguish a precedent."[85] Judge Wald has noted how judges can ignore or distinguish away precedents they do not like and "follow those precedents which they like best."[86] Michael Stokes Paulsen suggested that "stare decisis is a doctrine of convenience, endlessly pliable, followed only when desired, and almost always invoked as a makeweight."[87] There appears to be an "inherent tendency of judges to manipulate the doctrine politically."[88] Under this theory, precedent in practice is infinitely manipulable and hence meaningless as a determinant of judicial outcomes.[89] Although it is generally not claimed that precedents are infinitely indeterminate, they need be only sufficiently indeterminate that they can be manipulated to reach different outcomes in the cases selected for review by the Court.

In this vision, the Justices first choose their preferred outcome, based on ideological or other considerations, and then seek out precedents to cite in support of that outcome. This theory leads to the obvious question of why the Justices would expend the time and effort to produce

81. ALEXANDER M. BICKEL, THE SUPREME COURT AND THE IDEA OF PROGRESS 134 (1970).

82. Dennis J. Hutchinson, *The Black-Jackson Feud*, 1988 SUP. CT. REV. 203, 239.

83. Earl Maltz, *The Nature of Precedent*, 66 N.C. L. REV. 367, 371 (1988).

84. CASS R. SUNSTEIN, LEGAL REASONING AND POLITICAL CONFLICT 72 (1996).

85. Frederick Schauer, *Precedent*, 39 STAN. L. REV. 571, 594 (1987) (emphasis omitted).

86. Patricia M. Wald, *Changing Course: The Use of Precedent in the District of Columbia Circuit*, 34 CLEV. ST. L. REV. 477, 481 (1986).

87. Michael Stokes Paulsen, *Does the Supreme Court's Current Doctrine of Stare Decisis Require Adherence to the Supreme Court's Current Doctrine of Stare Decisis?*, 86 N.C. L. REV. 1165, 1209 (2008).

88. Christopher P. Banks, *Reversals of Precedent and Judicial Policy-Making: How Judicial Conceptions of Stare Decisis in the U.S. Supreme Court Influence Social Change*, 32 AKRON L. REV. 233, 235 (1999).

89. This theory apparently implies considerable insincerity on the part of the Justices. Even when the implications of precedents are somewhat indeterminate, "some arguments are more persuasive than others" and the Justices may "make good faith efforts to discover which answers are most accurate." PAUL M. COLLINS, JR., FRIENDS OF THE SUPREME COURT: INTEREST GROUPS AND JUDICIAL DECISION MAKING 83 (2008). The advocates of ideological attitudinal decision making do not proclaim that the Justices are insincere or dishonest but suggest that their ideological decisions may simply be the product of motivated reasoning, a subconscious evaluation of the precedents that contains an ideological bias. SEGAL & SPAETH, ATTITUDINAL MODEL REVISITED, *supra* note 63, at 433; *see also* Fleisher, *supra* note 49, at 965 (suggesting that motivated reasoning explains findings of ideological decision making, as judges "are simply more receptive to the elements of a decision that mesh with their own beliefs"). Even motivated reasoning, however, places boundaries on the effects of ideology and provides some role for legal influence. *See* LAWRENCE S. WRIGHTSMAN, JUDICIAL DECISION MAKING: IS PSYCHOLOGY RELEVANT? 56 (1999) (noting that psychological effect of motivated reasoning has limits in its power).

opinions with supporting citations, rather than simply pronouncing their decision. The common answer given by the legal realists is that such citations are necessary to *legitimize* the Court's holding.[90] The theory is that the public and other constituencies of the Court respect and adhere to decisions grounded in the law but not those based on the Justices' ideologies.[91] Hence, the Court employs citations to create the *appearance* that their decisions are based on the law, though this is not truly the case. The citations serve only as a mask for the true ideological basis for the decision. This is the historic view that judges "first arrive at their desired conclusion and only then develop a legal rationale that buttresses their decision."[92]

Segal and Spaeth have sought to directly examine these affects.[93] They examined a set of Supreme Court precedents that included dissenting opinions and identified the "progeny" of those decisions.[94] The authors then considered whether Justices who dissented in the original decision adhered to the precedent from which they dissented or continued to reject it. They found that only around twelve percent of the Justices chose to adhere to the earlier precedent rather than follow their personal preferences.[95] This direct study of precedent suggested that citations were but a mask for ideology.

The Segal and Spaeth results saw various challenges. For example, they did not include summary dispositions of the court, which might represent the clear cases governed by precedent, where its power would most obviously appear. When these summary dispositions were included, the Justices voted in favor of precedent, rather than preferences, about three-fourths of the time.[96] Others questioned the coding of the subsequent votes.[97] For Segal and Spaeth, a subsequent decision that limited the scope of the original precedent was regarded as attitudinal, not precedential.[98] This created an intrinsic bias in the study, however, and a

90. Tom R. Tyler & Gregory Mitchell, *Legitimacy and the Empowerment of Discretionary Legal Authority: The United States Supreme Court and Abortion Rights*, 43 DUKE L.J. 703, 707–08 (1994).

91. *See* Merryman, *Authority of Authority*, *supra* note 1, at 625 ("A feeling probably exists that even though judges actually make law and are not tightly bound by previous decisions it is desirable to give society a picture of the judicial process which conforms with the fiction of an abstract law which is mechanically applied by its instrument, the judge.").

92. Paul J. Wahlbeck, *The Life of the Law: Judicial Politics and Legal Change*, 59 J. POL. 778, 780 (1997).

93. This research was originally published as Segal & Spaeth, *supra* note 16, and subsequently, in more detail, as HAROLD J. SPAETH & JEFFREY A. SEGAL, MAJORITY RULE OR MINORITY WILL: ADHERENCE TO PRECEDENT ON THE U.S. SUPREME COURT (1999).

94. For a description of the particular methodology, see SPAETH & SEGAL, *supra* note 93, at 21–44.

95. *Id.* at 309.

96. Donald R. Songer & Stefanie A. Lindquist, *Not the Whole Story: The Impact of Justices' Values on Supreme Court Decision Making*, 40 AM. J. POL. SCI. 1049, 1061 (1996). The inclusion of these cases is debatable, as they rarely provoke the sorts of dissents that would evidence continued disavowal of the original opinion, but the Justices certainly had the power to so dissent and did not.

97. *Id.* at 1054.

98. *Id.* at 1051–52.

decision declining to extend a precedent is in no way contrary to stare decisis.[99] Insofar as the progeny cases addressed issues unresolved by the landmark precedent, the study tells little about the power of precedent.[100] Indeed, a reexamination of the cases found that in most of the progeny, "the Court opinion . . . explicitly reaffirms the doctrine announced in the landmark case."[101] Although the study might show that citations were not a perfect determinant of outcomes, they were also not a mask because they limited the Justices' discretion and channeled their outcomes.

Others have used a similar approach to study precedent and reached conclusions different from those of Segal and Spaeth. One recent analysis modified the Segal and Spaeth approach to measure newly appointed Justices' decisions in progeny cases (those who did not participate in the original decision), when their ideological beliefs would appear to call for a deviation from the precedent set in the initial landmark opinion.[102] The study concluded that the landmark precedent had a powerful effect on the new Justices' decisions.[103] Even if it were true that precedents did not alter the decisions of dissenting Justices in the original opinion, the far more significant effect of precedent would be that on future Justices.

A more serious failing of the Segal and Spaeth study could be the failure to consider "possible effects of precedent on the Court's agenda and litigation environment."[104] The landmark precedent shapes the progeny that the Court accepts for review, and it has no reason to take certiorari on cases directly governed by the precedential decision.[105] Thus, the Court simply "may decline review in those cases in which it faces constraint; if so, such constraint never would show up in studies that look only to granted cases," though it would remain a powerful legal determinant.[106] The findings of the study on precedent merely reveal a substantial ideological determinant of decisions whether to expand or

99. Frank B. Cross, *Chief Justice Roberts and Precedent: A Preliminary Study*, 86 N.C. L. REV. 1251, 1261 (2008) (observing that "a continued dissent need not represent any sort of repudiation of the precedent, but may simply demonstrate a reluctance to expand its scope beyond that set out in the initial holding").

100. *See* Friedman, *supra* note 78, at 267 (explaining how progeny decisions are not necessarily contrary to the holding in the underlying precedent, even when they are coded as "opposite in direction" (internal quotation marks omitted)).

101. Songer & Lindquist, *supra* note 96, at 1054.

102. Linda M. Merola, The Influence of *Stare Decisis* on the Votes of United States Supreme Court Justices: A Second Look 13–14 (Jan. 8, 2004) (unpublished manuscript, *available at* http://www.allacademic.com/meta/p67790_index.html).

103. *Id.* at 18.

104. Gillman, *supra* note 68, at 481 (citations omitted).

105. Cross, *supra* note 99, at 1262–63 (observing that "the landmark precedent itself may shape which progeny cases reach the Court," such that "looking at decisions in progeny cases [taken by the Court] simply does not test whether a governing precedent would control the Justices' votes"). Empirical precedent indicates that the certiorari decision is not centrally an ideological one but is apparently driven by other factors, such as clarity of the governing law. *See* Saul Brenner, Joseph M. Whitmeyer & Harold J. Spaeth, *The Outcome-Prediction Strategy in Cases Denied Certiorari by the U.S. Supreme Court*, 130 PUB. CHOICE 225, 226–27 (2006).

106. Friedman, *supra* note 78, at 271.

limit a precedent, not any finding on the precedent's validity for cases plainly within its ambit. Nor do they address the potential constraint or influence of such prior decisions on the contents of the subsequent opinion.

The legal realists nonetheless have contended that "prior cases have no effect on new decisions and that the citation of authority is a pure charade."[107] They make the argument that there are so many precedents available to the Court, supporting both petitioner and respondent, that it is easy for willful Justices to find precedential support for any decision they might prefer.[108] The briefs for both the petitioner and respondent will certainly cite numerous precedents that at least purportedly support their differing positions on the proper case outcome. This illustrates that at least some precedents can be found to support either side of the case. Jack Balkin suggests that "the materials of the law already contain justifications supporting every variety of liberal and conservative positions," and consequently can be manipulated for ideological purposes.[109]

Segal and Spaeth argue that "[i]f various aspects of the legal model can support either side of any given dispute that comes before the Court . . . then the legal model hardly satisfies as an explanation of Supreme Court decisions."[110] Some argue that judges "decide for themselves whether to be bound by precedent," given their ability "to make fine distinctions about fact patterns and to engage in other acts of 'creative' judging."[111]

The Segal and Spaeth results, and some other studies finding ideological judicial decision making, would seem to provide support for the theory that citations serve only as a mask. However, they fall well short of proving this case. For example, the research considers only the endpoint of the ideological direction of the outcome, whether it favored the party pursuing liberal or conservative ends.[112] No attempt is made to address *how* liberal or conservative the outcome is. For example, consider

107. Peter Harris, *Difficult Cases and the Display of Authority*, 1 J.L. ECON. & ORG. 209, 211 (1985); *see also* SEGAL & SPAETH, ATTITUDINAL MODEL REVISITED, *supra* note 63, at 85 (referring to "the phony world of precedent").

108. Thus, the claim that "the Supreme Court has generated so much precedent that it is usually possible to find support for any conclusion." LEE EPSTEIN & THOMAS G. WALKER, CONSTITUTIONAL LAW FOR A CHANGING AMERICA: RIGHTS, LIBERTIES, AND JUSTICE 21 (2d ed. 1995). Even traditional legal scholars have recognized this principle, acknowledging that stare decisis presents "a choice of precedents." HENRY J. ABRAHAM, THE JUDICIAL PROCESS: AN INTRODUCTORY ANALYSIS OF THE COURTS OF THE UNITED STATES, ENGLAND, AND FRANCE, 325 (6th ed. 1993) (emphasis omitted).

109. J. M. Balkin, *Taking Ideology Seriously: Ronald Dworkin and the CLS Critique*, 55 UMKC L. REV. 392, 430 (1987); *see also* Mark V. Tushnet, *Following the Rules Laid Down: A Critique of Interpretivism and Neutral Principles*, 96 HARV. L. REV. 781, 795 (1983) (arguing that reasonable legal arguments can be found for virtually any result in court). Some contend, however, that while "legal rules allow for more than one legally plausible outcome . . . usually one outcome can be ranked as more legally compelling or defensible than the others." BRIAN Z. TAMANAHA, LAW AS A MEANS TO AN END: THREAT TO THE RULE OF LAW 242 (2006).

110. SEGAL & SPAETH, ORIGINAL ATTITUDINAL MODEL, *supra* note 63, at 86.

111. Macey, *supra* note 3, at 110.

112. *See* SEGAL & SPAETH, ORIGINAL ATTITUDINAL MODEL, *supra* note 63, at 242–45.

an abortion decision. The Court might uphold a statute banning partial-birth abortion but leave in place the basic constitutional protections for reproductive rights found in *Roe* and *Casey*.[113] This would be deemed a conservative decision, but it would be far less conservative than the ideological preferences of the Justices, who might prefer to overrule *Roe* and *Casey* but do not do so out of fealty to precedent. Moreover, the relative force of the ideological content of the opinion may vary considerably.[114]

Some other research is contrary to Segal and Spaeth. Another study tackled the question of the Justices' fidelity to precedent by examining their prior decisions using a different methodology.[115] The author assessed responses in the Rehnquist Court to precedential decisions in light of the Justices' ideology and other factors. The presence of an underlying precedent was consistently statistically significant in various different models.[116] In many cases, the Justices departed from an earlier dissent to embrace the precedent created by that opinion.[117] Similarly, a book-length close examination of reproductive rights and death penalty cases concluded that the Justices' ideology did not rule their interpretation of precedents.[118] A recent book studying the affect of briefs from amici similarly found that such briefs appeared to have a legally persuasive effect on the Justices.[119] Another project shows that the Court's decision to follow precedent, while strongly influenced by ideological considerations, also resulted in part from concerns about the need to legitimize policy choices as observed, for example, in the Court's tendency to follow cases with greater legal vitality or authority.[120]

The theory that citation to precedent is but a mask also has trouble confronting the international experience. For example, French courts historically have a norm of never citing cases in their opinions, without concern for an effect on legitimacy.[121] Nevertheless, counsel frequently use precedents as persuasive authority and "it is clear that in practice French judges use precedents no less than their colleagues in other . . . countries."[122] If prior decisions have pragmatic decision-making effect in a nation where they are not cited in opinions or even formally recog-

113. *See, e.g.*, Gonzales v. Carhart, 550 U.S. 124, 146–47 (2007).

114. *See* David E. Klein, *Modesty, of a Sort, in the Setting of Precedents*, 86 N.C. L. REV. 1213, 1227–37 (2008) (analyzing the different approaches to structuring decisional commands and how they vary among opinions).

115. Youngsik Lim, *An Empirical Analysis of Supreme Court Justices' Decision Making*, 29 J. LEGAL STUD. 721, 724–33 (2000).

116. *Id.* at 748–49.

117. *See id.* at 731, 738, 749.

118. LEE EPSTEIN & JOSEPH F. KOBYLKA, THE SUPREME COURT AND LEGAL CHANGE: ABORTION AND THE DEATH PENALTY 310–12 (1992).

119. COLLINS, *supra* note 89, at 106–09 (finding that "there is clearly a statistically significant influence of amicus briefs for virtually all of the justices").

120. HANSFORD & SPRIGGS, *supra* note 9, at 124–28 (using a decision theoretic explanation and statistical tests to show that the Court is influenced by both policy concerns and legitimacy concerns).

121. *See* Michel Troper & Christophe Grzegorczyk, *Precedent in France*, *in* INTERPRETING PRECEDENTS: A COMPARATIVE STUDY, *supra* note 13, at 103, 112.

122. Taruffo, *supra* note 13, at 454.

nized as legal authority, it seems unlikely that they are meaningless in the United States, where they are considered to be foundational law, and where their use in opinions means that judicial fidelity to precedent can be monitored.

The theory that precedents are but a "mask" rests on empirical studies, and these studies fall short of proving the theory in its strongest version. Ultimately, "the existing evidence does not establish that justices are motivated solely (or even overwhelmingly) by policy goals."[123] The research shows that ideological policy goals are one important factor in Court decision making but that some other factors also influence those decisions. Moreover, the theories behind the use of stare decisis, discussed above, offer rational reasons why precedent would influence the Justices. The following Section examines the role of precedent as such an influence or constraint on the Court's decisions.

### *C. Citations as Influence and Constraint*

An intermediate theory suggests that citations may not fully determine Court outcomes but nonetheless serve as a constraint on the Justices' ability to render their ideologically preferred decisions or an influence on the shape of those decisions.[124] In this vision, Justices decide cases according to their ideological preferences, but only insofar as those preferences can fit within the body of existing precedents. There are some legal questions where the precedent is so uncertain that the Justices can judge ideologically, but other questions where they are constrained by the preexisting body of the law, including precedent. Consequently, "the rule of adhering to precedent hardly controls the Court's decisions, but it does structure and influence them."[125] Even devotees of the legal model would not assert that stare decisis universally controls decisions. Chief Justice Rehnquist declared that "[s]tare decisis is not an inexorable command" but is a "principle of policy."[126] In this view, stare decisis is only one of multiple factors directing the Court's outcome but still an

123. BAUM, *supra* note 51, at 20.

124. *See, e.g.*, Cross, *supra* note 29, at 262 (noting that "most accept that the law constrains decisions, by defining the reasons acceptable in adjudication and guiding the weight accorded [to] the applicable reasons"); *see also* HANSFORD & SPRIGGS, *supra* note 9, at 21 ("Given the justices' need to legitimize their policies, precedent can limit their flexibility or discretion. It does so by constraining the alternatives available to the justices to those which are legally defensible."). The law may, for example, exclude certain politically preferable results. *See* STEVEN J. BURTON, JUDGING IN GOOD FAITH 47–48 (1992).

125. LAWRENCE BAUM, THE SUPREME COURT 150 (5th ed. 1995); *see also* Harris, *supra* note 107, at 219 (contending that "[t]he fact that other decision criteria may sometimes outweigh a good argument from precedent does not mean precedent is unimportant," while "[t]he fact that a good argument from precedent may be one criterion does not mean that precedents control decisions").

126. Payne v. Tennessee, 501 U.S. 808, 828 (1991) (emphasis omitted) (internal quotation marks omitted).

important one.[127] Justice Powell declared that respect for constitutional stare decisis was essential to "the rule of law."[128]

All decisions are to some degree indeterminate in their implications, and the well-established ability of judges to "distinguish" a precedent, and the limited authority of horizontal precedent, obviously allows an opportunity to evade the principles of stare decisis.[129] But this ability does not necessarily establish insincerity or evasion. Some precedents may have a fixed meaning and are therefore conclusive, but the Court is unlikely to accept cases that are so clearly governed by stare decisis. The Justices choose cases for review in which the existing precedents are somewhat uncertain and use those cases to fix the meaning of precedent.[130]

This theory that precedent has some effect on the Court's decision could be explained by the same rationales used by the traditional legal model, as discussed above. Alternatively, the legitimation theory associated with the attitudinal model could itself provide a reason why precedent would have some "pull" at the Supreme Court level. If "deviation from precedent may cast doubt on the Court's integrity," the Justices may feel compelled to defer to precedent.[131] Perhaps the theories about judicial concern for precedent "boil down to the proposition that judges follow precedent because of their beliefs about its value in ensuring societal stability and legitimacy for the judicial branch."[132]

Stare decisis does provide a legitimating function for the Court's rulings, much as the realists claim. "[T]he legitimacy of American appellate opinions rests on the authorities they cite . . . ."[133] Given the intrinsic weakness of the judiciary and its general inability to implement its rulings, judicial power is limited by its perceived authority in our system of governance.[134] This authority is to some degree contingent on the belief that the Justices are deciding cases in accord with the law, rather than

127. *See* ROBERT E. KEETON, JUDGING 10 (1990) (suggesting that "the percentage of cases corruptly decided for reasons other than those disclosed is quite small").

128. Lewis F. Powell, Jr., *Stare Decisis and Judicial Restraint*, 47 WASH. & LEE L. REV. 281, 288 (1990).

129. *See* BAUM, *supra* note 125, at 149 (internal quotation marks omitted); *see also* Maltz, *supra* note 83, at 371 (reporting that "any law student knows" that "virtually any judicial decision can be analogized to or distinguished from any other fact pattern"). A recent advocate for the role of precedent in decision making has acknowledged that legal reasoning "afford[s] the Justices significant latitude in distinguishing" prior opinions, "thus avoiding the need either to overrule or to be bound by, past decisions." Fallon, *supra* note 30, at 1157. He also stresses, however, that "a decision distinguishing a prior case is almost inherently narrower than a decision to overrule the precedent altogether," and therefore somewhat constraining. *Id.* at 1158.

130. Michael J. Gerhardt, *The Irrepressibility of Precedent*, 86 N.C. L. REV. 1279, 1291 (2008).

131. Daniel A. Farber, *The Rule of Law and the Law of Precedents*, 90 MINN. L. REV. 1173, 1196 (2006).

132. Fleisher, *supra* note 49, at 955.

133. William H. Manz, *Cardozo's Use of Authority: An Empirical Study*, 32 CAL. W. L. REV. 31, 32 (1995).

134. *See* James H. Fowler & Sangick Jeon, *The Authority of Supreme Court Precedent*, 30 SOC. NETWORKS 16, 16 (2008).

their arbitrary preferences. This in turn creates pressure on the Court to reach decisions consistent with legal standards such as stare decisis. The Court's legitimation needs, recognized by attitudinalists,[135] may themselves promote adherence to precedent in fact.

There is ample evidence of a judicial concern for legitimation. "Legal historians suggest that justices in the 19th Century responded to the [Court's] crisis of legitimacy by strengthening the norm of stare decisis . . . ."[136] Reliance on precedent seemed a neutral criterion that enhanced the institutional reputation of the judiciary.[137] After 1805, Supreme Court citations to its own prior opinions doubled.[138] Thus, "the legitimacy of judicial decrees depends . . . in considerable part on public confidence that the judges are predominantly engaged not in making personal political judgments but in applying a body of law."[139] This theory has been modeled as judges' compromising their policy preferences in order to protect their reputations.[140] Justices must respect precedent to preserve "the Court's reputation and dominance in interpreting the Constitution."[141] There is now evidence indicating that "the legal model does contribute to the legitimacy of the courts."[142] This effect may be crucial, as Judge Posner suggested that the exercise of government authority by unelected judges "is tolerated only in the belief that the power is somehow constrained."[143] As Judge Easterbrook has observed, "Stare decisis . . . enhances the power of the Justices."[144]

Epstein and Knight argue that this need for legitimacy provided by citations in fact serves a constraining role at the Court. They believe that the Justices are fundamentally "policy seekers" but stress that those

135. *See supra* notes 90–91 and accompanying text.

136. Fowler & Jeon, *supra* note 134, at 16 (emphasis omitted). Before the 1800s, courts "had no firm doctrine of stare decisis." Frederick G. Kempin, Jr., *Precedent and Stare Decisis: The Critical Years, 1800 to 1850*, 3 AM. J. LEGAL HIST. 28, 33 (1959).

137. *See* LAWRENCE M. FRIEDMAN, A HISTORY OF AMERICAN LAW 127–33 (2d ed. 1985).

138. *See* James F. Spriggs, II et al., The Political Development of a Norm Respecting Precedent in the American Judiciary 13 (Apr. 15, 2004) (unpublished manuscript, *available at* http://allacademic.com/meta/p_mla_apa_research_citation/0/8/3/4/3/p83434_index.html).

139. ARCHIBALD COX, THE COURT AND THE CONSTITUTION 362 (1987).

140. *See* Thomas J. Miceli & Metin M. Coşgel, *Reputation and Judicial Decision-Making*, 23 J. ECON. BEHAV. & ORG. 31, 49 (1994).

141. MICHAEL J. GERHARDT, THE POWER OF PRECEDENT 70 (2008); *see also* Schauer, *supra* note 85, at 600 (suggesting that adherence to precedent strengthens the "external credibility" of the Court).

142. John M. Scheb II & William Lyons, *Judicial Behavior and Public Opinion: Popular Expectations Regarding the Factors That Influence Supreme Court Decisions*, 23 POL. BEHAV. 181, 182 (2001). The authors proceeded to conduct a survey revealing that the public actually believes that many Court decisions are driven by ideology in fact, though the people also believe that precedent is one factor influencing outcomes, a result consistent with the constraint model. *Id.* at 183–86. Another survey found that part of the reason that individuals see the Court as legitimate is that their decisions are based on "case-relevant information" and not "political pressures and personal opinion." Tyler & Mitchell, *supra* note 90, at 786.

143. Richard A. Posner, *Law and Literature: A Relation Reargued*, 72 VA. L. REV. 1351, 1370 (1986). Thomas Merrill similarly suggested that if the Court conceded the political nature of its decisions, it would become "more vulnerable to retaliation from the political branches." Thomas W. Merrill, *A Modest Proposal for a Political Court*, 17 HARV. J.L. & PUB. POL'Y 137, 139 (1994).

144. Frank H. Easterbrook, *Ways of Criticizing the Court*, 95 HARV. L. REV. 802, 817 (1982).

"who wish to establish policy that will govern the future activity of the society in which their Court exists will be constrained to choose from among the set of rules (precedent and the like) that the members of that society will recognize and accept."[145] Justices must therefore "make accommodations over the interpretation of precedent because they believe that doing so enhances the probability that society will consider the resulting decision legitimate."[146] Hence, "[i]f a community has a fundamental belief that the 'rule of law' requires the Court to be constrained by precedent, then justices can be constrained by precedent even if they personally do not accept that fundamental belief."[147] Epstein and Knight have confirmed this position by reference to the Justices' use of precedent in contexts other than their final opinions.[148] These results suggest that precedent plays some role as a constraint or influence on the Justices. Other studies offer more rigorous tests of this expectation, showing that the need for legitimacy has some bearing on the Justices' decisions to follow precedent and thus indicating that "the Court's prior interpretation of a precedent, the need to legitimize policy choices, and the legal arguments put forward by organized interests influence the law."[149]

Statements of the Justices themselves confirm that they "are aware of the inherent weakness of the federal judiciary and place high value on maintaining their institutional and decisional legitimacy through the use of precedent."[150] Thus Justice Stevens has noted that following precedent "obviously enhances the institutional strength of the judiciary."[151] In *Casey*, the Court's opinion expressly invoked this consideration, noting that "the Court's legitimacy depends on making legally principled decisions," which meant not overruling *Roe*.[152] Hence, researchers commonly view citations "as serving a primary function of legitimation."[153] As Walter Murphy noted, "People . . . are more ready to accept unpleasant decisions which appear to be the ineluctable result of rigorously logical deductions."[154] Yet the Justices who acknowledge the relevance of legitimation have not disclaimed the effect of precedents on their decisions.

145. LEE EPSTEIN & JACK KNIGHT, THE CHOICES JUSTICES MAKE 26, 45 (1998).

146. *Id.*

147. Knight & Epstein, *supra* note 28, at 1022. They suggest that the "justices have a preferred rule that they would like to establish in the case before them, but they strategically modify their position to take account of a normative constraint [of stare decisis] in order to produce a decision as close as is possible to their preferred outcome." *Id.* at 1021.

148. The authors' analysis of conference comments of the Justices found that 25.5% referred to applicable precedents. EPSTEIN & KNIGHT, *supra* note 145, at 30; *see also* Knight & Epstein, *supra* note 28, at 1026–28.

149. HANSFORD & SPRIGGS, *supra* note 9, at 11 (citations omitted).

150. Fowler & Jeon, *supra* note 134, at 16.

151. Stevens, *supra* note 39, at 2.

152. Planned Parenthood of Se. Pa. v. Casey, 505 U.S. 833, 866 (1992).

153. Walsh, *supra* note 20, at 339; *see also* Farber, *supra* note 131, at 1203 (concluding that "precedent provides incomplete constraint, but real guidance nonetheless").

154. WALTER F. MURPHY, ELEMENTS OF JUDICIAL STRATEGY 17 (1964).

The legitimacy theory of citation thus underlies both the theories of citation as mask and citation as constraint. The "citations as mask" theory, however, suggests that such legitimacy concerns may be maintained, even in the absence of reality. It ascribes a very low level of competence to the outsider who assesses the practice of stare decisis at the Court. Those who view citations as a constraint contend that the maintenance of legitimacy compels some sacrifice by the Justices, who would be unable to fool all the people all the time.[155] While it is difficult to extract the true effects of citations on decisions, one study of state courts suggested that they both serve to legitimize a decision and also have some substantive impact on directing that decision.[156] Although the legal model is difficult to test quantitatively, some preliminary research has suggested that the strength of legal arguments indeed matters to some degree at the Supreme Court.[157] A brief study of Chief Justice Roberts' first term decisions suggested that he found precedent not a "straightjacket[] that dictate[d] his decisions," but as "boundaries that shape[d] the nature of his opinions."[158]

A different sort of reputational legitimacy effect may exist among judicial colleagues.[159] Lawrence Baum has studied how judges respond to various audiences, including other judges.[160] He notes that "judges who want the respect of practicing lawyers, legal academics, and other judges have an incentive to be perceived as committed to the law and skilled in its interpretation."[161] A central consideration in this reputational legitimacy "is demonstrating the capacity to set aside personal preferences in the service of good law."[162] Richard Epstein contends that the legal model's standards contribute to the influence and prestige of individual Justices.[163] This effect will tend to drive judges to give somewhat greater respect for stare decisis, at the expense of their ideology, out of concern for their reputations. This natural concern for individual reputation will thus promote greater reliance on precedent.[164] Daniel Farber thus concludes

155. *See* Frank B. Cross, *The Justices of Strategy*, 48 DUKE L.J. 511, 530 (1998) (reviewing EPSTEIN & KNIGHT, *supra* note 145) (arguing that for Justices "to maintain an illusion of adherence to legal principle," "requires that they in fact adhere to that principle with some frequency").

156. Walsh, *supra* note 20, at 357.

157. *See* Johnson, Spriggs & Wahlbeck, *supra* note 69, at 525 (showing that oral arguments influence the Justices' votes in cases); Lindquist & Klein, *supra* note 49, at 135, 151–53, 155–56 (finding that factors such as the strength of lower court opinions and the Solicitor General's argument influence Court outcomes).

158. Cross, *supra* note 99, at 1276.

159. *See* Tiller & Cross, *supra* note 28, at 530 (suggesting that operation within the legal model "ensures social-professional acceptance by, and credibility within, the judge's community of peers").

160. BAUM, *supra* note 51, at xi.

161. *Id.* at 106.

162. *Id.* at 107.

163. Richard A. Epstein, *The Independence of Judges: The Uses and Limitations of Public Choice Theory*, 1990 BYU L. REV. 827, 838; *see also* Robel, *supra* note 47, at 902 (declaring that "[j]udges' professional standing is based in large part on [legal] craft notions").

164. *See* Sidney A. Shapiro & Richard E. Levy, *Judicial Incentives and Indeterminacy in Substantive Review of Administrative Decisions*, 44 DUKE L.J. 1051, 1054 (1995). They maintain that judges

that "precedent provides incomplete constraint, but real guidance nonetheless."[165]

Belief in a role for precedent in decision making is also consistent with internal views of judges themselves. They claim, and seem to sincerely believe, that the relevant legal materials affect their decisions. Moreover, this perception is true of the broader legal community. As Judge Newman has observed:

> It is the explanation for the result . . . that attracts the attention of the legal profession—judges of other courts who review the decision on appeal, or attempt to comply with it on remand, or decide whether or not to follow it in another jurisdiction; lawyers who enlist the decision when it helps, distinguish it when it hurts, and ponder it when advising a client; and especially students of the law, whether standing at the front of the classroom or sitting at the rear.[166]

If decision making according to the law, including precedent, is nothing but an insincere mask, it is a surprisingly effective scam. If judges were purely attitudinalist, it is unlikely that they could so effectively fool lawyers and academics about their motivations.

The considerable corpus of empirical research on ideological decision making at the Supreme Court does not refute this third theory of the role of precedent. As noted above, the studies leave a considerable number of Justice votes unexplained, votes that are apparently contrary to the attitudinal theory.[167] Moreover, a recent sophisticated empirical analysis shows how "even if the justices place great weight on legal doctrines, the Court may divide consistently along policy lines, creating a misleading impression of a completely politicized [C]ourt."[168] Thus, the empirical results by no means disprove a legal reasoning effect on its decisions.

### *D. The Implications of Citations*

The differing theories suggest differing implications for the citations found in Supreme Court opinions. If citations are a determinant, the citation practice of the Court reflects the reality of its decisions. If cita-

who ignore the legal model "in order to pursue an outcome orientation are likely to suffer a loss of respect among fellow jurists, lawyers, and the public." *Id.* at 1058.

165. Farber, *supra* note 131, at 1203.

166. Newman, *supra* note 62, at 201.

167. *See supra* notes 112–20 and accompanying text.

168. Michael A. Bailey & Forrest Maltzman, *Does Legal Doctrine Matter? Unpacking Law and Policy Preferences on the U.S. Supreme Court*, 102 AM. POL. SCI. REV. 369, 369 (2008). Additional evidence for the role of law in Supreme Court decision making is found in research suggesting that the Court's outcomes are influenced by the relative quality of the underlying legal analysis in circuit court decisions under review, *see* Lindquist & Klein, *supra* note 49, at 135, and in research showing that the relative quality of oral arguments influences Supreme Court Justices' votes. *See* Timothy R. Johnson, Paul J. Wahlbeck & James F. Spriggs, II, *The Influence of Oral Arguments on the U.S. Supreme Court*, 100 AM. POL. SCI. REV. 99, 99 (2006).

tions are a mask, the citation practice of the Court would represent a post hoc cover-up of the Justices' true motivations. Under this view, the most cited cases would be those that were ideologically most convenient to succeeding Courts, and the use of more citations might simply be a means of covering up ideology. The citations as influence and constraint theory suggests that citations are one relevant factor for explaining decisions of the Court, so that the most cited cases would be the most legally significant and the most citing cases better grounded in the law.

Broader research on organizations can inform the understanding of citations. In a neoclassical model, an organization would obtain information (such as precedents) only insofar as it is marginally cost/beneficial for making a better decision.[169] This view could be consistent with the legal theory of citations; that the only need for additional investigation into precedents, and consequent citation, is to the extent that it enables better legally grounded decisions.

Organizational decision-making research, however, has found that in practice, individuals collect far more information than appropriate under this cost/benefit standard.[170] While this effort seems foolish, it can be explained by factors such as signaling sincerity. "The gathering of information [such as citations] provides a ritualistic assurance that appropriate attitudes about decision making exist."[171] Those "[d]ecisions that are viewed as legitimate will tend to be information-intensive."[172] Thus, more citations should translate into more legitimacy for decisions.

The use of citations may be as a determinant or as a mask or as a combination of both, in which they work as a partial influence or constraint on the choices of the Justices. While there is empirical evidence that precedents are not perfect determinants,[173] it does not dispel the possibility of their influence. Organization theorists have observed that "[i]t is not easy to be a stable hypocrite."[174] Thus, one would expect that "[t]he symbolic display of precedent will then reinforce the myth that precedent affects judicial decisionmaking, and the myth will guide the practice."[175] This effect should appear in citation practices.[176] This plausible explanation, though, requires testing.

169. Martha S. Feldman & James G. March, *Information in Organizations as Signal and Symbol*, 26 ADMIN. SCI. Q. 171, 172 (1981).

170. *Id.* at 174.

171. *Id.* at 177.

172. *Id.* at 178.

173. *See* SEGAL & SPAETH, ATTITUDINAL MODEL REVISITED, *supra* note 63, at 433–34.

174. Feldman & March, *supra* note 169, at 180.

175. Harris, *supra* note 107, at 220.

176. *See, e.g.*, Farber, *supra* note 131, at 1183 ("Adherence to precedent does not mean simply refusing to overrule past decisions—it means taking them seriously as starting points for analysis in future cases."). Such serious consideration as a "starting point" compels citations to those precedents.

## II. EMPIRICAL RESEARCH ON CITATIONS

Judge Posner has called for further quantitative empirical studies of citations to precedent.[177] Richard Fallon has observed that the role of precedent at the Court "must be understood empirically"[178] rather than relying on the anecdotal and subjective impressions of commentators. Scientifically studying stare decisis is a notoriously difficult task. When the Court is divided, both the majority and the dissent will ground their arguments with citations to supporting precedents.[179] Presumably, one is more faithful to precedent than the other, but who is to decide? There is no neutral arbiter for evaluation of adherence to stare decisis, but some studies have made efforts to quantitatively examine citations.[180] This Part examines the direct empirical research on citation practices.

Legal researchers have long considered citations, but largely from a doctrinal perspective, using only subjective and anecdotal evidence on the Court's fidelity to stare decisis.[181] A representative article of this sort would consider an individual opinion of the Supreme Court and analyze whether the supporting citations truly supported the case outcome. In a sense, this research serves as something of a test of the theories of citation, as a decision that falsely manipulated past citations would suggest that it operated only as a mask. The test, however, is a very imperfect one. The erroneous decision might be a mistake by the Court, rather than an insincere use of precedent.[182] More centrally, the test depends on the aptitude and sincerity of the researcher evaluating the use of precedent. Perhaps it is the critical article that is using citations as a mask for the researcher's own extralegal objectives, or simply an error regarding the precedent's application.

A more central problem is that this typical legal research is by its nature anecdotal for a single decision, and has focused heavily on normative questions, while ignoring key descriptive considerations. The descriptive study of citation practice requires a more rigorous investigation. Political scientists and some legal scholars have conducted empirical investigations into judicial decision making for decades, but the research has dwelled on outcomes and for most of this time citation practice has been ignored.[183] In recent years, researchers have discovered this field of

177. *See* Posner, *supra* note 1, at 402.

178. Fallon, *supra* note 30, at 1115.

179. *See infra* notes 384–88 and accompanying text.

180. *See, e.g.*, Frank B. Cross et al., *Warren Court Precedents in the Rehnquist Court*, 24 CONST. COMMENT. 3 (2007); Landes & Posner, *supra* note 40.

181. *See, e.g.*, William S. Consovoy, *The Rehnquist Court and the End of Constitutional Stare Decisis:* Casey, Dickerson *and the Consequences of Pragmatic Adjudication*, 2002 UTAH L. REV. 53.

182. *See, e.g.*, Gerhardt, *supra* note 130, at 1285 ("The fact that Justices appear to manipulate precedent does not, however, mean they do not respect it. Instead, the Justices merely could be opting for one of several plausible constructions of prior decisions, or the outcomes in particular cases could be hard to reconcile because, as the product of a collegial or multimember institution, they are likely to be inconsistent.").

183. *See, e.g.*, ROHDE & SPAETH, *supra* note 77, at 145–57.

study and have begun to analyze citations and the use of precedent in Supreme Court decisions. Much of this research has focused on the application of citations.

A body of citations research focuses not on the Justices' choice to cite but on the role of precedents in future decisions.[184] The seminal research on this aspect of citations was by Landes and Posner.[185] They examined the citations contained in a sample of appellate court decisions, and whether the frequency of citations varied according to factors such as the subject matter of the decision and the age of a case.[186] The Landes and Posner study also looked at the courts' frequency of citation to some degree, finding that in the 1974 term there were some differences in citation numbers by type of case.[187] This research was primarily concerned with the rates of use of past precedents and found significant depreciation in their citation over time.[188]

Some research has been conducted on the frequency with which certain opinions or judges were cited *by* later courts. Judge Easterbrook has used this measure to evaluate Supreme Court Justices.[189] Stephen Choi and Mitu Gulati have conducted extensive research on circuit court judges and their relative receipt of citations to their opinions.[190] They contend that this serves as a measure of the quality of the cited opinion.[191] Of course, an opinion's receipt of a citation requires a later citing court, but the citing choices of the later court have seen less analysis.[192]

While there is limited research on citation choice, some evidence that precedents are not merely a mask comes from research on the Justices' internal usage of precedents. If precedents were but a mask for preferences, one would expect to see citations used in opinions for public

184. This was the primary subject of a separate issue of the *Journal of Legal Studies*, which analyzed various sources' citation frequencies within law reviews and judicial opinions. Symposium, *Interpreting Legal Citations*, 29 J. LEGAL STUD. 317 (2000).

185. *See* Landes & Posner, *supra* note 40, at 250.

186. Landes and Posner found that decisions in some areas of the law (e.g., constitutional) received far more citations than other areas (e.g., nonconstitutional criminal law). *Id.* at 285 tbl.7. They also found that the use of citations depreciated over time, with a mean of about six years. *Id.* at 255–61. A study of the California Supreme Court found a similar effect. *See* Merryman, *Toward a Theory of Citations*, *supra* note 1, at 395 & n.11.

187. Landes & Posner, *supra* note 40, at 285 & tbl.7.

188. *See id.* at 286.

189. Frank H. Easterbrook, *The Most Insignificant Justice: Further Evidence*, 50 U. CHI. L. REV. 481, 495–96 (1983).

190. *See* Stephen J. Choi & G. Mitu Gulati, *Choosing the Next Supreme Court Justice: An Empirical Ranking of Judge Performance*, 78 S. CAL. L. REV. 23, 50 (2004). Others have conducted similar research at the circuit court level. *See* David Klein & Darby Morrisroe, *The Prestige and Influence of Individual Judges on the U.S. Courts of Appeals*, 28 J. LEGAL STUD. 371, 375–81 (1999); William M. Landes et al., *Judicial Influence: A Citation Analysis of Federal Courts of Appeals Judges*, 27 J. LEGAL STUD. 271, 278 (1998).

191. Choi & Gulati, *supra* note 190, at 48–49. The relevance of this measure has been analyzed by other articles. *See generally* Symposium, *supra* note 184; Symposium, *Trends in Legal Citations and Scholarship*, 71 CHI.-KENT L. REV. 743 (1996).

192. Choi and Gulati have expanded their analysis to conduct such research at the circuit court level, examining the extent to which the judges are ideologically influenced in their choice of citations. Choi & Gulati, *supra* note 50, at 1293–1302.

consumption, but there would be no reason for their deployment in internal discussions at the Court. While the conference of the Justices on a case is private, the notes of Justices have provided us with some evidence of what occurs at conference. Justice Brennan's notes indicate that the Justices invoke precedents in their arguments the vast majority of the time when discussing a case.[193] While this is informative, it provides limited evidence on the totality of citation choice.

Another set of research has examined the power of precedent. In contrast to the Segal and Spaeth research discussed above, these analyses seem to show influence from past cases. Richards and Kritzer suggest that the content of an opinion creates a "jurisprudential regime."[194] Such "regimes structure Supreme Court decision making by establishing which case factors are relevant for decision making and/or by setting the level of scrutiny or balancing the justices are to employ in assessing case factors."[195] The authors noted that "justices see the law that they make as providing guidance to other institutions in society," but for "that guidance to be effective, they must rely upon that same law as guidance to themselves in order to treat like cases consistently."[196] They demonstrated that the First Amendment's content neutrality standard created in 1972 had this effect of setting precedents that drove future decisions.[197] The same effect was found in studies of the First Amendment establishment clause law,[198] the *Chevron* deference doctrine,[199] and search and seizure decisions (the central strength of the attitudinal model).[200] Even opponents of the new regime conform to its dictates, though more slowly than those who support it.[201]

A study focusing on gay rights decisions measured the relative effect of precedent and ideology on judicial outcomes.[202] The study considered different levels of state and federal courts and found that precedent had a significant effect on outcomes over and above the ideology of the judges.[203] The effect was smaller on courts of last resort, such

193. *See* Knight & Epstein, *supra* note 28, at 1026–27.

194. Mark J. Richards & Herbert M. Kritzer, *Jurisprudential Regimes in Supreme Court Decision Making*, 96 AM. POL. SCI. REV. 305, 305 (2002).

195. *Id.* at 305.

196. *Id.* at 307.

197. *Id.* at 311–15.

198. *See* Herbert M. Kritzer & Mark J. Richards, *Jurisprudential Regimes and Supreme Court Decisionmaking: The* Lemon *Regime and Establishment Clause Cases*, 37 LAW & SOC'Y REV. 827, 839 (2003).

199. *See* Mark J. Richards, Joseph L. Smith & Herbert M. Kritzer, *Does* Chevron *Matter?*, 28 LAW & POL'Y 444, 445 (2006).

200. *See* Herbert M. Kritzer & Mark J. Richards, *The Influence of Law in the Supreme Court's Search-and-Seizure Jurisprudence*, 33 AM. POL. RES. 33, 51 (2005).

201. Kevin M. Scott, *Reconsidering the Impact of Jurisprudential Regimes*, 87 SOC. SCI. Q. 380, 383–84 (2006).

202. DANIEL R. PINELLO, GAY RIGHTS AND AMERICAN LAW 1–2 (2003).

203. *See id.* at 142–43.

as the Supreme Court, but was still present.[204] Justices responded to and were influenced by precedents.[205]

Paul Wahlbeck examined the interaction of ideology, legal constraints, and other factors on Court decisions for a part of the Warren Court.[206] To study the effect of precedent, he counted "the number of previous decisions within the factual circumstance categories raised by a case in which the Court has consistently either included a factual matter within the scope of the law or excluded it."[207] He found that legal constraint was a significant factor.[208]

A recent book by Thomas Hanford and James Spriggs applied more rigor to analyzing the Justices' choice of citations, examining Justices' choices to cite particular prior decisions favorably or unfavorably.[209] They considered cases in which the Court either positively treated a precedent as controlling the outcome or negatively treated it by restricting its reach or questioning its importance.[210] They found that a positive treatment enhanced the "vitality" of the cited case, making it more powerful.[211] By contrast, the negative treatment of a precedent reduced this power. The authors found that the Justices were more likely to cite an ideologically aligned precedent positively and give more negative treatment to ideologically contrary precedents.[212] This effect is consistent with Larry Alexander's explanation of how precedential rules may be strengthened or limited by subsequent decisions.[213]

One of Hansford and Spriggs' principal theoretical claims was that the influence of the Justices' ideological distance from a precedent was conditional on the relative legal vitality (i.e., the continuing legal authority) of a case.[214] That is, they argued that the force of ideology would vary based on the legal authority of a case.[215] They posited that the influence of legal vitality stemmed from two sources. First, Justices recognize a need to legitimize their policy choices, and the decision to cite cases in part stems from this legitimation need.[216] Justices further realize they can more effectively justify their decisions by relying on cases with greater legal authority.[217] As a result, for example, Hansford and Spriggs expect

204. *See id.* at 150–51.
205. *See id.* at 93–98, 100–01.
206. *See* Wahlbeck, *supra* note 92, at 778.
207. *Id.* at 787.
208. *Id.* at 794. His findings were much more consistent with the view that precedents served as constraint, rather than determinant, because their predictive power was between fifteen and thirty percent, depending upon the type of decision. *Id.* at 791–94.
209. HANSFORD & SPRIGGS, *supra* note 9, at 6.
210. *Id.*
211. *Id.* at 23–26, 125–26.
212. *Id.* at 126.
213. *See* Larry Alexander, *Constrained by Precedent*, 63 S. CAL. L. REV. 1, 17–25 (1989).
214. HANSFORD & SPRIGGS, *supra* note 9, at 125.
215. *Id.*
216. *Id.* at 27.
217. *Id.*

the Justices, for legitimation reasons, to be more likely to positively interpret a precedent that has greater vitality.[218] They further suggested Justices have a policy incentive to take legal vitality into consideration in that "[t]he effect of ideological distance on the benefit associated with negatively altering the status of a precedent also depends on the current legal vitality of the precedent in question."[219] The legal vitality of a case can affect the policy benefits a Justice would receive from legally interpreting it in a particular way. For instance, while Justices always receive greater policy utility from negatively interpreting a precedent with which they ideologically disagree, they would receive even greater policy benefits from negatively treating a legally vital precedent.[220] By negatively treating a vital case with which they disagree, they are cutting back on a case that is presumably having greater influence on lower courts and other relevant decision makers.

Hansford and Spriggs' data demonstrate that the influence of policy preferences and the law are interdependent considerations, and that both affect the legal interpretation of precedent. They thus conclude that precedent can "represent[] a constraint in that justices may respond to the need to legitimize their policy choices."[221] Because of the need for legitimacy, they find that "precedent can limit [the Court's] flexibility or discretion."[222] This result is seen most clearly in the Justices' tendency to positively interpret precedents they ideologically favor when those cases have greater legal vitality. The authors also urge, though, that citation "represents an opportunity" to the Justices by creating or strengthening a constraint on other actors.[223] This latter result appears most evident in the Justices increased tendency to negatively interpret precedents they ideologically disfavor when those cases have greater legal vitality. In other words, the Justices overrule or otherwise negatively treat high vitality cases because in so doing they are moving an important legal *status quo* in a direction they favor. Legal research supports this conclusion.[224] There is some leeway in the use of precedent, so citation choices exist. This strongly suggests that "[e]ach judicial citation contained in an opinion is essentially a latent judgment about the case cited."[225]

A recent network analysis has used citations to study Supreme Court practice over the years. While this study focused primarily on the

218. *Id.* at 57.

219. *Id.* at 35.

220. *Id.*

221. *Id.* at 13. The authors also noted that "while the justices make decisions based on their policy preferences, they are also constrained by the need to legitimize policy choices by relying on vital precedents." *Id.* at 67.

222. *Id.* at 21.

223. *Id.* at 13. Thus, while constrained, the Justices may also "push existing precedent in directions they prefer." *Id.* at 67.

224. *Cf.* RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 541 (4th ed. 1992) (reporting that "precedent projects a judge's influence").

225. Fowler & Jeon, *supra* note 134, at 17 (emphasis omitted).

subsequent use of precedents, it contained some examination of citing practices. The authors found that the Warren Court Justices "tended to cite fewer cases," suggesting the activism with which it is often associated.[226] Landes and Posner, however, considered two terms of the Court and found little additional depreciation of precedent (suggesting judicial activism) in the Warren Court.[227] We will explore this question later in this Article.[228] Another unpublished paper examined the citations contained in the syllabus of Supreme Court opinions and found that precedent was more determinative of outcomes than ideology.[229]

Additional research indicates that one element of the norm of stare decisis—that Justices should cite the most legally relevant decisions in their opinions—has significant empirical support.[230] The norm of stare decisis does not suggest that judges should cite any case, but that they should cite the most legally relevant and authoritative cases for a dispute. The use of precedent is thus often depicted as an analogical reasoning process by which the Justices determine which cases are factually most similar to the present dispute and apply those cases. As Hansford and Spriggs explain, "The core purpose of precedent in this process is to provide judges with information about how to compare and group factual circumstances so that they can be treated similarly."[231] For instance, research shows that when deciding a case, the Court is more likely to cite prior cases that have greater legal relevance for the dispute in that they share similar issue areas, were decided on similar legal bases, or were cited a greater number of times in the legal briefs in the case.[232] Other studies show that the likelihood a Supreme Court case is cited by either the Supreme Court or lower federal courts is increasing in the degree to which it is a more central case in the network of law.[233]

These empirical findings on the power of precedent are obviously related to the citation choices of the Justices. For a precedent to have

226. *Id.* This is consistent with the oft-asserted claim that Warren Court opinions lacked legal craftsmanship. *See, e.g.*, PHILIP B. KURLAND, POLITICS, THE CONSTITUTION, AND THE WARREN COURT 91 (1970) (discussing the Warren Court's "willingness to disregard stare decisis" at a "volume and speed" that had "never been witnessed before"); Joseph Vining, *Justice, Bureaucracy, and Legal Method*, 80 MICH. L. REV. 248, 250 (1981).

227. Landes & Posner, *supra* note 40, at 290–92.

228. *See* discussion *infra* Part IV.A.

229. *See* Richard L. Pacelle, Jr. et al., Of Opportunities and Constraints: Decision Making in the Modern Supreme Court (Apr. 12, 2007) (unpublished manuscript, *available at* http://www.allacademic.com//meta/p_mla_apa_research_citation/1/9/7/2/5/p197253_index.html).

230. *See* Fowler & Jeon, *supra* note 134, at 28.

231. HANSFORD & SPRIGGS, *supra* note 9, at 19.

232. *See* James F. Spriggs, II & Thomas G. Hansford, *The U.S. Supreme Court's Incorporation and Interpretation of Precedent*, 36 LAW & SOC'Y REV. 139, 154–57 (2002).

233. *See* Ryan C. Black & James F. Spriggs II, *An Empirical Analysis of the Length of U.S. Supreme Court Opinions*, 45 HOUS. L. REV. 621, 680–81 (2008) (confirming the influence of the network centrality of Burger Court precedents on subsequent lower federal court citation of those cases); Fowler et al., *supra* note 14, at 325 (using network analysis to create measures of case centrality based on citation patterns in Supreme Court opinions and showing that case centrality correlates with subsequent citation rates).

power in directing the path of the law, it must be understood and incorporated by later Justices in their citations. The research on the influence of precedent is only an indirect approach to the study of Justices' citation practices. A direct analysis must address the citation choices at the time of the decision.

One approach for such study is simply to count the number of citations contained in an opinion as evidence of its grounding in stare decisis. An early study examined citation rates, employing the theory that "[t]he display of information," such as citations, "is a display of competence, and it provides legitimacy to the decision."[234] This theory is consistent with the organizational theory and research discussed above.[235] The author hypothesized that the number of citations would be higher in close cases, where the decision was a difficult one, and examined the decisions of state courts of last resort.[236] He found this was the case, as evidenced by a greater number of citations in decisions that included a dissenting or concurring opinion, reversed a lower court, involved a constitutional issue, had participating amici, and other factors.[237]

One further study examined total Supreme Court citation rates and their consequences.[238] The author examined the use of Supreme Court opinions by lower courts and considered the number of citations in the opinions as a variable, albeit for a relatively small sample of cases.[239] From this research, it appears that opinions containing more citations have more influence in the future path of stare decisis, even after controlling for other variables such as ideology.[240] He found a positive correlation between the number of citations in an opinion and its subsequent positive usage by lower courts.[241] Although the association was not particularly strong, he found a statistically significant correlation, which suggested that "legal reasoning with greater precedential ties is used more often by lower courts."[242] These conclusions find some confirmation in a study of state courts that found that "more carefully argued and documented" opinions had greater impact in their likelihood of subsequent citation.[243] A larger number of citations appeared to produce a "better"

234. Harris, *supra* note 107, at 209.

235. *See supra* text accompanying notes 169–76.

236. Harris, *supra* note 107, at 209.

237. *Id.* at 217.

238. *See* Charles A. Johnson, *Law, Politics, and Judicial Decision Making: Lower Federal Court Uses of Supreme Court Decisions*, 21 LAW & SOC'Y REV. 325, 332 tbl.2 (1987).

239. *Id.* at 325. Hansford and Spriggs demonstrated that Supreme Court opinions with greater legal vitality are more likely to be either positively interpreted or string cited in lower federal courts. HANSFORD & SPRIGGS, *supra* note 9, at 115–20; Spriggs & Hansford, *supra* note 232, at 144; *see also* Black & Spriggs, *supra* note 233, at 676 (indicating that longer majority opinions will receive more string cites in lower federal courts).

240. *See* Johnson, *supra* note 238, at 329.

241. *Id.* at 333.

242. *Id.*

243. Walsh, *supra* note 20, at 352–53.

decision.[244] Thus, the number of citations in an opinion appears to be a significant measure of an opinion's significance.

The number of studies on citation practice is growing, but is still quite small compared to the amount of attitudinal research on decisional outcomes, and they generally have failed to examine the choices of Justices to cite cases or citation rates in opinions.[245] Nevertheless, we can draw some tentative conclusions about the relevance of citation practices. It appears that citations matter to some degree, and the absolute number of citations is at least a rough cue for their significance. Consequently, we embark upon an empirical study of citation rates as a measure of the role of stare decisis.

## III. THE DATA ON SUPREME COURT CITATIONS

Citations are surely not random in their use.[246] Citing cases is not costless (as precedents must be found and evaluated before use).[247] Moreover, the effect of precedents and citations and the need for legitimacy might constrain the preferences of the opinion author and other Justices. Hence, "citations analysis" can be a valuable "empirical tool for understanding aspects of the legal system."[248] This Part provides the first major examination of citation rates of the Supreme Court for an extended period of time and a significant number of cases.

### *A. The Data on Citations*

Our analysis includes all citations to prior Supreme Court decisions in majority opinions of the Supreme Court. The data were drawn from LexisNexis in a textual format, using the widely used Shepard's citations service via a computer program. We rely on the data compiled by Fowler, who provides data on citation to Court opinions from 1791 through 2005.[249] Their data include citations contained in all "front of the book" majority opinions of the Court, and they excluded per curiam opinions that had no oral argument, summary "back of the book" dispositions, and in chambers decisions.[250] They identified 26,681 majority opinions released by the Court from 1791 through 2005.[251] The exclusion of summary dispositions surely understates the legal influence on decisions, as

244. *See id.* at 352.

245. *See, e.g.*, Landes & Posner, *supra* note 40.

246. Indeed, previous studies, mostly on state courts, have shown that "[c]itations are not randomly distributed." Walsh, *supra* note 20, at 338.

247. Harnay & Marciano, *supra* note 36, at 407 (addressing the costs of "the effort and the search for the information aimed to justify and back up the point made in the argumentation"); Posner, *supra* note 1, at 383 (emphasizing that "citing is not costless").

248. Posner, *supra* note 1, at 381.

249. Fowler et al., *supra* note 14, at 326.

250. *Id.* at 327 nn.6–8.

251. *Id.* at 327.

discussed above.[252] Our study is limited to the closely contested cases, where the law is presumably less constraining, in an attempt to identify the role of the law in such decisions.

### *1. Citation Count Measure*

From this data source, we calculated the number of citations to Supreme Court precedent in each Supreme Court majority opinion. A simple count of citations in an opinion is limited insofar as it does not consider the manner in which the precedent was cited in the opinion. Citations may be deemed "negative" in nature, such as those distinguishing prior opinions, and such citations are included in our number.[253] Some might argue that such negative citations show a disrespect for stare decisis and hence are contrary to our theories of citation significance. Yet Judge Posner notes that even such negative citations are "motivated by the authority of the previous case."[254] Moreover, many citations classified as negative may not be negative in fact. A distinguishing of a precedent acknowledges its importance in the corpus of stare decisis and may in fact be perfectly respectful of its holding. The litigants may have sought to expand the reach of the precedent beyond its original bounds, and the subsequent opinion distinguishing its application from the facts at hand may therefore be entirely consistent with the cited authority.

An overruling of a precedent is surely at least somewhat disrespectful of stare decisis,[255] and overruling requires a citation to the decision overruled. Such overrulings are extremely rare, however. In a representative decade, "the Court overturns less than 0.002 percent of its previous decisions."[256] Decisions to overrule precedent might be used as a quantitative measure of respect for stare decisis, but their relative rarity means that such a test would miss the effect of precedent in the vast majority of cases. Our analysis of citation practice is meant to capture this effect. While a more refined analysis of the treatment of precedents would have value, there is reason to think that a simple count is meaningful.

252. *See supra* note 96 and accompanying text. Of course, most of those summary dispositions contain no citations to prior Court opinions and are actually orders of the Court, rather than opinions.

253. See HANSFORD & SPRIGGS, *supra* note 9, at 57, for an analysis of the Court's decisions to subject prior opinions to legal interpretation.

254. Posner, *supra* note 1, at 385.

255. Even an overruling might be considered consistent with stare decisis, as the original opinion may have become inconsistent with the body of law that had subsequently developed. Justice Roberts suggested this possibility in his confirmation hearing. *Confirmation Hearing on the Nomination of John G. Roberts, Jr. to be Chief Justice of the United States: Hearing Before the S. Comm. on the Judiciary*, 109th Cong. 142 (2005). Nevertheless, it seems generally fair to regard overrulings as contrary to stare decisis.

256. JEFFREY A. SEGAL, HAROLD J. SPAETH & SARA C. BENESH, THE SUPREME COURT IN THE AMERICAN LEGAL SYSTEM 316 (2005). While ideological decision making is significant in the overruling of a precedent, its historic treatment in the Court's citations is also a factor. *See* James F. Spriggs, II & Thomas G. Hansford, *Explaining the Overruling of U.S. Supreme Court Precedent*, 63 J. POL. 1091, 1095 (2001).

What is more, even if a case is not legally treated, a citation to it continues to offer meaningful information about the continuing legal relevance of that case. For instance, recent research distinguishes conceptually between case relevance, which they argue is largely based on whether a case is cited, and the legal vitality or authoritativeness of a case, which they contend is based on how a case has been legally interpreted in the past, and, for instance, whether a case was distinguished rather than followed.[257] One study used the number of times a case was cited by subsequent opinions as a starting point for determining the degree to which the case was central in the legal network of cases at the Court.[258] Recent work by Hansford and Spriggs on the legal treatment of precedent at the Court also makes this distinction between the relevance and authority of a case.[259] They measured legal relevance as the number of times a case was previously interpreted by the Court (whether positively or negatively) and measured legal vitality as the difference in the prior number of positive and negative interpretations.[260] We assume that a citation to a case, even if that citation is a string citation, provides information about the continued relevance for that case for legal disputes coming before the Court. In short, we argue that citations provide meaningful information about the law.

### *2. Network Centrality Measure*

A count of citations (what network analysts refer to as "degree centrality") is meaningful, but it does not take advantage of the full array of information contained in the choice of citations by Justices. The casual reader of Supreme Court opinions can observe that the citations contained in majority and concurring or dissenting opinions vary to some degree. They can also ascertain that the Justices differ not only in terms of how many cases they cite but also in terms of the quality of those cited cases, and, for instance, whether they cite cases that are perceived as more legally influential or authoritative.

Network analysis is a tool increasingly used in the natural and social sciences whose basic purpose is to map and measure the relationship among actors or items in a network and to measure the latent positions those actors or items occupy in the network.[261] Researchers have used this analysis to evaluate the nature of social interactions and, for example, to identify key individuals who communicate most extensively with others.[262] The method has been used to examine such issues as the nature

257. *See* Fowler et al., *supra* note 14, at 328 n.12.
258. *See id.* at 325.
259. HANSFORD & SPRIGGS, *supra* note 9, at 60–62, 76 n.27.
260. *Id.* at 60–62.
261. For a general introduction to network analysis, see JOHN SCOTT, SOCIAL NETWORK ANALYSIS: A HANDBOOK (2d ed. 2000).
262. *See id.* at 102.

of contagious disease transmission,[263] the spread of obesity,[264] and the cosponsorship of bills in the U.S. Congress.[265] Most analogous to our study, network analysis has been used to study academic citations and identify the most influential authors.[266] It has also been used in a few recent articles to examine the network of relations among court cases.[267] Michael Gerhardt has emphasized the importance of these network effects of precedent, noting that "[t]he extent and nature of a precedent's network of citations influence the strength of its constraining power."[268] "[T]he clarity [and] significance" of a precedent's "meaning in constitutional law depends on the consistency and uniformity with which the Court and other public authorities have cited it."[269] Hence, network analysis of the future applications of precedent provides a valuable tool for assessing its importance.

In basic terms, a network comprises the relationships among some set of actors or items in a network. A network consists of two basic parts. First, a network includes the nodes, or the actors or items connected in the network.[270] Second, the network is comprised by the connections among these nodes.[271] In our case, Supreme Court opinions represent the nodes in the network, and citations to and from opinions are the linkages among cases. The network of the law is thus made up of the citations within and among cases. We emphasize that this network consists of direct connections, such as a citation from Case A to Case B, and indirect connections, such as a connection between Case A and Case C resulting because Case A cites Case B, and Case B cites Case C. There is thus an indirect linkage between Case A and Case C and this indirect connection can provide information about how central both of those cases are in the overall network. One important feature of measures based on network analysis is that they are often superior precisely because they utilize the information contained in these indirect connections to draw inferences about the latent positions of cases in the network.[272]

263. *See, e.g.*, Lauren Ancel Meyers et al., *Network Theory and SARS: Predicting Outbreak Diversity*, 232 J. THEORETICAL BIOLOGY 71, 71 (2005).

264. *See* Nicholas A. Christakis & James H. Fowler, *The Spread of Obesity in a Large Social Network over 32 Years*, 357 NEW ENG. J. MED. 370, 370 (2007).

265. *See* James H. Fowler, *Connecting the Congress: A Study of Cosponsorship Networks*, 14 POL. ANALYSIS 456, 456–58 (2006).

266. *See, e.g.*, Kouhei Sugiyama et al., Structural Analysis of Paper Citation and Co-Authorship Networks Using Network Analysis Techniques (Dec. 20, 2007) (unpublished manuscript, http://www.ispl.jp/~oosaki/papers/Sugiyama07_ICCS.pdf) (establishing and analyzing a paper citation network and paper co-authorship network).

267. *See, e.g.*, Fowler et al., *supra* note 14, at 324–25; Fowler & Jeon, *supra* note 134, at 16.

268. Gerhardt, *supra* note 130, at 1289.

269. *Id.*

270. Fowler et al., *supra* note 14, at 325.

271. *Id.*

272. See *id.*, who show that their dynamic case centrality measures, which draw on information contained in the indirect linkages as well as the direct connections, are superior to a measure based on the direct connections alone (i.e., degree centrality).

One of the most often examined latent traits of a node in a network is its centrality or importance in the overall network of relations. Network analysts define centrality as a point that is "'at the centre' of a number of connections, a point with a great many direct contacts with other points,"[273] or a point with "strategic significance in the overall structure of the network."[274] The simplest measure of centrality is "degree" centrality, which one measures based on the direct connections among cases.[275] For example, the measure of the number of cited cases in an opinion is a measure of what some call the "outward" degree centrality of an opinion.[276] Analysts, however, have developed more powerful measures of centrality that consider both these direct connections and the indirect connections among cases. They do so by evaluating the significance of a case based on both the number of citations ("degree"), and the "quality" of the citing and cited cases.[277] Using this information, analysts are able to produce quantitative estimates of the importance of a case in the legal citation network of the Supreme Court.[278]

We utilize a measure of case centrality applied by Fowler to the Supreme Court that measures what they term the "outward relevance" of all Supreme Court opinions decided from 1791 through 2005.[279] It measures the degree to which a case is "grounded" in influential Supreme Court precedent and is based on the number of citations in a case, where each of those citations is weighted by how influential the cited case is in the network of Supreme Court precedent. This measure captures how deeply embedded a Supreme Court opinion is within the network of all citations among Supreme Court opinions, as evidenced by the citation patterns between it and all other cases. More specifically, this method measures the legal centrality of a precedent as a weighted function of the number of citations in that case, where each of those citations to a precedent is weighted by how legally influential that cited case is in the network of law. Another way of putting this is that the contribution a given citation makes to the citing case's centrality is in part shaped by how legally central the cited case is. In this way, our network measure of centrality uses not only direct connections among case citations but also indirect connections. In addition, these scores are dynamic in the sense that they can vary over cases at a single point in time and vary over time for given cases. This change in the centrality of cases results because, as the Court releases opinions and those opinions cite previously decided cases, the centrality score for a given case can change, as the degree of influence of the cases it originally cited ebbs and flows.

273. SCOTT, *supra* note 261, at 83.
274. *Id.* at 82.
275. *Id.* at 83.
276. *See* Fowler et al., *supra* note 14, at 325.
277. *See id.* at 342–43.
278. *Id.* at 336 tbl.2.
279. *See id.* at 331–32.

There is thus an association between this legal centrality score and the raw citation counts, simply because more citations provide more centrality scores to be cumulated. The correlation, however, is not a precise one because the network centrality score contains information from the indirect network linkages. A case that cites more less-central decisions will produce a lower score than one that cites fewer cases, but ones that have higher centrality scores. In some contexts, it is a superior measure to raw citation counts because it addresses the choice to cite cases that are currently more compelling in the legal network. Some Justices may be more frugal in their use of citations, using only those cases that are truly important to the decision (and avoiding string cites that may be unnecessary to the resolution of the case). This measure avoids punishing such Justices and falsely making them appear disrespectful of precedent. A higher score indicates that the Justices cited cases that are more legally significant cases at the time, and the legal significance should correlate to some degree with the authentic practice of stare decisis. The score is straightforward and is a percentile measure, reflecting which percentile of the distribution each case resides in.

Previous studies using these scores demonstrate that they are both valid and reliable indicators of the centrality of a case. Studies find a high association between these centrality scores and the Supreme Court cases judged most important by expert commentators,[280] and the subsequent citation of these cases by the Supreme Court and lower courts.[281] There is also some evidence that this network centrality measure is associated with stare decisis. A study of annual changes in the network found that changes in network centrality had a statistically significant negative association with the extent of ideological voting in that year.[282] This suggests that the network centrality measure appears to be associated with voting based on precedent rather than ideology.

### *B. The Meaning of Citations*

As already indicated, we use two quantitative measures of citations in majority opinions. We first rely on the total number of cited cases in an opinion as a measure of the use of precedent. Second, we use the network centrality score, which captures how deeply integrated the cited cases in an opinion are in the then-existing overall network of law at the Court. The use of these numeric variables might be challenged, as use of more citations has no obvious meaning. A greater number of citations

280. Fowler & Jeon, *supra* note 134, at 21–22.

281. *See* Fowler et al., *supra* note 14, at 342–43; *see also* Black & Spriggs, *supra* note 233, at 673–76 (using network centrality as a control variable in an article about opinion length determining likelihood of future citations).

282. *See* Frank B. Cross et al., *Determinants of Cohesion in the Supreme Court's Network of Precedents* tbl.4 (Univ. of Tex., Law and Econ. Research Paper No. 90, Aug. 2006), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=924110.

could mean that the decision is better grounded in historic precedent, but it could also mean that citations were included simply as a mask, for legitimation reasons, or that the number of citations is due to some random factor entirely unrelated to stare decisis or any other meaningful legal consideration.[283] We next consider the implications of more citations or citations of different types.

A Supreme Court citation to a precedent is a decision made by the authoring Justice (and most likely other members of the Justice's majority coalition). The significance of particular citations for the decision obviously varies in each opinion. But "each citation is a latent judgment by the justice who authors it about which cases are most important for resolving questions that face the Court" and the decision to cite a precedent suggests that it provides some valuable information about its relevance.[284] Thus, a study of citations has relevance to judicial decision making.

Merryman suggests that frugality in citing might actually better respect stare decisis, insofar as Justices with fewer citations are "exercis[ing] nicer discrimination" and relying on only those citations that are truly applicable to the case at hand.[285] He suggests, though, that the number of citations may better reflect the "breadth" of a decision and the Justice's choice to make it more relevant and important to future judges.[286] His study of the California Supreme Court also appears to partially refute the frugality hypothesis, as the justices who cited the most overall authority also cited the most authoritative sources.[287] This provides some support for claims that more citations reflect more thorough legal grounding for opinions.[288]

Traditional legal model "[j]urisprudential theories typically offer little basis for predicting the amount of authority a decision will require."[289] It is impossible to objectively establish the proper number of citations for a Supreme Court decision.[290] It has been suggested that "a larger number

283. "Some cases simply [may] have more relevant precedents and would be expected to yield more citations." Cross, *supra* note 99, at 1268.

284. Fowler & Jeon, *supra* note 134, at 18.

285. Merryman, *Toward a Theory of Citations*, *supra* note 1, at 420. He notes that some citations might be "unnecessary padding" and reflect the fact that "the judge has failed to do the additional intellectual work of selecting the most clearly applicable authority to cite." *Id.* at 421.

286. *Id.* at 422.

287. *Id.* at 422–23.

288. Numbers of citations may thus be an indirect measure of the degree to which the Justices see their role as a legalistic one. *See* Lawrence M. Friedman et al., *State Supreme Courts: A Century of Style and Citation*, 33 STAN. L. REV. 773, 794 (1981) (suggesting that citation patterns "reflect conceptions of role," so that changes in such patterns "may be barometers of changes in the way judges think about their roles and about the sources and limits of their power").

289. Harris, *supra* note 107, at 210.

290. *See* Manz, *supra* note 133, at 46 (noting that the significance of an opinion with "many citations" is theoretically indeterminate).

of authorities is to be preferred," as it suggests greater attention to legal doctrine, though it may also reflect the breadth of a decision.[291]

A scan of petitioner and respondent briefs presented to the Court demonstrates that Justices inevitably have a large number of potential citations to use in the opinion. The Court's opinion cites only a small fraction of the cases cited in the briefs.[292] Moreover, the Court identifies numerous cases to cite that were not included in the briefs.[293]

A limited study of Chief Justice Roberts' decisions displays the scope of judicial discretion.[294] In multiple cases, both the briefs for the petitioner and respondent cited a particular case, but it was omitted from the opinion.[295] While the parties' expert counsel found these prior decisions relevant, the majority opinion did not. Moreover, these opinions cited cases, sometimes dozens of cases, that were found in neither brief.[296] It was therefore "plain that Justice Roberts exercised considerable discretion in choosing which precedents to cite."[297]

The significance of the discretionary choice of precedents is further demonstrated by a study of the Rehnquist Court's citation of Warren Court precedents.[298] Posner and Landes demonstrated a general tendency for precedents to depreciate over time, but such depreciation was especially pronounced in the context of the relatively conservative Rehnquist Court's use of precedents from the liberal Warren Court.[299] This depreciation was not uniform, however, but varied by case.[300] The study found that opinions authored by more liberal Warren Court Justices tended to suffer relatively more depreciation.[301] This helps confirm that Justices selectively cite cases to empower certain prior opinions. We expand on this existing research by examining the Justices' initial choice of citations.

Some have suggested that a greater number of citations may be a sign of lesser respect for stare decisis, such as might be suggested by the

291. *Id.* at 47. Manz also suggested that opinions with more citations were associated with an "incremental approach to legal change," *id.*, which implies a less ideologically activist standard for judicial decision making.

292. *See* William H. Manz, *Citations in Supreme Court Opinions and Briefs: A Comparative Study*, 94 LAW LIBR. J. 267, 267, 272 tbl.6 (2002) (examining the 1996 term of the Court and noting that the Court cited only a minority, about 25 percent, of the cases cited in the briefs for petitioner, respondent, and amici).

293. *See id.* at 271 tbl.5 (noting that 26.5 percent of the Supreme Court cases cited in the opinion of the Court were not found in the briefs). Spriggs & Hansford also found that the Court legally interprets precedents not cited in any of the merits briefs filed in cases (showing that in the 182 cases decided in the 1991 and 1995 Terms of the Court, the Court treated 23 precedents not cited in any of the briefs, meaning over 8 percent of all cases legally interpreted by the Court in the study were not cited in briefs). Spriggs & Hansford, *supra* note 232, at 145 & n.4.

294. Cross, *supra* note 99, at 1272–76.

295. *Id.* at 1274.

296. *Id.*

297. *Id.*

298. Cross et al., *supra* note 180, at 8–10.

299. *See supra* note 186; *see also* Cross et al., *supra* note 180, at 10–13.

300. Cross et al., *supra* note 180, at 13–14.

301. *Id.* at 15–16.

theory that citations are a mask for ideology. Hence, "courts faced with uncertainty surrounding the adoption of new legal doctrines and motivated by the desire to win acceptance for their decisions can be expected to employ citations most intensively when, in fact, acceptance is most problematic."[302] The actual authors of this claim do not believe that citations are a mask, however, but a partial constraint, and that the greater number of citations is necessary for legitimacy.[303] Lawrence Friedman suggests that "[a] change in the law . . . calls for a broad search for authority."[304] Under this theory, the number of citations is significant, but centrally for the purposes of legitimizing controversial decisions.

Fowler and Jeon conversely argue that a higher number of citations reflects greater adherence to stare decisis.[305] Landes and Posner likewise suggest that an activist court, inclined to ignore precedent, "might cite few cases" in support of its agenda.[306] Thus, more citations would mean a decision with superior legal grounding.[307] While a plausible claim, this position is not undisputable. If citations were a determinant of the Court's decision, and the case was clearly controlled by a prior decision, a small number of citations might suffice to justify the outcome. If citations are a mask, a Justice might choose to employ a large number of citations so as to better hide the true basis for the decision behind a blizzard of precedent.

The Hansford and Spriggs research provides support for a modified version of this hypothesis. Their study shows that Justices tend to prominently cite and rely upon cases they favor and cite negatively those cases that they disfavor.[308] This very action reveals a belief that citations matter. Precedents are not entirely constraining, as evidenced by the propensity of the Justices to negatively treat those precedents that are ideologically unappealing.[309] The negative treatment, though, is some testimony to the authority of precedent, as such a treatment is employed because the Justices expect it to alter the corpus of precedent and hence the state of the functional law.

Thus, the Justices' use of citations reflect a belief in the influence of stare decisis. Using more citations would seemingly reflect a somewhat greater devotion to this influence, as "the values of precedents increase the more often they are cited."[310] Hansford and Spriggs demonstrate that

302. Walsh, *supra* note 20, at 340.

303. *Id.* at 357–58.

304. Friedman et al., *supra* note 288, at 815.

305. Fowler & Jeon, *supra* note 134, at 17–18.

306. Landes & Posner, *supra* note 40, at 274; *see also* Timothy Schwarz, Comment, *Cases Time Forgot: Why Judges Can Sometimes Ignore Controlling Precedent*, 56 EMORY L.J. 1475, 1491–94 (2007) (discussing practice of ignoring controlling precedent).

307. *See* Cross, *supra* note 99, at 1266–67 (suggesting that "[o]ne might anticipate that a Justice who placed particular importance on stare decisis would cite a larger number of precedents to support his or her judgment").

308. *See* HANSFORD & SPRIGGS, *supra* note 9, at 125–26.

309. *Id.*

310. GERHARDT, *supra* note 141, at 109.

citations to a case enhance the vitality of that case as a precedent, which effectively increases its legal authority both at the Supreme Court and in lower courts.[311] The use of citations is not merely a reaction to their authority, though, but can also be a utilization of this authority to direct the course of the law. The use of precedent "is a critical component of the network of rules that comprise 'the law' in any area," and more citations produce a denser network.[312]

The use of simple citation numbers has been called "the roughest indicator" of judicial practice.[313] While it does not perfectly capture stare decisis, the absolute number of citations has meaning. It reflects a Justice's devotion to precedent, both as a constraint and as an opportunity for shaping the future course of the law. Studies have shown that cases with more citations carry greater weight.[314] One might differentiate among types of citations, but as stated above, for conceptual reasons we continue to think that legal relevance is best captured by the presence of a citation rather than the substantive treatment of the citation and thus total numbers may serve as a reasonable proxy. One study used both total citations and "strong citations" for a smaller group of employment law cases and found that both measures produced similar results.[315] Consequently, our measure of total citations, though necessarily crude, should yield meaningful results.

The network centrality measure created by Fowler provides further nuance to our analysis by allowing us to differentiate between the relative quality of the precedents cited in an opinion.[316] Thus, we are in fact moving beyond looking exclusively at the quantity of citations to begin to examine how variation in the quality of cases cited in an opinion relates to the development of law.

A skeptic might still maintain that the number of citations is simply a matter of random variation that can say little about the merits of the opinion. The methods of statistical analysis, though, can help us exclude randomness as an explication and isolate significant determinants of more citations. In the conclusion of this Article, we will examine the significance of greater numbers of citations.

### *C. Descriptive Information*

Before embarking upon our analysis of citation rates, we offer some descriptive information on citation frequency.[317] Over the entire history

311. HANSFORD & SPRIGGS, *supra* note 9, at 111.

312. David G. Post & Michael B. Eisen, *How Long Is the Coastline of the Law? Thoughts on the Fractal Nature of Legal Systems*, 29 J. LEGAL STUD. 545, 545 (2000).

313. Friedman et al., *supra* note 288, at 804.

314. *See, e.g.*, Walsh, *supra* note 20, at 356–58.

315. *Id.*

316. Fowler et al., *supra* note 14, at 330–32.

317. Our numbers differ from those reported in *id.* at 332–33 because their analyses included citations in majority, concurring, and dissenting opinions (though their article mistakenly reports they on-

of the Court, the average majority opinion cites nearly seven previously decided Court decisions.[318] There is, of course, considerable variability in the number of citations, and the interquartile range of this time period ranges from a low of one cite to a high of nine citations.[319] We also observe significant variation over time, as the Court has gradually increased its propensity to cite its own precedents.[320] In the first fifty years of the Court's history the average Court opinion cited only one Supreme Court precedent, while in the most recent fifty-year period the Court averaged over eleven citations per majority opinion.[321] We address the question of temporal variation in the Court's citation to precedent in Section D below. One basic point to bear in mind is that there is significant variation in the Court's citation practices, both over time and across cases at a given point in time, and our ultimate task is to provide an explanation for these citation tendencies.

TABLE 1
SUPREME COURT CASES CITING THE MOST PRECEDENT

| Case | Total Cited Cases | Case Topic |
|---|---|---|
| *Miller Bros. Co. v. Maryland* (1954) | 193 | Due Process |
| *Minnesota Rate Cases* (1913) | 160 | Commerce Clause |
| *Comm'r v. Estate of Church* (1949) | 150 | Taxation |
| *Nebbia v. New York* (1934) | 139 | Due Process |
| *Glidden Co. v. Zdanok* (1962) | 130 | Separation of Powers |
| *Home Building & Loan Ass'n v. Blaisdell* (1934) | 113 | Contract Clause |
| *Louis K. Liggett Co. v. Lee (*1933) | 112 | Equal Protection |
| *Ashwander v. Tennessee Valley Authority* (1936) | 109 | Legislative Power |
| *Joint Anti-Fascist Refuge Comm. v. McGrath* (1951) | 108 | Presidential Power |
| *Landgraf v. USI Film Products* (1994) | 101 | Retroactivity |

The list of majority opinions with the most citations is surprising for the age of the decisions and, to some degree, the nature. While most of these opinions are recognized as important ones, the list does not correlate closely to what commentators would consider the most significant cases of the twentieth century, which calls the legitimation hypothesis into some question. A number of the leading decisions were those of the New Deal Court's "constitutional revolution," which involved "a total repudiation of the preexisting constitutional tradition and its replacement . . . with a new comprehensive synthesis."[322] *Nebbia*, *Blaisdell*, and *Ashwander* were all key decisions in this era.[323] This is precisely the cir-

ly examine citations in majority opinions), and we restrict our analysis to citations in majority opinions.

318. *See* fig.1.

319. *See id.*

320. *See id.*

321. *See id.*

322. BRUCE ACKERMAN, WE THE PEOPLE: FOUNDATIONS 114 (1991).

323. Ashwander v. Tenn. Valley Auth., 297 U.S. 288 (1936); Nebbia v. New York, 291 U.S. 502 (1934); Home Bldg. & Loan Ass'n v. Blaisdell, 290 U.S. 398 (1934).

cumstance where the legitimation theory would predict high numbers of citations. Other decisions, though, seem to be influenced more by law than need for legitimation. *Landgraf*, for example, involves a fairly technical legal question of little public controversy.[324]

### *D. Citation Rates over Time*

Our first analysis considers the frequency of citations in the Court's history. Norms of citation practice have changed, as the opinions in the early years of the nation seldom cited prior decisions of the Court. This begins with a simple analysis of the frequency of citations per opinion in the twentieth-century Courts. We also consider external factors that may alter this frequency, such as the increase in support in the form of judicial clerks.

#### *1. Citation Practice in History*

One might reasonably expect to see an increase in the number of citations over time. First, as time passes, there are simply more cases for the Court to cite. The greater pool of available precedents as time passes makes it more likely that more of those precedents are governing, or at least relevant to, the Court's decision. Second, the resources available to the Justices have increased over time. Electronic databases, such as LexisNexis and Westlaw, make citation finding easier, and, perhaps most significantly, the Justices have acquired increasing numbers of law clerks.[325]

As noted above, we use a comprehensive list of Court opinions. The cases included are every signed or per curiam opinion of the Supreme Court published in the *United States Reports* between 1791 and 2005, excluding non-orally argued per curiams, in chambers decisions, and "back-of-the-book" decisions. This yielded 26,681 opinions for the Court history.[326] Our examination begins with simply counting the average (i.e., median) number of citations per majority opinion over time. Figure 1 depicts this average number of citations for the full history of the Court and the variance in those citation rates.

Clearly, citation rates have generally increased over the Court's history, though it has not been a uniform rise. There was a large jump in citation numbers in the late 1800s where, for the first time, the median

324. Landgraf v. USI Film Prods., 511 U.S. 244, 250 (1994) (deciding whether to apply the law as it exists at the time of the conduct giving rise to the case or the law at the time of the court's decision).

325. In addition to more citations, Landes and Posner suggest that the growth of reliance on law clerks from elite schools might cause citation practice to "become more uniform" over time. Landes & Posner, *supra* note 40, at 294. A study of citations concluded that increased use of nonlegal citations was explained by the availability of electronic databases. Frederick Schauer & Virginia J. Wise, *Nonlegal Information and the Delegalization of Law*, 29 J. LEGAL STUD. 495, 495–97 (2000).

326. Washington Univ. in St. Louis, Supreme Court Database, http://scdb.wustl.edu (last visited Dec. 7, 2009) [hereinafter Supreme Court Database].

number of cites climbed to four per case in 1890. This increase was followed by a period of nearly forty years of little growth in this number. We do not see another significant rise in the citation rate until nearly 1930, where the median rose to ten by 1937. This pattern was followed by a decline in the early Vinson Court era, with another significant increase in average citations across the Warren and Burger Courts, followed by another decrease in the later Rehnquist Court.

FIGURE 1

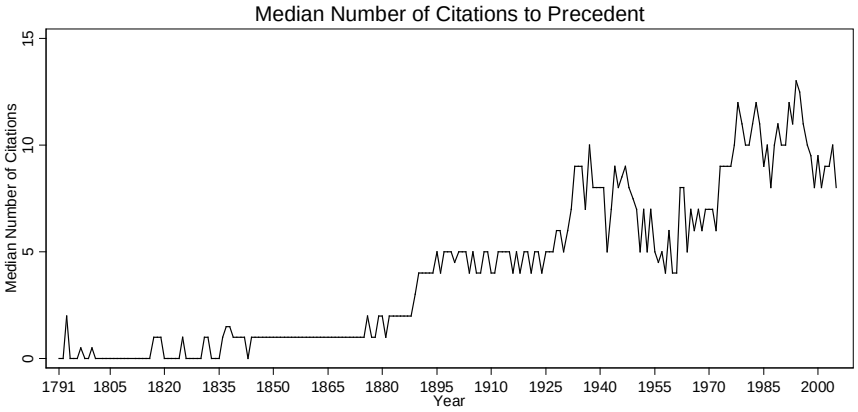



Figure 1: Time series plots of the median number of citations to Court precedent in majority opinions of the Court (top panel), and the interquartile range of the number of citations (bottom panel), 1791–2005. The interquartile range is a measure of the dispersion of a set of data around its midpoint and is defined as the difference in the 75th and 25th percentile. Larger values indicate a greater degree of variation around the central tendency in the data. We obtained data for citations to Supreme Court precedent contained in majority opinions of the Court decided between 1791 and 2005, from Fowler et al., *supra* note 14.

Figure 1 also presents data on the variability in citation numbers among cases for each year. The general growth in citation numbers has been accompanied by a slow increase in the variation around that central tendency, as shown by the growing interquartile range over time. Thus, something much more than mere changing norms of time is driving citation rates. That is, even after one accounts for factors that change over time, there are also obviously case-based factors that can account for citation patterns within and across cases.

There are various possible explanations for the general increase in citations over time. It may reflect the larger number of available cases or a greater professionalization or institutionalization of the Court in society. Alternatively, it might be explained by factors unrelated to the law itself, such as the new availability of computer databases.[327] One logical

327. A study of the California Supreme Court found that computer assisted legal research did not appear to increase the overall citation rate, however. Paul Hellyer, *Assessing the Influence of Computer-Assisted Legal Research: A Study of California Supreme Court Opinions*, 97 LAW LIBR. J. 285, 293 (2005).

explanation for the increase in citations is the increased number of Supreme Court clerks, who may supply those citations for the Justices.

### *2. The Significance of Clerks*

External factors might influence the number of citations per opinion. The assistance of clerks at the Court might be expected to increase citations in opinions by reducing the citation costs of the Justices themselves, and the role of Supreme Court clerks has seen increased academic attention.[328] At least since the beginning of the Warren Court, clerks have played a significant role in drafting the Court's opinions.[329] Today, the clerks "sometimes write judicial opinions and almost always influence the content of the opinions."[330] Empirical evidence suggests that clerk ideology influences the outcome of the Court's decisions,[331] so one might expect clerks to influence the content of opinions as well. Having additional opinion drafting assistance would logically produce lengthier and better supported opinions. Judge Posner has suggested that without law clerks, Justices would have reduced "the number of footnotes [and] citations" in opinions.[332]

Over time, the Justices have acquired increasing numbers of law clerks, and this has surely influenced the Court in some way.[333] Before the 1880s, the Justices had no law clerk support.[334] In that decade, they began to hire a "stenographer" for secretarial help.[335] In 1919, the Justices received a second staff assistant, who could assume more substantive legal responsibilities.[336] Not until the 1930s did the Justices hire re-

328. *See, e.g.*, TODD C. PEPPERS, COURTIERS OF THE MARBLE PALACE: THE RISE AND INFLUENCE OF THE SUPREME COURT LAW CLERK 2–8 (2006); ARTEMUS WARD & DAVID L. WEIDEN, SORCERERS' APPRENTICES: 100 YEARS OF LAW CLERKS AT THE UNITED STATES SUPREME COURT 21 (2006). Both books are by political scientists who base their findings on interviews with former clerks and the published papers of the Justices. For a good early discussion of the history and role of clerks at the Court, see Chester A. Newland, *Personal Assistants to Supreme Court Justices: The Law Clerks*, 40 OR. L. REV. 299 (1961).

329. PEPPERS, *supra* note 328, at 151–52. This role varies among the Justices and over time. For example, Justices Harlan and Black significantly increased their reliance on clerks for opinion drafting, as their health declined. *See id.* at 153–55. Research has found that some Justices, such as Justice Marshall, appeared to rely more heavily on clerks in drafting their opinions. Paul J. Wahlbeck et al., *Ghostwriters on the Court? A Stylistic Analysis of U.S. Supreme Court Opinion Drafts*, 30 AM. POL. RES. 166, 172 (2002).

330. Robert Justin Lipkin, *Which Constitution? Who Decides? The Problem of Judicial Supremacy and the Interbranch Solution*, 28 CARDOZO L. REV. 1055, 1087 (2006).

331. Todd C. Peppers & Christopher Zorn, *Law Clerk Influence on Supreme Court Decision Making: An Empirical Assessment*, 58 DEPAUL L. REV. 51, 53 (2008).

332. RICHARD A. POSNER, THE FEDERAL COURTS: CHALLENGE AND REFORM 155 (1996). He suggests that the differential ratio of citations in Supreme Court opinions and those of the circuit courts is "more likely to be related to the higher ratio of law clerks to opinions in the Supreme Court." *Id.* at 156.

333. Landes & Posner, *supra* note 40, at 294; *see also* Schauer & Wise, *supra* note 325, at 510–11.

334. *See* PEPPERS, *supra* note 328, at 43–45.

335. *Id.* at 45–46.

336. *Id.* at 83.

cent law school graduates for assistance.[337] The Justices received a second clerk in 1947, a third clerk in 1970, and a fourth in 1978.[338]

The role of Supreme Court law clerks has shifted over time. Up to the middle of the twentieth century, the clerks had little or no role in the drafting of Supreme Court opinions.[339] By the 1940s and 1950s, however, a few Justices (Minton, Murphy, and Vinson) began assigning opinion writing responsibility to their clerks, though others (Stone, Burton, and Jackson) resisted this delegation.[340] By the time of the Warren Court, nearly all the Justices had their clerks prepare opinion drafts, with Justices Black and Douglas being the primary exceptions.[341] Some Justices, such as Marshall, reputedly delegated an unusual amount of opinion writing authority to clerks.[342] By the time of the Burger and Rehnquist Courts, "an institutional norm developed of delegating opinion drafting to law clerks in most, and in some instances all, cases."[343] Even in the case of Justice Stevens, who relies less on clerks than other Justices, his clerks "add[] citations" to opinions.[344]

The *Law Clerk Handbook* declares that the job responsibilities include "do legal research, prepare bench memos, draft orders and opinions, edit and proofread the judge's orders and opinions, and verify citations."[345] Moreover, "today's justices are often viewed as editors, who delegate to their clerks the crucial task of writing the first opinion draft."[346] The availability of this additional assistance provided by clerks reduces the costs to the Justices of finding and using citations. One might therefore expect that additional clerkship resources would lead to an increase in citations. But a study of the length of Supreme Court opinions found no such association with clerk numbers,[347] so the significance of clerks in opinion drafting may be overstated. The association between the number of clerks per Justice and the number of citations in resulting opinions is graphically displayed in the following figure.

337. POSNER, *supra* note 332, at 139.

338. *Id.*

339. *Id.* at 144–45.

340. David R. Stras, *The Supreme Court's Gatekeepers: The Role of Law Clerks in the Certiorari Process*, 85 TEX. L. REV. 947, 951–52 (2007) (reviewing PEPPERS, *supra* note 328, and WARD & WEIDEN, *supra* note 328).

341. The preceding historical experience is briefly summarized in *id.* at 952.

342. *See* Wahlbeck et al., *supra* note 329, at 166, 170–71 (using quantitative techniques to identify the stylistic "fingerprints" of clerks on the Justices' opinions).

343. Stras, *supra* note 340, at 953.

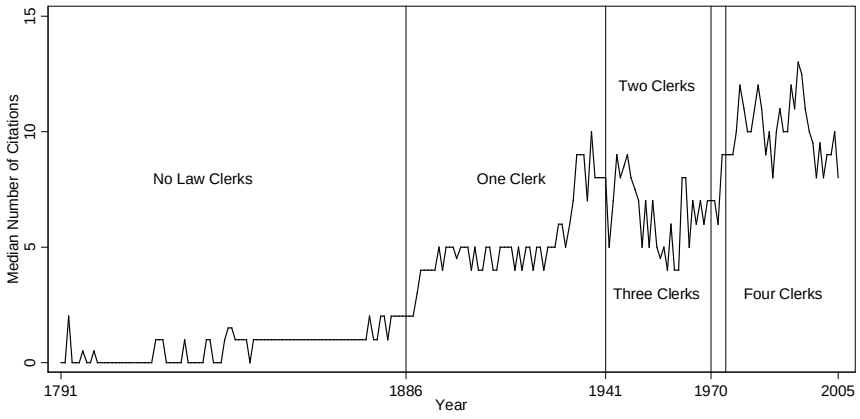
344. *Id.* at 956.

345. ALVIN B. RUBIN & LAURA B. BARTELL, LAW CLERK HANDBOOK 1 (1989).

346. Wahlbeck et al., *supra* note 329, at 167.

347. Black & Spriggs, *supra* note 233, at 640, 644–45.

FIGURE 2
CITATION NUMBERS BY NUMBER OF CLERKS




There is a reasonably clear association between an increasing number of clerks and the Court's and the Justices' propensity to cite more precedents. Generally speaking, the average number of cites is larger when the Justices employ a larger number of clerks. For instance, the increase from zero clerks to one clerk saw a substantial rise in the average number of cites per opinion from 0.7 to 5.1. The increase to three clerks saw a small change in citation rate (from 5.1 cites per case to 6.5 cites per case), and the increase to four clerks saw the most dramatic increase (to 10.1 cites per opinion). The regime with four clerks plainly has a higher citation rate than any of the earlier eras.[348] The relationship is not perfect, of course, and we observe that while the average number of cites during the period when the Justices employed two clerks is higher than when they employed one clerk, the increase actually began prior to the change in the number of clerks, and, even more importantly, we observe a general decrease in the citation rate during the two-clerk period.

We wish to subject these bivariate correlations to a more rigorous statistical test because it is possible that other factors that roughly correlate with more clerkship support for the Justices may explain this increase in citation rates. For instance, the general institutionalization of law clerks within the Court has advanced during this time, which could explain the apparent association between clerks and citations.[349] Given the nature of these data, one must also control for any general time trends (i.e., autocorrelation) in citations in order to tease out the inde-

348. Difference in means tests show that there is a statistically significant difference in a comparison of each of the clerk periods with another ($p \leq 0.05$), except for the difference between the citation rate during the period with two clerks and three clerks.

349. *See* Black & Spriggs, *supra* note 233, at 638–45 (finding that these factors, rather than the number of clerks, appeared to explain the growth in the length of opinions).

pendent affect of clerks.[350] We did so by estimating the relationship between clerks and citation rates using a time series model[351] and including a control for the general institutional development of the Court over time.[352] We thus control for autocorrelation, as well as the most likely alternative explanation for the increasing number of citations.

TABLE 2
EFFECT OF THE NUMBER OF CLERKS AT THE COURT ON THE RATE OF CITATIONS

| | *Estimate (Std. Error)* |
|---|---|
| 1 Clerk | 1.39 (.63)* |
| 2 Clerks | .975 (.839) |
| 3 Clerks | 1.82 (1.02)* |
| 4 Clerks | 3.43 (.97)* |
| Institutional Development | 2.41 (.40)* |
| Constant | 3.10 |
| AR(1) | .58 (.05)* |
| N | 213 |
| Chi-Squared | 472.5* |

The results in the above table confirm the basic story as evidenced in Figure 2, meaning law clerks have played a role in the increase in the Justices' use of case citations over time. For instance, with appropriate controls we can now conclude that when the Justices employed four clerks as opposed to no clerks, their opinions contained an average of an additional 3.4 citations to precedent. One should note, of course, that the magnitude of the relationship between clerks and citations is diminished in this analysis, precisely because we have controlled for time and

350. See WILLIAM H. GREENE, ECONOMETRIC ANALYSIS 525–56 (4th ed. 2000) and RICHARD MCCLEARY & RICHARD A. HAY, JR., APPLIED TIME SERIES ANALYSIS FOR THE SOCIAL SCIENCES 66–79 (1980) for a discussion of autocorrelation. Autocorrelation is defined as "serial correlation of the disturbances across periods" and typically results when potential independent variables that are omitted from a regression are correlated over time. GREENE, *supra*, at 525; *see also* MCCLEARY & HAY, *supra*. This causes the error term from one time period to be correlated with the error term from other time periods (since the error term contains the missing independent variables).

351. We diagnosed our data as belonging to an autoregressive 1 (AR-1) process. We then conducted an interrupted time series analysis and estimated an Autorregressive Integrated Moving Average (ARIMA) model with dummy variables for each of the clerks (omitting one as the baseline category).

352. We measured the institutional development of the Court over time based on data from Kevin T. McGuire, *The Institutionalization of the U.S. Supreme Court*, 12 POL. ANALYSIS 128 (2004). He analyzed the institutionalization of the Supreme Court on the basis of (1) rules of the Supreme Court, (2) Supreme Court location, (3) discretionary agenda, (4) federal judicial experience, (5) law clerks, (6) circuit duties, and (7) expenditures per Justice. *Id.* at 134 tbl.1. For our measure, we created an index of institutionalization based on a factor of analysis of all items identified by McGuire except for clerks (since we include separate clerk variables in the model).

institutional development.[353] In summary, our data show that the increasing number of law clerks on the Court is associated with the Justices' tendency to cite a larger number of cases in majority opinions.

### *3. Citation Rate by Case Type*

A factor that could influence citation rates is the type of case before the Court. While there is no obvious intrinsic reason why one type of case should require more citations than another, it is possible that some areas simply have more relevant authority to be cited.[354] Or the Court's legitimacy may be more at stake in some types of cases, which could produce a higher rate of citations. For this Section (and the remainder of this Article), we examined cases decided from the 1946–1999 Terms of the Court (n=6291 for most analyses).[355] We restrict our analyses to this contemporary time period because data for testing our hypotheses are available from several data sources for this span of time.

We begin with an examination of the relationship between different case types and citation rates, as illustrated by a box plot. The United States Supreme Court Judicial Database (USSCJD), which codes cases for numerous variables,[356] breaks the Court's cases into thirteen issue areas.[357] We used this typology to determine the distribution of citation rates across these different issue areas. In Figure 3, the box in the plot shows the boundaries of the 25th and 75th percentiles for citation counts, and the tick mark inside the box denotes the median. The tick marks at the end of the lines reveal the 5th and 95th percentiles. The dots at the upper end reflect the presence of individual cases with high citation counts.

353. In addition to the differences apparent in the table, there are also statistically significant differences between the following clerk comparisons (to estimate these affects, we ran the model three additional times and each time excluded a different clerk dummy variable): one clerk versus four clerks, two clerks versus four clerks, and three clerks versus four clerks. In short, six out of the ten clerk comparisons are statistically significant (zero clerks versus two clerks, one clerk versus two clerks, one clerk versus three clerks, and two clerks versus three clerks are the statistically insignificant comparisons).

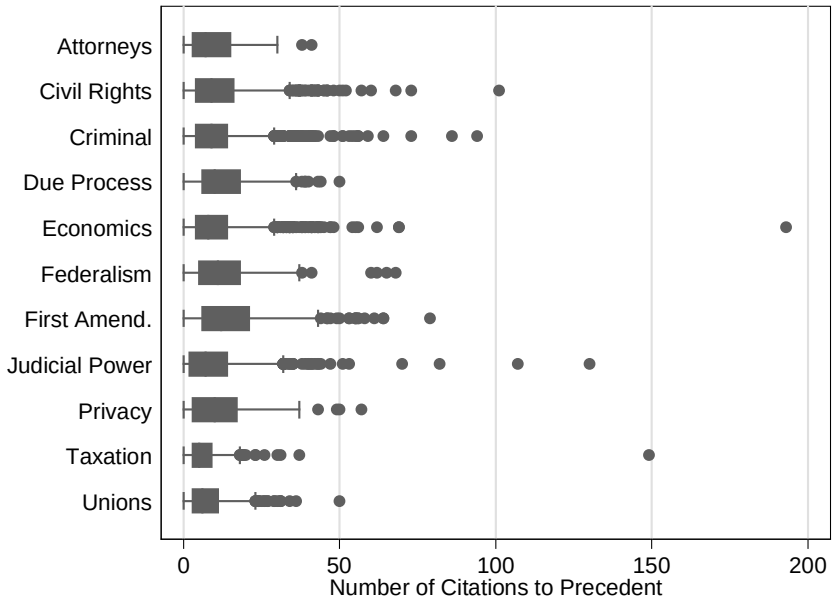
354. A small study of the early years of the Roberts Court found that constitutional criminal procedure decisions appeared to produce decisions with more citations. Cross, *supra* note 99, at 1268.

355. There are 6363 precedents decided by the Court over this time period. We excluded 72 of these cases from our analyses because Fowler et al., *supra* note 14, do not provide citation data for them. Most of these excluded cases are "back of the book" orally argued per curiam opinions, which Fowler et al. excluded from their study.

356. This database is the standard for use in research on the Supreme Court. Shapiro, *supra* note 8, at 478.

357. The case types in the database are categorized as attorneys, civil rights, criminal, due process, economics, federalism, First Amendment, judicial power, privacy, taxation, and unions. *See id.* at 489. The nature of the categories may not be entirely transparent, and more detailed descriptions of the categorization can be found in the codebook for the database. We exclude two types of cases from our analysis, interstate relations and miscellaneous, because Spaeth does not code their ideological direction. These types of cases are relatively rare, though.

FIGURE 3




Box plot of the number of citations to precedent in majority opinions of the Court, 1946–1999 (n=6363). We adopted our issue area definitions from Spaeth. Data for the number of citations come from Fowler.

There is considerable overlap in the boxes, but some obvious differences appear among types of cases. First Amendment, due process, and civil rights cases appear to have more citations on average, while taxation cases have fewer citations. One can imagine various reasons for this effect, including legitimation, as the more politically controversial case-types appear to yield more citations.

Our next step is to conduct an analysis to discern the statistical significance of our variables for case type, controlling for a small number of variables, including the number of clerks on the Court, temporal effects (i.e., dummy variables representing which Chief Justice presides over the Court), and a dichotomous variable for whether the opinion was authored per curiam (= 1 if per curiam, else it equals 0). Our unit of analysis is each majority opinion (for a total of 6291 opinions), and we examine two dependent variables: (1) a count of the number of citations in a given majority opinion; and (2) the network centrality score for a given opinion in the year that opinion was released, where a larger score indicates that an opinion cites a larger number of cases that are more firmly embedded in the Supreme Court network. The first dependent variable (the number of cites) is a count measure, and the appropriate statistical estimator is a negative binomial regression model. The network centrality measure is a proportion (i.e., it represents the percentile rank of a case

in the overall distribution of cases in the entire network in the year a case was decided), and we therefore use ordinary least squares to examine it. We report the coefficient and the standard error for each variable. For the citation count measure, we also report the effect size—the number of additional citations associated with the effect of the particular variable.[358] Table 3 displays the results.

TABLE 3
EFFECT OF CLERKS AND CASE TYPE ON THE NUMBER OF CITATIONS IN AND NETWORK CENTRALITY OF AN OPINION

| | *Citation Count Coefficient (Std. Error) [Effect Size]* | *Network Centrality Coefficient (Std. Error)* |
|---|---|---|
| *Number of Clerks* | | |
| Two Clerks | -.337 (.190 )* [3.7] | -.063 (.050) |
| Three Clerks | -.110 (.046) * [1.3] | -.016 (.009)* |
| *Case Type* | | |
| Civil Rights | .048 (.038)* [.7] | -.026 (.007)* |
| First Amendment | .361 (.051)* [5.8] | .091 (.007)* |
| Due Process | .053 (.049) [.8] | .014 (.008) |
| Privacy | .105 (.124) [1.5] | -.037 (.024) |
| Attorney | -.161 (.108) [-2.0] | -.122 (.024)* |
| Unions | -.268 (.057)* [-3.2] | -.136 (.012)* |
| Economic | -.024 (.037) [-.3] | -.097 (.007)* |
| Judicial Power | -..015 (.046) [-.2] | -.093 (.009)* |
| Federalism | .1611 (.051)* [2.3] | -.031 (.013)* |
| Taxation | -.409 (.088)* [-4.4] | -.269 (.013)* |
| *Additional Control Variables* | | |
| Per Curiam Opinion | -.1.466(.089)* [9.9] | -.274 (.014)* |
| Vinson Court | .129 (.053)* [1.8] | -.007 (.010) |
| Burger Court | -.021 (.187) [-.3] | .039 (.050) |
| Rehnquist Court | -.108 (.189) [-1.6] | .005 (.050) |
| Constant | 2.266 (.036)* | .778 (.007)* |
| Number of Observations | 6291 | 6291 |
| Alpha | -.40 (.03)* | --- |

Consistent with our time series analysis, we show clerks are related to the Justices' citation practices. Our data indicate that the average opinion written when the Justices employed four, rather than two, clerks contained an additional 3.8 citations to precedent (going from 9.2 to 12.9

358. Because the raw numbers for the network centrality score have no intrinsic meaning, no effect size is reported for this variable.

cites per opinion).[359] One should bear in mind, however, that this regression does not include the full set of variables for our ultimate analysis, and we will thus revisit this issue below. With this set of control variables, it appears that clerk resources contributed both to more citations and to citations with total higher network centrality.

The data also continue to reveal differences across case types. Cases with higher citation rates at conventional levels of statistical significance include those involving the First Amendment and federalism, while cases with statistical significance for fewer citations included cases involving unions and taxation (as compared to the baseline citations for criminal cases). The significance of the affect of case type was more pronounced for the network centrality measures. The most intriguing finding is that federalism cases had more citations (with statistical significance) but nevertheless had less network centrality (also with statistical significance). This suggests that the Court's federalism decisions had numerous supporting citations but that those cited cases had been relatively obscure ones on which the Court had not previously much relied. As one would expect, per curiam opinions contain dramatically fewer citations and rely on cases that are generally less influential in the overall network of Supreme Court law. Given their relevance to our dependent variable, these variables will serve as control variables in our below tests of our hypothesis on citation practice. Finally, we note that, contrary to some existing research, the Warren Court did not cite fewer precedents than the Burger or Rehnquist Courts.[360]

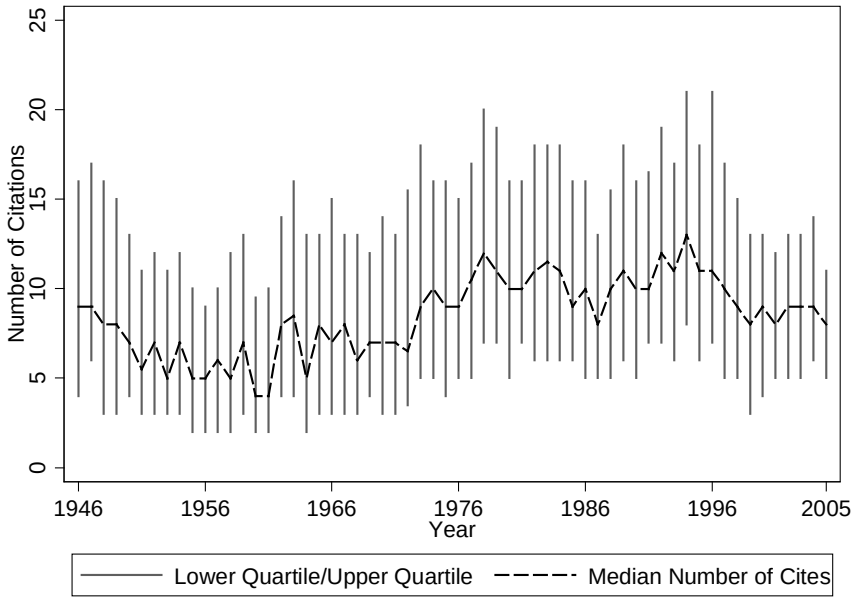
## IV. DETERMINANTS OF CITATION PRACTICE

The prior Part illustrated some determinants of citation counts (clerk numbers, case type, per curiam opinions, and time) that are unrelated to our hypotheses, and they will be used as control variables in the following analyses. Figure 4 indicates the average number of opinions by year and shows that, even within a given year, there is considerable variation in the number of citations in opinions.

359. We estimated these predicted counts while controlling for the other variables at their means or mode (for a categorical variable), meaning we set issue area to economic, the time period to the Burger Court, and Per Curiam to 0 (i.e., the opinion is authored by a named Justice).

360. *See* Fowler & Jeon, *supra* note 134, at 19. We find this difference for two reasons. First, the Fowler and Jeon list of Supreme Court precedents was overinclusive in that it included cases that were actually orders of the Court (and which contained no citations), and this particular problem was particularly severe during the Warren Court, when the Court included most orders as "front of the book" opinions in the *United States Reports*. For a discussion of this issue, see Fowler et al., *supra* note 14.

FIGURE 4




It is this variation that we strive to explain. In this Part we initially test the hypothesis that the desire to legitimate their decisions causes Justices to use more citations in their opinions. Then we consider legal factors that could influence the number of citations in majority opinions. Afterwards, we look at the influence of the collegial nature of Supreme Court decision making. Finally, in Part V we explore whether the Justices have citation proclivities that differ from one another.

### *A. Legitimation and Citation Practice*

Insofar as the Court's concern is for legitimation, one would expect certain patterns in citations, as certain types of decisions are more likely to call the Court's legitimacy into question. Controversial cases that might call the Court's legitimacy into question or that draw considerable public attention would be candidates for more citations. We identify several particular types of cases that might be expected to present particular legitimation issues for the Court—decisions overruling a prior precedent of the Court, decisions invalidating a federal or state statute on constitutional grounds, and decisions covered on the front page of the *New York Times.*

One case type that might be expected to yield more citations for legitimation purposes would be a case that explicitly overrules a prior opinion. Such an overruling ruptures the Court's apparent dedication to precedent, which may explain its rarity. Recent research shows that the

Court's overruling of precedent can lead individuals to be less likely to agree with a Court decision precisely because an overruling often appears less consistent with the norm of stare decisis.[361] When an overruling does occur, the theory of legitimation would suggest that the Court would cite more cases to support the overturning of precedent. Such citations would indicate that it was the precedent being overruled that was out of step with the corpus of relevant precedents, and that the overturning action did not disrupt the legal model of stare decisis. When overruling a prior decision, the court commonly does so "on the basis of precedent itself."[362]

The association of more citations with an overruling decision, however, is also potentially consistent with a more traditional legal model. One of the Court's standards for overruling a precedent is where it is a mere "remnant of abandoned doctrine" that was left behind as a "survivor of obsolete constitutional thinking."[363] More citations would be used to demonstrate that the overruled decision was obsolete. But this is precisely the reasoning that would be used by those wishing to mask ideology, and the application of the standard has been criticized as arbitrary.[364] What is more, research shows that the precedents most at risk of being overruled by the Court are those that are ideologically distant *and* are highly legally vital, meaning that the Court faces a distinct legitimation need when overruling precedent because it is doing so based in large part on policy-motivated reasons.[365] Thus, we hypothesize that decisions overruling precedent will receive more citations for legitimation purposes. Given the implicit attack on stare decisis associated with overruling a precedent, this category might be the one where legitimation concerns are paramount. We used Shepard's Citations to identify whether a case overruled precedent, and this action occurred in 96 of the 6291 opinions in our data set.[366]

A second category of decisions for which the Court might have legitimacy concerns are those in which it invalidates a statute on constitutional grounds. Such decisions invoke the infamous countermajoritarian difficulty that has subjected the Justices to criticism.[367] These are the classic case categories associated with judicial activism.[368] Given the as-

361. *See* James R. Zink, James F. Spriggs II & John T. Scott, *Courting the Public: The Influence of Decision Attributes on Individuals' Views of Court Opinions*, 71. POL. 909, 909 (2009) (using an experimental research design to show that the use of precedent and the size of the majority coalition influence individuals' agreement with and acceptance of those decisions).

362. SEGAL & SPAETH, ORIGINAL ATTITUDINAL MODEL, *supra* note 63, at 50.

363. Planned Parenthood of Se. Pa. v. Casey, 505 U.S. 833, 855, 857 (1992).

364. *See* Paulsen, *supra* note 87, at 1184–92.

365. *See* HANSFORD & SPRIGGS, *supra* note 9, at 39–40.

366. Supreme Court Database, *supra* note 326.

367. The countermajoritarian difficulty has been the subject of countless publications; it is well summarized as a theoretical problem in LAURA KALMAN, THE STRANGE CAREER OF LEGAL LIBERALISM (1996).

368. *See, e.g.*, POSNER, *supra* note 332, at 320 (stating that the definition of judicial activism is a decision in which a court acts "contrary to the will of the other branches of government"); SEGAL &

sociation of activism with ideological or willful decision making, these are cases where Justices would be expected to be most concerned for legal legitimation of their decisions, which may be provided by an increased number of citations in the majority opinion. In these cases, the Court would want to signal that its decision to strike down a statute was compelled by stare decisis and not merely an ideological action of the majority. We used the Supreme Court Database to identify opinions that overruled federal or state statutes, and 462 of the 6291 cases in our data reached such a conclusion.[369]

Our third test case for the role of legitimation concerns in citation practice uses cases in which the opinions were discussed on the front page of the *New York Times*. The prominent coverage of the opinion is presumably both a contemporaneous measure of its importance and a cause of public attention and hence suggests that the Court would have special concern for legitimating such opinions. About fifteen percent of the Court's opinions result in such front page coverage. Such coverage is a conventional measure of case salience in political science research.[370] Although this is an after-the-fact measure, it seems unlikely that the number of citations in the opinion would influence the *New York Times* coverage, so this should not distort the test.

We then estimated a model that includes each of these variables, as well as the control variables from above for the number of clerks, case type, time controls, and per curiam opinions. The introduction of the legitimation variables did not materially alter the effect of the control variables, so we do not report those results. Table 4 displays the relative effect of our legitimation variables. As in the prior table, the citation count column contains an estimate for the "effect size" for each variable, which indicates the predicted increase in the number of citations when that particular legitimation need is present rather than when it is absent.[371]

SPAETH, ATTITUDINAL MODEL REVISITED, *supra* note 63, at 413 (characterizing such invalidations as "the most dramatic instances of a lack of judicial restraint"); CASS R. SUNSTEIN, RADICALS IN ROBES: WHY EXTREME RIGHT-WING COURTS ARE WRONG FOR AMERICA 42–43 (2005) (contending that "it is best to measure judicial activism by seeing how often a court strikes down the actions of other parts of government, especially those of Congress").

369. Supreme Court Database, *supra* note 326.

370. The initial case for the reliability of the measure is found in Lee Epstein & Jeffrey A. Segal, *Measuring Issue Salience*, 44 AM. J. POL. SCI. 66, 66 (2000). The measure has been used in numerous subsequent articles, including Michael A. Bailey, Brian Kamoie & Forrest Maltzman, *Signals from the Tenth Justice: The Political Role of the Solicitor General in Supreme Court Decision Making*, 49 AM. J. POL. SCI. 72, 78–79 (2005); Vanessa A. Baird, *The Effect of Politically Salient Decisions on the U.S. Supreme Court's Agenda*, 66 J. POL. 755, 760 (2004); Paul M. Collins, Jr., *Towards an Integrated Model of the U.S. Supreme Court's Federalism Decision Making*, 37 PUBLIUS 505, 509 (2007); Fowler et al., *supra* note 14, at 338.

371. To estimate these effects, we held the control variables at their means or modes (for a categorical variable).

TABLE 4
EFFECT OF LEGITIMATION NEEDS ON THE NUMBER OF CITATIONS IN AND NETWORK CENTRALITY OF AN OPINION

| | *Citation Count Coefficient (Std. Error) [Effect Size]* | *Network Centrality Coefficient (Std. Error)* |
|---|---|---|
| *Legitimation Needs* | | |
| Opinion Overrules Precedent | .327 (.055) [14.6] | .082 (.007)* |
| Opinion Strikes Law as Unconstitutional | .785 (.120)* [4.7] | .108 (.0097)* |
| Case on Front Page of *NYT* | .312 (.035)* [4.5] | .078 (.006)* |
| Constant | 2.134 (.033)* | .756 (.007)* |
| Number of Observations | 6291 | 6291 |
| Alpha | .571 (.014)* | --- |

Each of the hypotheses is strongly supported by the data, as the coefficient is statistically significant and the effect size is substantial. The most striking result regards the Court's use of case citations when it overrules precedent, and in such cases it cites an average of 26.9 prior Court opinions, while only citing 12.3 cases when it does not overrule precedent. The magnitude of the effect for the overturning of statutes and case salience (being reported on the front page of the *New York Times*) are roughly comparable, as each increases the number of citations from 12.3 to nearly 17.

Our results on legitimation provide support for the theory that citations are a mask, but they are also consistent with the theory that citations are an influence and constraint on Supreme Court decision making. To differentiate between these two theories, we proceed to consider the sorts of legal variables that the citations-as-a-mask hypothesis would reject as explanations of citations.

### *B. Legal Factors in Citation Practice*

There is no objective standard for determining the proper cases to be cited or the "legally correct" number of citations in a majority opinion, and, as a result, it is difficult, though we would argue not impossible, to estimate the effects of legal concerns on citation behavior. We rely on a series of indirect ways of capturing these legal effects. These indirect factors must be largely orthogonal to legitimation concerns in order to exclude that theoretical basis for citations.[372]

372. Legitimation theory is perfectly consistent with a belief that the Justices are influenced by law and precedent, as discussed *supra* notes 127–35, 322–24 and accompanying text. This theory, however, is also consistent with the purely ideological decision making hypothesized by Segal and Spaeth.

One legal characteristic often discussed in the literature is the difference in the role of stare decisis in constitutional versus statutory cases.[373] The received legal wisdom contends that stare decisis exerts greater pull on the Justices' decisions in statutory cases.[374] The logic is the following: when the Court issues a decision interpreting a federal statute, Congress can correct any mistakes; if the Court makes an error in a constitutional opinion, for all practical purposes only the Court can correct it. Justice Powell wrote that "[t]he idea has long been advanced that stare decisis should operate with special vigor in statutory cases because Congress has the power to pass new legislation correcting any statutory decision by the Court that Congress deems erroneous."[375] More recently, Michael Gerhardt placed considerable emphasis on this distinction in discussing the role of precedent at the Court.[376] Existing research does reveal some distinctions in the Court's citation of cases along these lines, but not entirely in line with this received wisdom. For instance, Spriggs and Hansford conclude that the Court is less likely to overrule statutory precedents, which seems consistent with this stated legal norm, but they also show that the Court is more likely to positively interpret constitutional precedents, and they therefore conclude that constitutional precedents are simply more at risk of receiving any type of interpretation by the Court (either positive or negative).[377] Given the emphasis placed on this legal distinction in commentary, we test for whether the Court's citation practices vary across these different types of precedents. We note that, while we label this a legal effect, it is of course possible that variation in constitutional and statutory precedents also relates to legitimacy or other concerns.

We also examine one aspect of the role case selection may have on citation practices. Scholars generally suggest that when the Court grants certiorari based on a conflict among lower federal courts, their decision was largely motivated by legal, rather than ideological, considerations.[378] According to Perry, "Without a doubt, the single most important generalizable factor in assessing certworthiness is the existence of a conflict or 'split' in the circuits."[379] Edelman, Klein, and Lindquist agree stating that "[w]hen the Court takes a case to resolve a conflict, the Justices may be less motivated by ideological considerations and more concerned to en-

Consequently, there is a need to test theories that something more than mere legitimation motivates citation practice.

373. Powell, *supra* note 128, at 287–88.

374. *Id.*

375. *Id.* at 287.

376. GERHARDT, s*upra* note 141, at 97 (stating "the Court shows less deference to precedent in constitutional adjudication").

377. *See* HANSFORD & SPRIGGS, *supra* note 9, at 90–91, 125.

378. *See* Lindquist & Klein, *supra* note 49, at 139.

379. H.W. PERRY JR., DECIDING TO DECIDE: AGENDA SETTING IN THE UNITED STATES SUPREME COURT 246 (1991).

sure uniformity in federal law."[380] We therefore examine whether the Court's citation practices differ when the Justices grant certiorari due to a lower court conflict. We measure "Lower Court Conflict" as equal to 1 if Spaeth identified the Court as granting certiorari to resolve a split between circuit courts.[381]

Our third legal variable is a measure of case complexity. The Supreme Court database contains data often used to capture legal complexity, based on the number of legal provisions and legal issues coded for each case, and this measure has been used in previous studies.[382] This measure is somewhat flawed as a scale of legal complexity,[383] but it may serve as a rough proxy for the nature of the legal component of cases.

The fourth and fifth variables consider majority coalition size. Here we use two dummy variables, testing the relative effects of unanimous opinions and those of cases decided by a minimum winning coalition (usually a 5-4 decision). These provide an indirect test of the legal hypotheses. A unanimous opinion (joined by Justices of very diverse ideological preferences) should require no "masking" of ideological bias. It is possibly driven by law, given the absence of ideological variance, and therefore would need fewer citations to establish legitimacy. By contrast, a 5-4 decision is typically driven by the different Justices' ideologies. Given this ideological divide, the majority opinion is particularly in need of legal legitimation, and one might therefore expect a higher number of citations in such outcomes.[384]

Finally, we assess the role that separate opinions can play in the citation proclivities of the majority opinion. Separate opinions can call into question the legal reasoning in the majority and, according to many, may even weaken the perceived legitimacy of the opinion.[385] Judge Learned Hand noted that a separate opinion "cancels the impact of monolithic solidarity on which the authority of a bench of judges so largely

380. Paul H. Edelman et al., *Measuring Deviations from Expected Voting Patterns on Collegial Courts*, 5 J. EMP. LEG. STUD. 819, 836 (2008); *see also* Lindquist & Klein, *supra* note 49, at 135 (for evidence that legal factors influence the Justices' votes in conflict cases).

381. We used the Supreme Court database's "cert" variable and coded it equal to 1 if Spaeth identified the reason for the Court granting cert as "intercircuit conflict" or "intercircuit conflict and important issue."

382. *See, e.g.*, Robert J. Hume, *The Use of Rhetorical Sources by the U.S. Supreme Court*, 40 LAW & SOC'Y REV. 817, 826 (2006); Timothy R. Johnson, James F. Spriggs II & Paul J. Wahlbeck, *Passing and Strategic Voting on the U.S. Supreme Court*, 39 LAW & SOC'Y REV. 349, 359, 363 (2005).

383. *See* Shapiro, *supra* note 8, at 488–500 (identifying errors in the coding of legal issues and legal provisions in question).

384. We note that we are using the size of the final majority coalition, and not the size of the conference coalition. Much previous research uses the size of the conference coalition as a measure of the strategic constraints facing opinion authors and thus as a factor that influences the manner in which Justices bargain and negotiate in a case. *See* FORREST MALTZMAN, JAMES F. SPRIGGS II & PAUL J. WAHLBECK, CRAFTING LAW ON THE SUPREME COURT: THE COLLEGIAL GAME 62–70 (2000); James F. Spriggs II, Forrest Maltzman & Paul J. Wahlbeck, *Bargaining on the U.S. Supreme Court: Justices' Responses to Majority Opinion Drafts*, 61 J. POL. 493–95 (1999).

385. *See* Spriggs, Maltzman & Wahlbeck, *supra* note 384, at 486–87.

depends."[386] Justice Brennan agreed and stated that a separate opinion "challenges the reasoning of the majority, tests its authority and establishes a benchmark against which the majority's reasoning can continue to be evaluated, and perhaps, in time, superseded."[387] It is therefore common for Court watchers to suggest that separate opinions can weaken the impact of a precedent. It also seems reasonable to expect that the longer the separate opinions in a case, the larger the number of citations the majority opinion will contain. The larger number of citations reflects the majority's attempt to respond to the legal criticisms leveled at it by the separate opinions.

To test the role of these factors, we estimated a statistical model that incorporates the legitimacy determinants and adds the above legal variables. The regression also incorporates the control variables of the basic model (clerk numbers, case type, time controls, and per curiam opinions), though we do not report these for space reasons. Results are reported in Table 5. We calculated effect sizes based on a two standard deviation change about the mean of an independent variable that is a continuous measure or a change from 0 to 1 if it is a dichotomous variable.[388] The legitimacy variables remain highly correlated with citation practices, even with the introduction of legal variables, so legitimacy plainly influences citation rates independent of legal considerations.

The legal variables are consistent with the expectation that law matters. Greater complexity results in more total citations, as do longer separate opinions. The Court uses more citations when hearing cases in which lower courts are divided, which is consistent with the hypothesized legal effect. We also learn that the Court cites a fewer number of precedents in statutory opinions (10.7), as opposed to either constitutional cases (14.2) or opinions that are neither statutory nor constitutional (13.1). This might seem contrary to the theory that stare decisis is more important in the context of statutory disputes. But it may simply reveal the logical theory that the Court in these cases focuses more on statutory text or may simply be a case of legitimation concerns being so great as to mask legal concerns in this set of cases.

386. LEARNED HAND, THE BILL OF RIGHTS 72 (1958).

387. William J. Brennan, Jr., *In Defense of Dissents*, 37 HASTINGS L.J. 427, 435 (1986).

388. We controlled for all other variables by setting them at their mean or modal values (if a categorical variable).

TABLE 5
LEGAL FACTORS AND CITATION RATES

| | *Citation Count Coefficient (Std. Error) [Effect Size]* | *Network Centrality Coefficient (Std. Error)* |
|---|---|---|
| *Legal Factors* | | |
| Lower Court Conflict | -.062 (.029)* [-.64] | -.030 (.006)* |
| Complexity | .293 (.029)* [4.6] | .048 (.004)* |
| Constitutional Interpretation | .280 (.030)* [3.5] | .118 (.005)* |
| Other Interpretation | .200 (.036)* [2.4] | .054 (.008)* |
| Length of Separate Opinions | .000 (.000)* [5.0] | .000 (.000)* |
| Unanimous Opinion | .231 (.025)* [3.8] | -.044 (.005)* |
| Minimum Winning Opinion | -.010 (.034) [-1.0] | -.001 (.005) |
| Constant | 2.075 (.187)* | .738 (.048)* |
| Number of Observations | 6291 | 6291 |
| Alpha | .513 (.013)* | --- |

One of the most telling findings on citation counts are those for coalition size. Unanimous opinions have a strong, statistically significant association with more citations, as unanimous coalitions cite 13.5 cases while nonunanimous and nonminimum winning coalitions cite only 10.7. Minimum winning coalitions, by contrast, contain one fewer precedent, though that effect is not statistically distinguishable from zero. The former decisions raise no legitimation issues, while the latter decisions raise great legitimation issues. The data show clearly that something more than mere legitimation is driving citations. While legitimation matters, our data suggest that the law may serve as an important constraint and influence on the opinions of the Supreme Court.

With the exception of coalition size, the picture is similar for our network centrality measure. We observe the Court citing cases that are more legally embedded in the Supreme Court network when deciding cases with certain legal characteristics. The effect of coalition size, however, is opposite what we observe for the raw number of citations. Unanimous opinions tend to cite cases that are less legally central, while minimum winning coalitions cite more cases that have greater legal centrality. Perhaps this is a sign of concern for legitimation—close cases re-

quire the citation of more important past opinions to support their legitimacy.

### *C. Collegial Interaction and Opinion Writing*

We conclude by testing an additional set of variables involving collegial interaction on the Court. Because the Justices of the Court strive to frame a majority coalition and perhaps gain as many votes as possible, they interact with one another and inevitably compromise their individual preferences. This may affect their citation practice. This interaction may be either attitudinal or legal. A Justice of the majority coalition may demand (or reject) a citation for ideological reasons, because that Justice favors (or disfavors) that case. Alternatively, such a Justice may demand (or reject) a citation based on its legal validity.

Political scientists often view the process of opinion writing on the Supreme Court as constituting a "collegial game."[389] This perspective contends that Justices pursue legal and policy goals within strategic and contextual constraints emanating from the various internal norms and rules operating on the Court.[390] These scholars conceptualize strategic constraints as consisting of circumstances in which the decision of one Justice depends at least in part on the preferences and choices of other Justices on the Court.[391] Maltzman, Spriggs, and Wahlbeck refer to this idea as the "Collective Decision-Making Postulate," which posits "Justices will try to secure opinions that are as close as possible to their policy positions by basing their decisions in part on the positions and actions of their colleagues."[392] The basic idea is that legal doctrine results in part from the interaction of the Justices as they bargain and negotiate their way to outcomes in cases. Chief Justice Rehnquist described this collegial process as follows: "Judging inevitably has a large individual component in it, but the individual contribution of a good judge is filtered through the deliberative process of the court as a body, with all that this implies."[393] Chief Justice Rehnquist concluded that "give and take is inevitable, and doctrinal purity may be muddied in the process."[394]

For example, scholars and judges often discuss the Court's informal practice that an opinion generally creates binding precedent only if supported by a majority on the Court. Majority opinion authors thus recog-

389. *See, e.g.*, MALTZMAN, SPRIGGS & WAHLBECK, *supra* note 384, at 8.

390. *See* EPSTEIN & KNIGHT, *supra* note 145, at 10–12, 17 (positing Justices seek to advance their own policy goals but are constrained by both their expectations about the actions of the other Justices and the Court's institutional norms).

391. *Id.* at 10 (applying the rational choice paradigm to judicial decision making to explain Justices' choices as strategic behavior); MALTZMAN, SPRIGGS & WAHLBECK, *supra* note 384, at 18 (hypothesizing Justices "are constrained by the concurrent actions" of their colleagues).

392. MALTZMAN, SPRIGGS & WAHLBECK, *supra* note 384, at 17.

393. William H. Rehnquist, *Remarks on the Process of Judging*, 49 WASH. & LEE L. REV. 263, 270 (1992).

394. *Id.*

nize that, under some conditions, it is necessary to bargain and compromise in order to gain the votes necessary to forge a majority. As Justice Brennan put it: "Before everyone has finally made up his mind [there is] a constant interchange among us . . . while we hammer out the final form of the opinion."[395] Considerable data support this view of decision making on the Court, and, most relevant for our purposes, research shows that variables related to this collegial game directly influence opinion authors' willingness to accommodate their colleagues. For instance, they show that the ideological nature of the majority conference coalition, as well as the volume of bargaining on the Court, influence opinion authors' choices about when to accommodate.[396]

This perspective leads us to hypothesize that variables relating to collegial interaction—ideological factors and bargaining among the Justices—will influence the number of cases cited in a majority opinion. We use three variables to tap collegial interaction. The first of these is a measure of the ideological distance of the opinion author from the average for the full majority coalition behind the opinion. We measure the ideology of each Justice using Martin-Quinn scores, which offer measures of Justices' conservatism or liberalism, and which have become the standard used for research such as this study.[397] This "Author Distance" variable assumes a larger positive score when the author is ideologically further from the final majority voting coalition. For example, if a relatively conservative Justice (such as Justice Scalia) is authoring an opinion for liberal Justices, then our score will have a larger positive value.

The second variable is the ideological heterogeneity of the majority coalition. The "Coalition Heterogeneity" variable again uses the Martin-Quinn ideology scores to scale how ideologically diverse the majority coalition behind the opinion is by taking the standard deviation of the scores for the Justices in the majority coalition. This measure excludes the opinion author in its calculation and is based on all of the other Justices who voted with the final majority.

The third variable measures the amount of bargaining that took place in a case. We expect that as the amount of bargaining between Justices and the majority opinion author increases, opinion authors will need to engage in a greater amount of accommodation in order to convince their colleagues to join their opinions for the Court. This is especially true for members of the majority-conference coalition, whose votes the author needs to forge a majority. We code the variable "Bargaining"

395. William J. Brennan, Jr., *State Court Decisions and the Supreme Court*, 31 PA. B. ASS'N Q. 393, 405 (1960).

396. *See* MALTZMAN, SPRIGGS & WAHLBECK, *supra* note 384, at 120–22.

397. Some studies in law reviews making use of this measure include Andrew D. Martin et al., *The Median Justice on the United States Supreme Court*, 83 N.C. L. REV. 1275, 1275 (2005); Theodore W. Ruger, *Justice Harry Blackmun and the Phenomenon of Judicial Preference Change*, 70 MO. L. REV. 1209, 1218–19 (2005); Paul J. Wahlbeck, *Strategy and Constraints on Supreme Court Opinion Assignment*, 154 U. PA. L. REV. 1729, 1754 n.94 (2006).

as the number of bargaining memoranda sent from members of the majority-conference coalition to the majority opinion author during the opinion-writing process.[398] The data source from which we obtained this variable covers only the Burger Court years, and thus when we estimate the effect of bargaining we confine our analysis to the 2214 cases in our data decided during the tenure of Chief Justice Burger. Tables 6 and 7 present the results for the large sample and then for the Burger Court years.

The results indicate that elements of collegial interaction significantly influence citation patterns. While the ideological distance of the author from the coalition has no bearing on citations, the heterogeneity of the coalition does. We observe that the Justices both cite more opinions and cite opinions with greater network centrality the more heterogeneous the coalition. These two effects, however, are modest. For instance, when the author encounters a homogenous coalition she cites an average of 10.1 cases, but cites 10.7 cases when the coalition is more heterogeneous. Our interpretation of this effect is that those additional citations reflect the author's attempts at bringing together Justices with disparate viewpoints into a single coalition. We also see that bargaining by Justices on the Court with the author also increases the number of citations. The effect is somewhat small, with a case with no bargaining containing 9.4 citations, and a case with four bargaining memos containing 10.3 citations.

The above analyses demonstrate the variety of factors that influence the Supreme Court's citation practice. We find that legitimation concerns, legal factors, and collegiality concerns all have an effect on both the number of citations and network centrality of cited cases in majority opinions. These findings omit one potentially important factor, though—the identity of the author of that opinion. Opinion writers may have a significant effect on citations, and we explore this in the following Part.

398. MALTZMAN, SPRIGGS & WAHLBECK, *supra* note 384, at 62–69. In this study, the authors identified four types of bargaining tactics: (1) suggestions or memos that ask for specific changes to the majority opinion; (2) threats or suggestions coupled with an explicit statement that the Justice will not join unless he or she is accommodated; (3) statements that a Justice "will wait," which indicates that a Justice is currently unwilling to join the majority opinion but does not articulate a specific concern; and (4) first drafts of separate opinions.

TABLE 6
THE EFFECT OF COLLEGIALITY ON THE NUMBER OF CITATIONS IN AND NETWORK CENTRALITY OF AN OPINION

| | *Citation Count Coefficient (Std. Error) [Effect Size]* | *Network Centrality Coefficient (Std. Error)* |
|---|---|---|
| *Collegial Interaction* | | |
| Author Distance | -.034 (.008) | -.005 (.001) |
| Coalition Heterogeneity | .005 (.002)* [.6] | .001* (.000) |
| Constant | 2.107 (.184)* | .706 (.037)* |
| Number of Observations | 5872 | 5872 |
| Alpha | .487 (.013)* | --- |

TABLE 7
THE EFFECT OF COLLEGIALITY ON THE NUMBER OF CITATIONS IN AND NETWORK CENTRALITY OF AN OPINION (BURGER COURT ONLY)

| | *Citation Count Coefficient (Std. Error) [Effect Size]* | *Network Centrality Coefficient (Std. Error)* |
|---|---|---|
| *Collegial Interaction* | | |
| Author Distance | -.027 (.011) | -.005 (.002) |
| Coalition Heterogeneity | .008 (.004)* | -.001 (.001) |
| Bargaining | .022 (.010) [.9] | .008 (.001) |
| Constant | 2.107 (.184)* | .806 (.014)* |
| Number of Observations | 2214 | 5872 |
| Alpha | .487 (.013)* | --- |

## V. INDIVIDUAL JUSTICES' CITATION PRACTICES

This Part considers the degree to which individual Justices differ in their citation practices. We have seen that both legitimacy variables and legal factors influence the number of citations in the majority opinion. Many scholars suggest that authors have individual styles that manifest themselves in citation practices. Landes and Posner, for example, refer to this idea as the "taste hypotheses," meaning some Justices have tastes

for citing either different types of cases or a larger number of cases.[399] For instance, Manz shows Judge Cardozo had a tendency to cite more cases than his colleagues on the New York Court of Appeals, though as a Supreme Court Justice he cited at a rate similar to his colleagues.[400] There is reason to believe that the identity of the opinion author is a factor in citation choices.

### *A. The Role of the Opinion Author*

Before analyzing the significance of the opinion author in the number of cases cited in an opinion, we need to examine the author's role. Although most opinions have individual authors, they speak for a coalition of Justices. The other members of the majority coalition may influence the content of the opinion and the nature and number of the precedents cited in that opinion. Chief Justice Rehnquist has noted that in order to obtain a majority opinion, "some give and take is inevitable, and doctrinal purity may be muddied in the process."[401]

Internal study of the Court's operation shows that the Justice assigned the authorship of the majority opinion produces an initial draft and circulates it to his or her colleagues.[402] This initial circulation invites input from other Justices and is designed in part to ensure that the initial conference majority is preserved and perhaps expanded.[403] The other Justices may respond with "bargaining statements" that seek changes in the original opinion draft in order to win their votes.[404] A study of the Burger Court found that some form of bargaining memorandum occurred in approximately sixty percent of the cases.[405] In ten major cases analyzed more closely, significant opinion changes were made in response to these bargaining statements.[406] This anecdotal result is confirmed by more systematic empirical analysis of all cases decided during the Burger Court, where it is shown that majority opinion authors accommodate their colleagues as a function of the strategic environment of the case (such as whether the author has enough votes to form a coalition, the bargaining engaged in by other Justices, and the size of the conference majority).[407]

The presence of these bargaining statements suggests that the ultimate Court opinion is not purely the product of the opinion author, which may extend to the citation choices of that opinion. The influence

399. Landes & Posner, *supra* note 40, at 260.
400. Manz, *supra* note 133, at 36, 47.
401. Rehnquist, *supra* note 393, at 270.
402. *See* MALTZMAN, SPRIGGS & WAHLBECK, *supra* note 384, at 32–34.
403. *See id.* at 36 ("By assigning a case . . . to a more moderate justice, the chief justice may discourage justices from defecting and thus preserve his preferred outcome.").
404. *See id.* at 65.
405. EPSTEIN & KNIGHT, *supra* note 145, at 73.
406. *Id.* at 100–05.
407. *See* MALTZMAN, SPRIGGS & WAHLBECK, *supra* note 384, at 114–23.

of such bargaining statements should not be exaggerated, though, as one study found that only a minority of the statements produced any major change of the opinion (45.2 percent), though this was more common in more important decisions (64.8 percent).[408] Moreover, the most common response from other Justices of the majority coalition is simply to declare that they "join" the majority opinion.[409] This suggests that much of the content of a given majority opinion may be the product of the opinion author.

Other evidence also suggests that the role of the opinion author is critical. The process of the assignment of the opinion author by the Chief Justice or senior Justice of the majority is generally considered important. Research demonstrates that the assignment of authors is strategically important, evidencing the significance of the author to the ultimate opinion.[410] Justice Fortas suggested, "[I]f the Chief Justice assigns the writing of the opinion of the Court to Mr. Justice A, a statement of profound consequence may emerge. If he assigns it to Mr. Justice B, the opinion of the Court may be of limited consequence."[411]

Justices who do not join the majority opinion bear some costs associated with drafting a separate opinion and also suffer collegiality costs within the Court. A mathematical model included these costs and found that for most Justices, the opinion author could draft the opinion as he or she desired, though more ideologically extreme Justices would need to make modifications in their preferred opinion in order to satisfy colleagues.[412] The presumed significance of opinion assignment is supported by some recent research on opinion contents.

To test whether the author of the majority opinion or the median Justice effectively dictates the content of the majority opinion, a recent study used majority coalitions as a test.[413] It examined the ideological alignment of Justices joining the majority opinion.[414] The alternative possibilities were that the opinion author largely controls the content of opinions and that the median Justice exercises this control.[415] The study found effects for both but concluded that the model suggesting opinion author control had "greater support."[416] Hence, it is appropriate to attribute opinion contents substantially to the opinion author.

408. EPSTEIN & KNIGHT, *supra* note 145, at 99.

409. Spriggs, Maltzman & Wahlbeck, *supra* note 384, at 485, 503.

410. *See, e.g.*, Forrest Maltzman & Paul J. Wahlbeck, *May It Please the Chief? Opinion Assignments in the Rehnquist Court*, 40 AM. J. POL. SCI. 421, 438–40 (1996).

411. Abe Fortas, *Chief Justice Warren: The Enigma of Leadership*, 84 YALE L.J. 405, 405 (1975) (first and second emphasis omitted).

412. Charles M. Cameron & Lewis A. Kornhauser, *Modeling Collegial Courts (3): Adjudication Equilibria* 18 (N.Y.U. School of Law, Law & Econ. Research Paper Series, Working Paper No. 08-54, 2008), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1296071.

413. Chris W. Bonneau et al., *Agenda Control, the Median Justice, and the Majority Opinion on the U.S. Supreme Court*, 51 AM. J. POL. SCI. 890, 891 (2007).

414. *Id.* at 893.

415. *Id.* at 891–92.

416. *Id.* at 890.

There is additional empirical reason to believe that the majority opinion author largely controls citation decisions. If citations were a product of full majority coalitions, one would not expect to see systematic differences among rates for opinion authors, yet some limited existing research shows that judges have distinctly different practices of citing cases in their opinions.[417] One early historical study found that Justice Cardozo "cited far more authority in his opinions" than did his contemporary judges.[418] This may be attributed to his "slow and cautious" creation of new doctrine,[419] which in turn suggests that more citations may be a cue for better legal grounding of opinions, contrary to simple ideological decision making. The early research also found that Cardozo's heavier use of citations "resembled those of the other justices with major reputations, Brandeis, Stone and Hughes, more than those of the remainder of the Court."[420] This suggests that more citations correspond to a pattern of perceivedly better opinions and associated attribution of judicial "greatness."[421] Thus, the citation patterns of Justices can be a clue to opinion quality.

Citations are to some degree influenced by the full majority coalition, but the opinion's author appears to be central to citation choices. The occasional influence of other Justices would simply create random noise that would tend to obscure true differences in the Justices' differential citation practices. Consequently, if we can find systematic differences among the Justices from our study of opinions, the true Justice effect is probably even greater than that discovered.

### *B. Comparative Citation Rates of Justices*

Our descriptive analysis considers the citation rates for majority opinions authored by the Justices of the Warren, Burger, and Rehnquist Courts. While absolute citation counts are imperfect, they do provide relevant information on the individual Justices' commitment to the role of stare decisis. The Justices are distinct individuals with different preferences, and they may systematically cite more or less authority for their opinions.[422] Citation choices are discretionary, and even relevant prece-

417. *See, e.g.*, Merryman, *Authority of Authority*, *supra* note 1, at 656–62 tbls.3–9; Merryman, *Toward a Theory of Citations*, *supra* note 1, at 415–22.

418. Manz, *supra* note 133, at 31.

419. Andrew L. Kaufman, *Judging New York Style: A Brief Retrospective of Two New York Judges*, 1988 Y.B. SUP. CT. HIST. SOC'Y 103, 110.

420. Manz, *supra* note 133, at 31.

421. *See* ALBERT P. BLAUSTEIN & ROY M. MERSKY, THE FIRST ONE HUNDRED JUSTICES: STATISTICAL STUDIES ON THE SUPREME COURT OF THE UNITED STATES 37–40 (1978) (listing Brandeis, Cardozo, Hughes, and Stone as the only "great" Justices of this era of the Court). Justice McReynolds, characterized as a "failure," *id.* at 40, "was the lightest citer on the Court" during this period. Manz *supra* note 133, at 52.

422. *See, e.g.*, Lawrence Baum, *What Motivates Supreme Court Justices? Assessing the Evidence on Justices' Goals* (paper presented at the 1995 annual meeting of the Midwest Political Science Asso-

dents may be simply ignored.[423] Thus, the study of Justices' citation practice informs the study of their commitment to stare decisis. We separate our analyses by era to avoid the confounding factor of clerk support and other temporal variation on citation numbers.

The citations in a majority opinion may not be purely the product of the opinion's author. The other members of the majority coalition may demand the inclusion (or omission) of a particular citation. Nevertheless, it seems fair to assume that the opinion author is the primary source of its citation choices. Any outside influence would merely obscure the author's true effect and cause our research to understate the true differential citation practices of opinion authors.

### *1. The Warren Court*

We begin by examining the citation rates of Warren Court Justices. As noted above, the Warren Court in general was regarded by many as activist and not respectful of precedent. Justice Scalia himself characterized the Warren Court era as a period "marked by a newfound disregard for stare decisis."[424] The individual Justices of the Warren Court, though, may have treated precedent very differently. This Section examines their citation rates.

Various commentators have made claims about the individual Warren Court Justices and their treatment of precedent. Chief Justice Warren himself allegedly "shunned judicial restraint and stare decisis."[425] Justice Douglas wrote of his relatively weak version of precedent, declaring that it was wrong to "let[] men long dead and unaware of the problems of the age" resolve contemporary cases.[426] He praised decisions of the Hughes, Stone, and Vinson Courts that overruled precedent.[427] In one opinion, Justice Douglas declared that prior decisions "do not bind us," as "they dealt with matters of constitutional interpretation which are always open."[428] His reputation was for having a "cavalier attitude" toward precedent.[429] Justice Black was similarly said to display an "indifference to case law."[430] He shared Justice Douglas's "disdain for precedent as au-

ciation), at 2–3 (observing that "evidence from biographical sources strongly suggests that justices differ in the hierarchies of goals that influence their behavior on the Court").

423. *See* COURTS, JUDGES, & POLITICS: AN INTRODUCTION TO THE JUDICIAL PROCESS 445 (Walter F. Murphy, C. Herman Pritchett, Lee Epstein & Jack Knight eds., 6th ed. 2006) (observing that "[a]n embarrassing precedent can be handled by simply not mentioning it at all" and giving examples of this practice).

424. Harper v. Va. Dep't of Taxation, 509 U.S. 86, 108 (1993) (Scalia, J., concurring) (emphasis omitted).

425. D. Wes Sullenger, *Burning the Flag: A Conservative Defense of Radical Speech and Why It Matters Now*, 43 BRANDEIS L.J. 597, 618 (2005) (emphasis omitted).

426. William O. Douglas, *Stare Decisis*, 49 COLUM. L. REV. 735, 736 (1949).

427. *Id.* at 750 (referring to the overruled decisions as "constitutional doctrine excrescences produced early in the century").

428. Glidden Co. v. Zdanok, 370 U.S. 530, 592 (1962) (Douglas, J., dissenting).

429. T. R. VAN GEEL, UNDERSTANDING SUPREME COURT OPINIONS 93 (2d ed. 1997).

430. Maurice Kelman, *The Forked Path of Dissent*, 1985 SUP. CT. REV. 227, 251.

thority for decision making."[431] These prominent Warren Court Justices are considered to have a weak view of the importance of precedent.[432]

Justice Brennan's vision of reliance on precedent is less clear. In one noteworthy opinion, Brennan formally reversed his longstanding position on the entrapment defense and bowed to the power of stare decisis.[433] He urged respect for precedent in his opinions,[434] and when overruling a prior decision, he carefully justified his reason for departing from stare decisis.[435] But other Brennan positions, such as his continued argument that the death penalty was intrinsically unconstitutional, essentially ignored the body of Court precedents.[436] His former clerk, Judge Posner, suggested that Justice Brennan was not "terribly interested in doctrinal niceties."[437]

Justice Frankfurter publicly argued for the importance of the continuity provided by stare decisis. In a concurrence in a case involving the judicial contempt power, he emphasized a long history of cases supporting it, and rejected Justice Black's opinion that "everybody on the Court has been wrong for 150 years and . . . that which has been deemed part of the bone and sinew of the law should now be extirpated."[438] He "considered consistency and stability in constitutional law as essential and thus held onto a relatively consistent (but nonabsolutist) respect for precedent over time."[439] One might therefore expect Justice Frankfurter to have somewhat higher citation rates than Justices Black and Douglas.

Before examining citation rates at the Warren Court, the possible skewing effect of opinion assignment must be considered. For example, when Chief Justice Warren was in the Court's majority, he assigned the opinion. One might expect that he would assign particularly important cases (perhaps requiring more citations) to himself, which might skew his numbers upward.[440] During this entire period, the Justices had two clerks, so support should not skew the numbers. Figure 5 displays the average citations per majority opinion authorship for the Justices of the Warren Court Era with over ten opinions authored. We use a median to

431. GERHARDT, *supra* note 141, at 52.

432. *Id.* at 51–53; *see also* KURLAND, *supra* note 226, at 90–91.

433. Mathews v. United States, 485 U.S. 58, 66–67 (1988) (Brennan, J., concurring).

434. *See, e.g.*, Teague v. Lane, 489 U.S. 288, 331–32 (1989) (Brennan, J., dissenting) (arguing that the doctrine of stare decisis "demands respect in a society governed by the rule of law" (quoting Akron v. Akron Ctr. for Reprod. Health, Inc., 462 U.S. 416, 420 (1983) (internal quotation marks omitted)).

435. *See* Monell v. Dep't of Soc. Servs., 436 U.S. 658, 695–701 (1978) (emphasizing factors such as the overruled decision as a departure from prior practice, congressional disapproval, and the lack of reliance).

436. Justice Brennan explained this practice as reflecting "the unique interpretive role of the Supreme Court with respect to the Constitution." Brennan, *supra* note 387, at 437. Even here, though, he suggested that precedent "should[] carry considerable weight in subsequent cases." *Id.* at 435.

437. Richard A. Posner, *In Memoriam: William J. Brennan, Jr.*, 111 HARV. L. REV. 9, 11 (1997).

438. Green v. United States, 356 U.S. 165, 192–93 (1958) (Frankfurter, J., concurring).

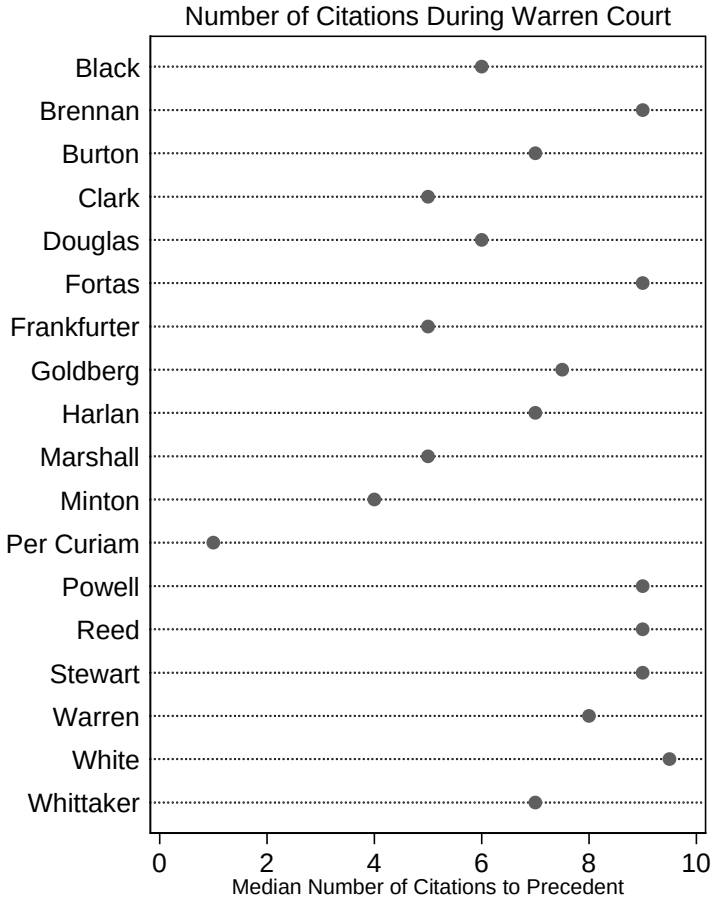
439. GERHARDT, *supra* note 141, at 57.

440. *See* Epstein & Segal, *supra* note 370, at 66 (referring to "long line of literature" that "claims that Chief Justices overassign important disputes to themselves").

represent the average to prevent extreme outlier cases from distorting the results.

The Warren Court shows great disparity among the Justices. Several Justices are relatively high in citation levels, averaging nearly ten per opinion (Brennan, Fortas, Powell, Reed, Stewart, and White). Other Justices had much lower rates, with fewer than seven citations per opinion (Black, Clark, Douglas, Frankfurter, Marshall, and Minton). This may suggest that they were less committed to stare decisis, which conforms to the generally held view for at least Justices Black and Douglas. The difference in citation rate between the two groups of Justices is relatively significant, at twenty-five percent or more. Chief Justice Warren was in the middle for citation frequency, though this number may be biased upward by his common opinion assignment authority—he may have assigned himself the significant opinions calling for more citations, if only for legitimacy reasons.

FIGURE 5




*2. The Burger Court*

The Burger Court was a controversial era for the Supreme Court. President Nixon appointed the Chief Justice and other Justices with the goal of unmaking liberal Warren Court decisions.[441] He appointed Chief Justice Burger as a "champion of . . . conservative legal philosophy."[442] This effort, however, is generally regarded as a failure.[443] The Justices of the Court were "less politically or even legally conservative than was

441. *See* THE BURGER COURT: THE COUNTER-REVOLUTION THAT WASN'T xi (Vincent Blasi ed., 1983).
442. *Id.*
443. *Id.* at xi–xiii.

originally supposed."[444] This has been attributed to the "considerable restraining influence" of precedent.[445] The Burger Court, however, engaged in its own measure of judicial activism,[446] as evidenced by decisions such as *Roe v. Wade*.[447] The Court's "version of stare decisis" was characterized as "a parody of the law."[448] Consequently, its fealty to precedent is somewhat indeterminate.

The Burger Court Justices have generally seen less discussion than those of the Warren Court, but they have also been the subject of some commentary. Justices Blackmun and Powell were characterized as "strong adherents of stare decisis."[449] Justice Powell wrote that respect for precedent was a "key[] to preservation of an independent judiciary and public respect for the judiciary's role as a guardian of rights."[450] Justice O'Connor has been considered especially committed to reliance on precedent.[451] Justice Stevens has written how "[a]dherence to the doctrine of stare decisis . . . enhances the reputation of judges and makes their work product more acceptable to the community at large."[452]

The Burger Court saw clerk support increase from two to three and on to four, so this will bias the mean citation count somewhat in favor of Justices who joined the court later, such as Justices O'Connor and Stevens. Figure 6 displays the mean citations per majority opinion authorship for the Justices of the Burger Court Era.

444. Frederick Schauer, *Does Doctrine Matter?*, 82 MICH. L. REV. 655, 656 (1984) (reviewing THE BURGER COURT: THE COUNTER-REVOLUTION THAT WASN'T, *supra* note 441). It was noteworthy that "[n]o important Warren Court decision was overturned by the Burger Court." BERNARD SCHWARTZ, DECISION: HOW THE SUPREME COURT DECIDES CASES 123 (1996).

445. Schauer, *supra* note 443, at 656.

446. *See generally* Robert F. Nagel, *A Comment on the Burger Court and "Judicial Activism,"* 52 U. COLO. L. REV. 223 (1981).

447. 410 U.S. 113 (1973).

448. Albert W. Alschuler, *Failed Pragmatism: Reflections on the Burger Court*, 100 HARV. L. REV. 1436, 1452 (1987).

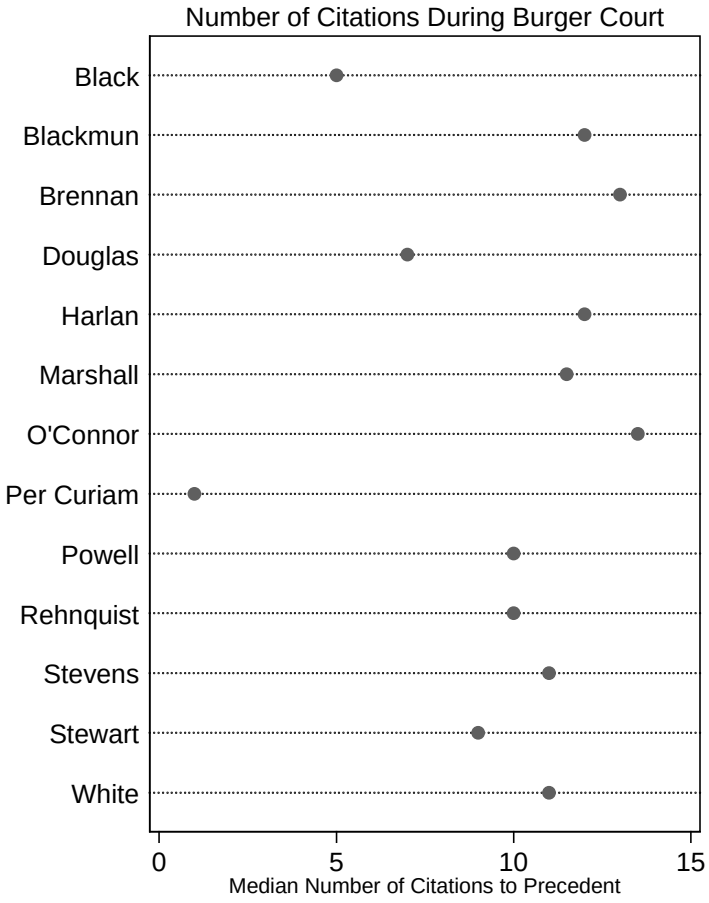
449. William N. Eskridge, Jr., *Some Effects of Identity-Based Social Movements on Constitutional Law in the Twentieth Century*, 100 MICH. L. REV. 2062, 2317 n.1199 (2002).

450. Powell, *supra* note 128, at 290.

451. *See, e.g.*, Wilson Ray Huhn, *The Constitutional Jurisprudence of Sandra Day O'Connor*: *A Refusal to "Foreclose the Unanticipated*," 39 AKRON L.J. 373, 384 (2006) (referring to "her commitment to precedent and her devotion to the principle of stare decisis" (emphasis omitted)).

452. Stevens, *supra* note 39, at 2.

FIGURE 6




The Burger Court saw less variance in citation frequency and much higher average citation counts per opinion than did the Warren Court. Liberal holdovers from the Warren Court, Justices Black and Douglas, used the fewest citations. Justice O'Connor had the highest rate, followed by Justice Brennan.

*3. The Rehnquist Court*

The Rehnquist Court is often associated with a conservative shift in the Supreme Court of the sort anticipated for the Burger Court. The Reagan White House embarked on a campaign to remake the judiciary and aggressively sought out conservative appointees. It would "not proceed with a judicial nomination . . . unless it felt assured that the nominee

shared the administration's judicial philosophy."[453] The appointment of the moderate Sandra Day O'Connor fulfilled a campaign pledge, but the ensuing elevation of William Rehnquist and appointment of Antonin Scalia were consistent with the commitment to judicial conservatives.[454]

Reagan's efforts were largely successful, and Cass Sunstein has concluded that the "disciplined, carefully orchestrated, and quite self-conscious effort by high-level Republican officials in the White House and the Senate has radically transformed the federal judiciary."[455] The new appointees ushered in an era characterized as one of "conservative judicial activism."[456] Claims that conservatives on the Court were unusually activist "have become commonplace."[457] Critics have correspondingly criticized its lack of respect for precedent.[458]

The Rehnquist Court's "retreat" from the policies of the Warren and Burger Courts "has . . . been criticized for activist disregard of stare decisis."[459] The Court's critics have claimed that its Justices were "willing to ignore even the most basic tenets of stare decisis."[460] Its lack of restraint was contrasted to the era of the Burger Court, "when adherence to the doctrine of stare decisis generally prevailed."[461]

Chief Justice Rehnquist was in the atypical position of having previously been an Associate Justice, and his dedication to stare decisis might have been influenced by his new role as Chief Justice. His respect for precedent was specifically analyzed by Earl Maltz.[462] While he respected precedent in some decisions, Maltz noted that in other cases he was ready to overturn liberal Warren Court decisions.[463] Michael Gerhardt suggested that he "apparently modified his attitude toward

453. SHELDON GOLDMAN, PICKING FEDERAL JUDGES: LOWER COURT SELECTION FROM ROOSEVELT THROUGH REAGAN 305 (1997).

454. *See id.* at 316 & n.v.

455. SUNSTEIN, *supra* note 368, at 9.

456. *See, e.g.*, Jack M. Balkin & Sanford Levinson, *Understanding the Constitutional Revolution*, 87 VA. L. REV. 1045, 1092 (2001) (contending that the courts are undergoing a revolutionary period of conservative judicial activism); Paul Gewirtz & Chad Golder, *So Who Are the Activists?*, N.Y. TIMES, July 6, 2005, at A19 (reporting results suggesting that conservative Justices of the Rehnquist Court were unusually likely to invalidate federal legislation, relative to their more liberal counterparts).

457. Frank B. Cross & Stefanie A. Lindquist, *The Scientific Study of Judicial Activism*, 91 MINN. L. REV. 1752, 1757 (2007) (internal quotation marks omitted).

458. *Id.* at 1758.

459. Ernest A. Young, *Judicial Activism and Conservative Politics*, 73 U. COLO. L. REV. 1139, 1168 (2002) (emphasis omitted); *see also* Consovoy, *supra* note 181, at 54 (suggesting that the Court uses stare decisis as a "tool useful in protecting the Court as a political institution, rather than a jurisprudential doctrine designed to protect the Court's precedent").

460. William P. Marshall, *Conservatives and the Seven Sins of Judicial Activism*, 73 U. COLO. L. REV. 1217, 1236 (2002) (emphasis omitted).

461. Stanley H. Friedelbaum, THE REHNQUIST COURT: IN PURSUIT OF JUDICIAL CONSERVATISM 129 (1994).

462. Earl M. Maltz, *No Rules in a Knife Fight: Chief Justice Rehnquist and the Doctrine of Stare Decisis*, 25 RUTGERS L.J. 669 (1994).

463. *Id.* at 676–77.

precedent," and became more dedicated to stare decisis after becoming Chief Justice.[464]

For the Rehnquist Court, "the justices who most often expressed a weak view of precedent were Justices Scalia and Thomas."[465] Over time, though, Justice Scalia showed greater concern for stare decisis.[466] Although many have claimed that Justice Scalia is an activist, he has expressed fealty to precedent.[467] He has written that his dedication to originalism "must accommodate the doctrine of stare decisis."[468] Justice Thomas, by contrast, has shown some disregard for stare decisis and proudly claimed that originalism should trump precedents.[469] Justice Scalia has declared that Justice Thomas "does not believe in stare decisis, period."[470] A close analysis of Justice Ginsburg concluded that she was respectful toward precedent but quite willing to overrule or modify it when appropriate.[471] Justice Breyer's jurisprudence has seen less commentary, but a review of his recent book remarked that "stare decisis—adherence to precedent—plays no explicit role in Justice Breyer's interpretive approach."[472]

With these general reputations in mind, we consider citation rates for the Justices of the Rehnquist Court, displayed in Figure 7. During this era, there were no changes in clerkship numbers to potentially skew the comparative results.

Perhaps the most striking results for the Rehnquist Court are the relatively low citation levels for several Justices (e.g., Breyer, Ginsburg, Marshall, Thomas, and White), which are below the typical citation rates of the Burger Court, notwithstanding the increase in clerk support. This is roughly consistent with the expectations about individual Justices, discussed above. Justices Blackmun, Brennan, O'Connor, and Souter have higher citation rates for this period. By this measure, Justice Rehnquist did not show particular devotion to stare decisis but was actually slightly below the average for the era.

464. GERHARDT, *supra* note 141, at 57.

465. *Id.* at 53.

466. *Id.* at 57–58.

467. *Id.* at 58.

468. Antonin Scalia, *Response*, *in* A MATTER OF INTERPRETATION: FEDERAL COURTS AND THE LAW 129, 139 (Amy Gutman ed., 1997) (emphasis omitted).

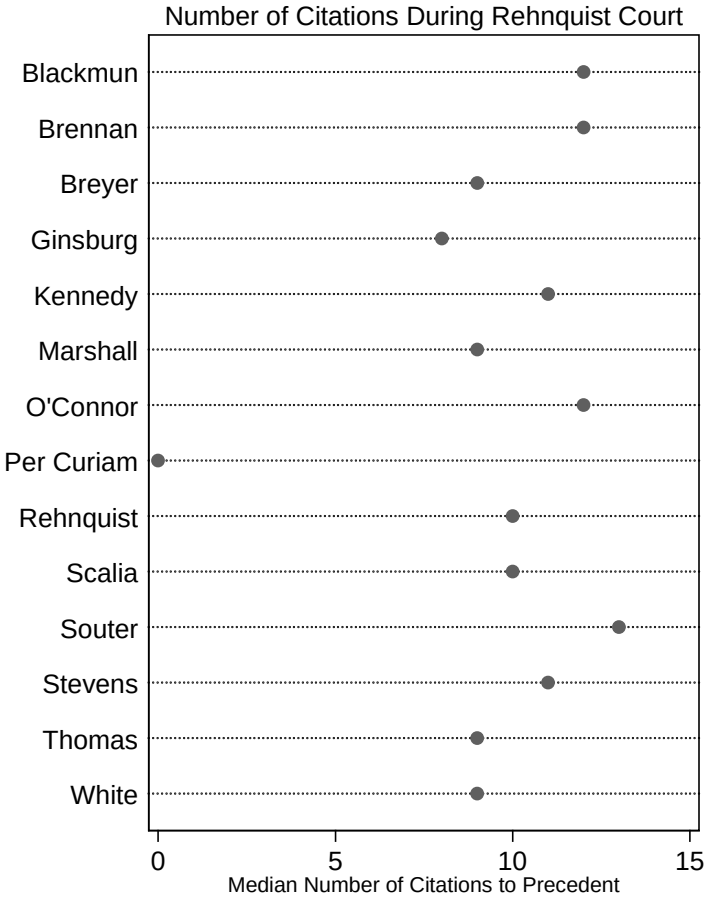
469. *See, e.g.*, Van Orden v. Perry, 545 U.S. 677, 692–93 (2005) (Thomas, J., concurring) (calling on the Court to "abandon the inconsistent guideposts it has adopted for addressing Establishment Clause challenges, and return to the original meaning of the Clause") (footnote omitted).

470. KEN FOSKETT, JUDGING THOMAS: THE LIFE AND TIMES OF CLARENCE THOMAS 281 (2004) (internal quotation marks omitted) (emphasis omitted).

471. *See generally* Mei-Fei Kuo & Kai Wang, Comment, *When Is an Innovation in Order?: Justice Ruth Bader Ginsburg and Stare Decisis*, 20 U. HAW. L. REV. 835 (1998).

472. Michael W. McConnell, *Active Liberty: A Progressive Alternative to Textualism and Originalism?*, 119 HARV. L. REV. 2387, 2398 (2006) (reviewing STEPHEN BREYER, ACTIVE LIBERTY: INTERPRETING OUR DEMOCRATIC CONSTITUTION (2005)).

FIGURE 7




### *C. Statistical Analyses of Citation Rates by Justice*

Our task in this Section is to estimate the effect of opinion authorship, after controlling for all of the other covariates we have previously explored. While the median citations per Justice metric is informative, a focus on it alone does not account for other variables that we have found to influence citation practices. For example, one Justice might have been assigned more cases where legitimation needs were greater or been assigned more complex cases, which could lead to higher citation rates independent of the Justice's legal philosophy or individual style. This Section moves beyond the bivariate correlations presented above and uses a multivariate regression framework to control for all of the independent variables used in the analyses in Parts III–V.B.

To accomplish our goal, we start with the model including all of the independent variables analyzed above and add to it a dummy variable for each opinion author (which takes on the value of 1 if a given Justice authored a particular opinion). For the citation count dependent variable model, we excluded Justice Stewart to serve as a baseline because he is the Justice whose citation rate is closest to the mean.[473] For the Network Centrality dependent variable, we excluded Justice Marshall from the model, as he had the average value on that variable. One can basically interpret each of the coefficients as the extent to which that Justice's citation behavior differed from the mean citation behavior of other opinion authors. As in the above analyses, we use a negative binomial regression for the Citation Count dependent variable and ordinary least squares for the Network Centrality dependent variable. Table 8 reports the results for citation counts and network centrality measures, sorted by the Justice with the highest raw citation rate to the lowest.[474] The analyses included our control variables, though results are omitted from the table.

TABLE 8
CITATION RATE BY JUSTICE

| *Justice* | *Citation Count Coefficient (Std. Error)* | *Network Centrality Coefficient (Std. Error)* |
|---|---|---|
| Rutledge | .365 (.170)* | .075 (.032)* |
| Souter | .351 (.088)* | .001 (.018) |
| Reed | .309 (.104)* | .011 (.023) |
| Stevens | .181 (.07)* | .001 (.011) |
| Brennan | .181 (.060)* | -.001 (.011) |
| Blackmun | .167 (.064)* | .077 (.011) |
| O'Connor | .155 (.068)* | .001 (.012) |
| Kennedy | .140 (.082) | -.020 (.014) |
| Breyer | .065 (.139) | -.049 (.031) |
| Marshall | .058 (.067) | --- |
| White | .050 (.060) | -.005 (.011) |
| Thomas | .050 (.098) | -.024 (.017) |
| Scalia | .043 (.080) | -.016 (.014) |
| Powell | .028 (.067) | .017 (.011) |
| Vinson | .011 (.123) | -.009 (.025) |
| Warren | .015 (.078) | -.011 (.018) |

(*Continued on next page*)

473. The mean citation rate in all cases was 11.2, and the median was 9. When the majority opinion author, Justice Stewart had a mean and median citation rate, respectively, of 9 and 11.8.

474. For this analysis, we excluded all per curiam opinions, and the number of observations is therefore 5872 instead of 6291.

TABLE 8—*Continued*

| *Justice* | *Citation Count Coefficient (Std. Error)* | *Network Centrality Coefficient (Std. Error)* |
|---|---|---|
| Jackson | -.008 (.246) | -.046 (.027) |
| Stewart | --- | .002 (.012) |
| Ginsburg | -.029 (.114) | -.021 (.018) |
| Goldberg | -.047 (.120) | -.045 (.033) |
| Harlan | -.061 (.082) | -.020 (.017) |
| Rehnquist | -.074 (.064) | -.003 (.010) |
| Burton | -.098 (.097) | -.004 (.022) |
| Burger | -.125 (.07) | -.006 (.012) |
| Fortas | -.146 (.110) | .014 (.031) |
| Frankfurter | -.195 (.101) | -.008 (.018) |
| Whittaker | -.245 (.127) | -.053 (.033) |
| Clark | -.348 (.081)* | -.062 (.018)* |
| Murphy | -.377 (.162)* | -.079 (.038)* |
| Black | -.374 (.078)* | -.056 (.016)* |
| Douglas | -.400 (.0840* | -.044 (.015)* |
| Minton | -.641 (.121)* | -.111 (.030)* |
| Constant | 1.979 (.192)* | .704 (.039)* |
| Number of Observations | 5872 | 5872 |
| Alpha | .461 (.012) | --- |

For the era studied, Justices Rutledge, Reed, and Souter clearly have the most citations per opinion. They are followed by a group, including Justices Brennan, Stevens, Blackmun, O'Connor, and Kennedy, all of whom had significantly high rates.[475] Justices with the lowest levels of citations include Justices Black, Clark, Douglas, Minton, and Murphy. Although some have questioned the devotion to stare decisis of Justices Thomas, Scalia, and Breyer, they all have approximately average citation rates, once the relevant controls are considered.

In general, there is less variation across the network centrality scores of the Justices' opinions, as compared to their citation rates. For instance, while seven Justices authored opinions with significantly larger than average citation rates, only one (Rutledge) wrote opinions with higher than average network centrality. In addition, the kurtosis for "Citation Count" equals 28.41, which is considerably higher than the 4.35

475. Each of the aforementioned Justices statistically significantly differed from the mean citation rate at $p \leq 0.05$ (see Table 8), except for Justice Kennedy, whose citation rate differed from the mean at $p=0.09$.

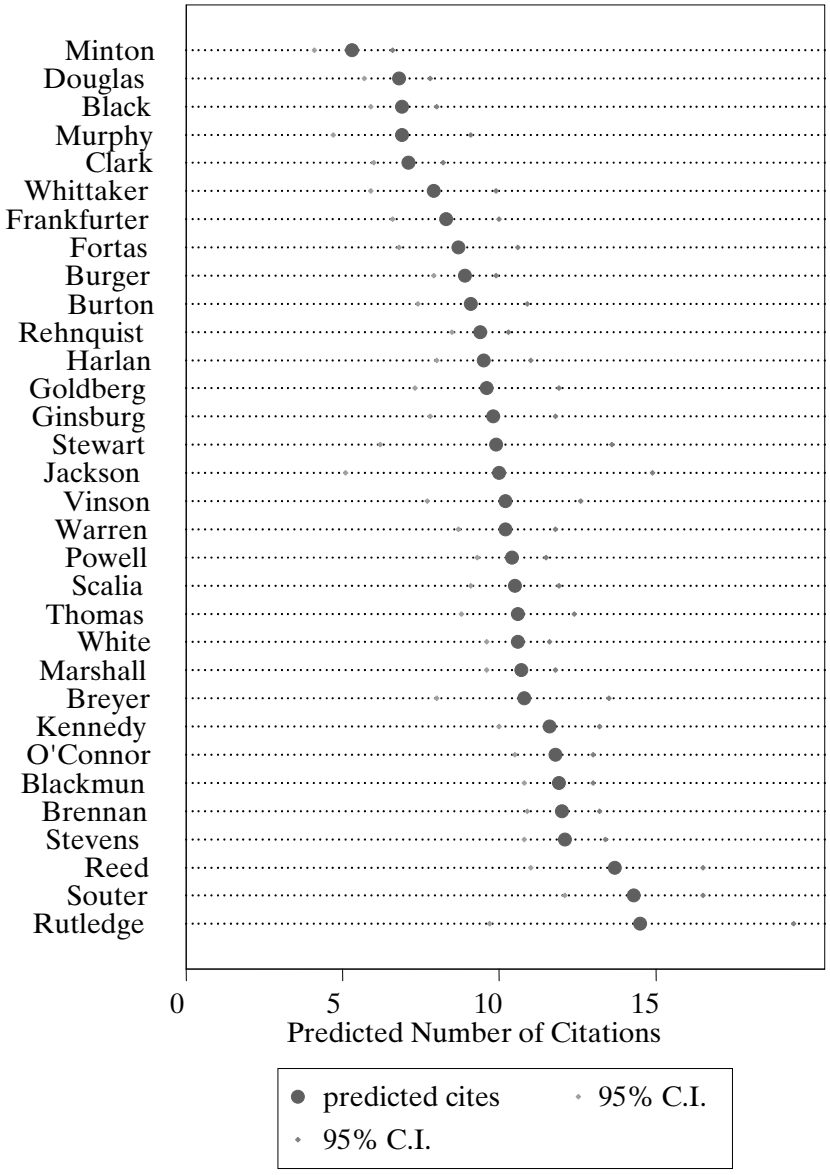
kurtosis for "Network Centrality."[476] This difference suggests that while the Justices often differ considerably in the raw number of cites in a case, they do not as often differ in terms of whether they cite cases that are currently more tightly embedded in the network of law. In addition, no Justice demonstrated a significant disconnect between their number of citations and their citations of cases that are legally central in the network. The most notable differences are for those Justices who authored opinions with a larger than average number of citations (Souter, Reed, Stevens, Brennan, Blackmun, and O'Connor), but wound up citing cases that were similar in network centrality to other authors. All those Justices (Clark, Murphy, Black, Douglas, and Minton) who cited fewer opinions than their colleagues also tended to cite cases that were less connected in the network of law. It thus appears that the individual proclivities of opinion authors is more pronounced in terms of the number of cases they cite than in the quality of those cited cases (where quality is based on how central those cited cases are to the overall network of cases at the Court).

Our inclusion of the individual Justice variables had no real effect on the results of our theoretical variables of interest. The only difference is that "Coalition Heterogeneity" barely drops out of statistical significance in the Citation Count Model (p=.051). All of the other variables continue to matter even after including the opinion author control variables. We do observe a difference, however, with regard to the clerk variables. Once we control for all other variables, we conclude that the increasing number of clerks appears to have no affect on the number of cites in an opinion, though there is an affect on the network centrality of cited cases.

Because the numbers of Table 8 are created with control variables, they show a Justice's tendency to cite more or fewer cases, regardless of the case type, the number of clerks, whether those cases appear to require legitimation, or the presence of the legal factors we discussed above. To more clearly display the differences among the Justices, we present their expected citation rates for each of the Justices for the same case. This is a hypothetical case for which all of the other variables were held at their respective average levels. Figure 8 shows the expected number of citations for each Justice, surrounded by 95th percentile confidence intervals for each Justice.

476. Kurtosis is a measure of how "peaked" a distribution is and the extent to which its variance is due to large mean deviations that occur infrequently. A larger kurtosis score indicates that a distribution has a higher peak and "fatter" tails. *See* GREENE, *supra* note 350, at 64–65, 397.

FIGURE 8




There is a striking difference in citation rates for the Justices of the era, with other variables held constant. Of the modern era Justices, Sou-

ter stands out for using the most citations,[477] though other recent Justices also have historically high citation rates (Stevens, Blackmun, O'Connor, Kennedy, and Breyer). The lowest citation rates come from the Warren Court Era, and the controls for clerk support mean that this was not attributable to a lack of resources. Justice Brennan from this era is near the top on citation rates.

The differences in citation rates are sufficiently great to suggest that there are real differences among the Justices. The implications of the difference are not transparent. Greater use of citations should show greater respect for stare decisis or perhaps just more effort in opinion writing. Other explanations are also possible. Greater use of citations may further an opinion's projection of power.[478] Perhaps writing opinions better grounded in precedent gives those opinions greater future influence in the law. This prospect is discussed in the next Part.

## VI. THE IMPLICATIONS OF MORE CITATIONS

The above Parts revealed the circumstances that resulted in more precedents being cited by a Court opinion and the different tendencies of Justices to cite cases, but the significance of this simple citation count might still be questioned. We noted some existing research that indicated that more citations gave a case greater future legal significance.[479] It has been suggested that Cardozo's practice of citing more cases reflected his recognition of the "practical necessity for tying forward-looking opinions into the precedential past in order to make them acceptable to other judges, the bar, and even to a tradition-minded public."[480] This claim, however, is largely speculative, and the existing studies are very limited and far from conclusive. In this Part, we provide a more rigorous analysis of the importance of more citations, using empirical data on the network of Supreme Court precedent.

This Part examines the effect of more citations and citations with greater network centrality on future citation use by the Supreme Court and by lower courts. Our unit of analysis is the case year, meaning our data set contains an observation for each of our precedents in each year of its "life," starting in the year it was decided. The dependent variable is the number of citations a case receives in a given year. We are thus estimating the number of times a case is cited in each year. Because our de-

477. The numbers for Justices Rutledge and Reed are very high, but they are based on a smaller sample of majority opinions, late in their terms on the Court, as illustrated by the relatively wide confidence intervals around their projected citation numbers.

478. *See* Cross, *supra* note 99, at 1276 (analyzing opinions of Chief Justice Roberts and suggesting that his use of citations "appear[ed] dedicated to creating a new path of stare decisis that will direct the course of future rulings").

479. See notes 234–44 and accompanying text.

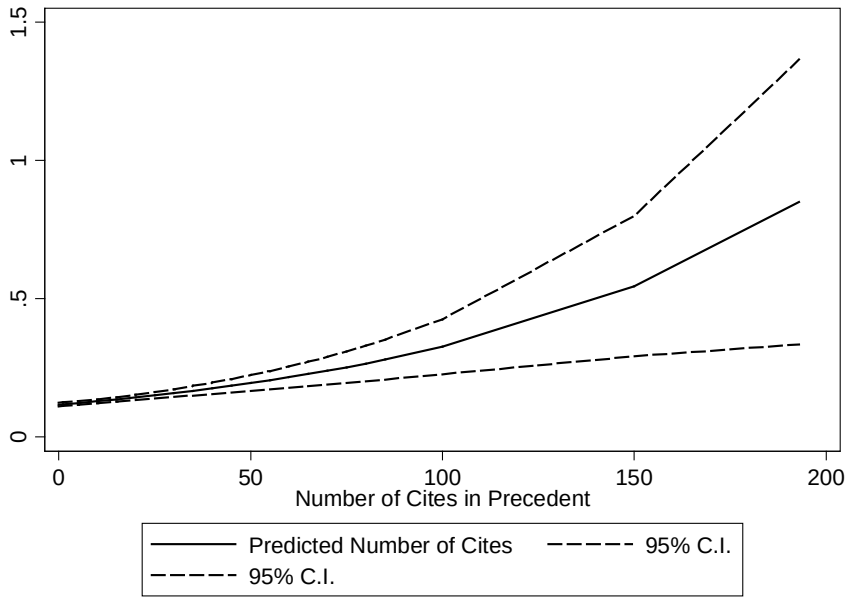
480. Robert A. Leflar, *Honest Judicial Opinions*, 74 NW. U. L. REV. 721, 724 (1979).

pendent variable is a count, we use a negative binomial regression model to estimate the effect.

We will display the effect graphically using our data to create predicted rates for future citation, depending upon the number of citations in the opinion and its network centrality score. These predictions are based on a model with most of the variables from Table 5 in order to isolate the independent effect of our citation practice variables of concern.[481] Figure 9 displays the association between the citation numbers of a particular majority opinion and future citations in subsequent majority opinions of the Supreme Court.

FIGURE 9

CITATION COUNT AND SUBSEQUENT CITATIONS IN THE SUPREME COURT

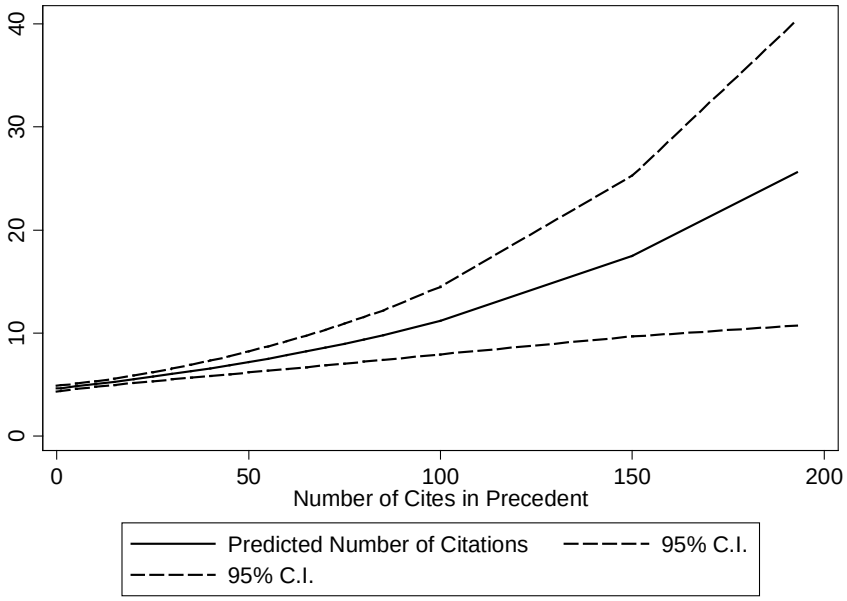



A greater number of citations in an opinion is associated with more subsequent citations by the Supreme Court. The effect, however, is a very small one, unless the citing case contains a very high number of citations that is far above the norm for Supreme Court decisions. Recall that the average precedent in our data cited approximately 11 precedents, and a case in the 90th percentile of this distribution cited only 24 opinions. Thus, most of the effect is occurring in the tails of the distribution of the number of citations in a precedent. More citations therefore give

481. Our control variables include Majority Opinion Length, Separate Opinion Length, Unanimous Coalition, Minimum Winning Coalition, Complexity, Constitutional Issue, Other Issue, Per Curiam, *New York Times*, Opinion Overrules Precedent, Opinion Strikes Law as Unconstitutional, Age of Precedent, Age of Precedent-Squared, Inward Legal Relevance, Amicus Participation in Case, and One Year Lag of Dependent Variable.

cases relatively little subsequent positive effect. Figure 10 replicates the procedure, but for subsequent lower court citations.

FIGURE 10




The pattern for subsequent lower court citations is quite similar to that for subsequent Supreme Court citations. There is a positive association that is statistically significant but quite small as a substantive matter, except for those few cases where citation numbers are extraordinarily high. Simply adding more citations to an opinion has relatively little effect on the precedential power of a decision.

The next graphs follow the same approach but study the effect of a case having citations of greater network centrality. Figure 11 displays the association between an opinion having a higher network centrality score and the number of citations in subsequent Supreme Court majority opinions. The association for the network centrality measure is much stronger and clearer than that for the raw citation counts. Higher centrality scores increase the impact of a decision, even at relatively low levels for our centrality score and the association between centrality and future citation is strong, with small 95 percent confidence intervals throughout the spectrum of centrality scores. An opinion with a higher centrality score will on average receive two or three times the future citations as one with a low centrality score. Figure 12 replicates this analysis but for subsequent lower court citations.

FIGURE 11

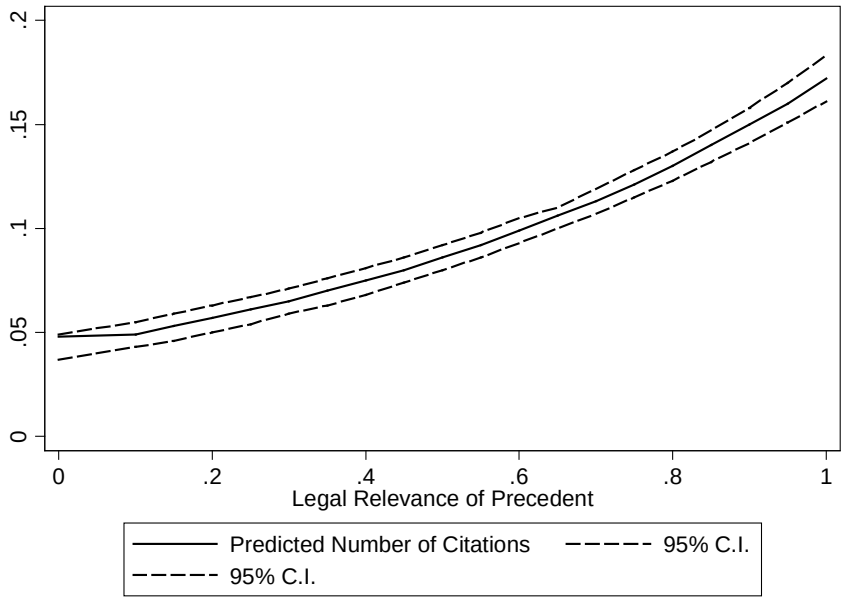
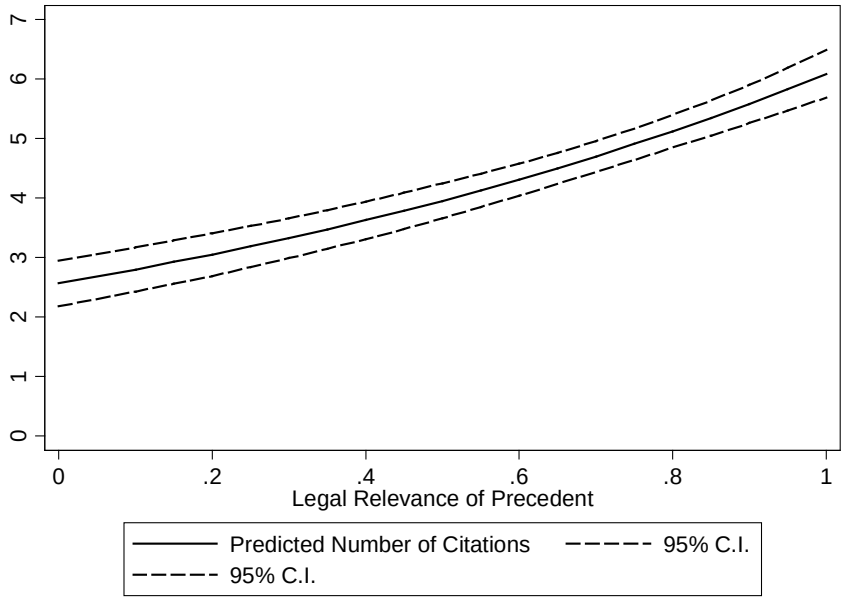



FIGURE 12




The pattern of results for subsequent lower court citations is similar to that for subsequent Supreme Court citations; higher network centrality scores are consistently associated with higher future citation rates. For

lower court citations, a high centrality score may yield about twice as many citations. This confirms and extends the findings from the very limited earlier studies suggesting that "legal reasoning with greater precedential ties" have greater influence on the law.[482]

Citation practice obviously may matter for the outcome of a particular Supreme Court decision. This Part reveals that it clearly matters for the future use of Court decisions in the path of stare decisis. More citations are associated with a very small increase in influence for a decision, but our network centrality measure is associated with a great increase in future influence. This measure is clearly capturing something important about the opinion.

## CONCLUSION

Decision making according to precedent is a central aspect of the legal process, a process that has seen an enormous amount of qualitative and normative analysis but very little descriptive empirical work. Our study of citation practices provides a new approach to analyze the role of stare decisis in Supreme Court decision making. We can draw at least preliminary conclusions about the factors that influence citation practice at the Court. The pure attitudinal model cannot fully explain citation practice in the Court's opinions.

Citations are in part a feature of matters external to the Justices. The Court's concern with legitimating its rulings increases citation rates and citation choices for those opinions that are most vulnerable to questions about their institutional legitimacy. Legitimacy is not the only basis for citation, though, as certain legal and collegial variables show a statistically significant effect on the number and type of citations in Supreme Court majority opinions. Over and above these factors, individual Justices have distinctive citation practices that show considerable variance. These differences provide a window into their decision-making processes. Michael Gerhardt's recent book on precedent concludes:

> On the Court, the justices recognize the need to give the same level of respect to the precedents of others as they expect their preferred precedents to deserve. . . . Adherence to the golden rule is further premised on justices' appreciation for the institutional values of stability, consistency, and predictability in constitutional adjudication. Justices who are disposed to value—or to balance—these institutional considerations over any personal preferences to do otherwise are likely to maintain—if not expand—their influence both on and off the Court.[483]

482. Johnson, *supra* note 238, at 333.

483. GERHARDT, *supra* note 141, at 201 (further stating that adherence to the golden rule of precedent helps Justices maintain their influence on and off the Court).

This respect for precedent is thus a strategic tool to empower the Supreme Court's decisions, a conclusion confirmed by our empirical analysis.

As Gerhardt notes, the Justices have differed in their relative regard for stare decisis.[484] Some may make less effort to invoke precedent due to the time and effort required to increase citations or because they place less significance on stare decisis as a standard to govern the Court's decisions. Other Justices place greater regard on precedent, because they understand it to be an important aspect of the Court's authority and responsibility and, consequently, their own influence on the law. The study of citation rates is therefore an important tool to understand the development of stare decisis at the Supreme Court.

This Article provides the first major quantitative study of the Justices' use of citations using network data. Consequently, our results are but a beginning effort, to be refined by subsequent research. While the data enable us to ascribe some confidence in relative citation rates for the Justices over the era, other factors that we have not considered may elaborate these conclusions. Citation rates may vary by the ideological direction of the Court's result (perhaps some Justices cite more cases in conservative decisions, or vice versa). We have only studied the variable of the opinion author, and perhaps the author does not control the content of the opinion. The other Justices of a majority coalition may demand citations in the final opinion. Our collegiality study indicates that adding citations or the use of particular citations can encourage other Justices to join an opinion. Nonquantitative examination of our findings may also illuminate our understanding of stare decisis at the Supreme Court level.

This Article provides a base from which a great deal of further research may proceed. The number of citations in a Supreme Court opinion is not randomly distributed, but demonstrably varies according to a number of factors, including the individual Justice authoring the majority opinion and the type of case. Operating from this beginning, future researchers may examine more closely the role of ideology in citation choices and how that differs among the Justices. They may also consider how precedent operates differently in certain categories of cases.

The quantitative results also may prove valuable in other studies of judicial characteristics. The Martin-Quinn scores discussed above permit comparison of Justice ideologies with our measures for citations. Perhaps more ideologically extreme Justices cite fewer (or more) cases or different cases. New data provide relative judicial activism scores for Justices of this same period.[485] The association of citation practice and judicial activism could be explored. A creative study has produced

484. *See id.* at 51–54.

485. *See* STEFANIE A. LINDQUIST & FRANK B. CROSS, MEASURING JUDICIAL ACTIVISM 137–38 (2009).

scores for "judicial minimalism" for some recent Justices,[486] and the association between citation practice and minimalism could be fruitful.

While our study is but a beginning, it contains some profound findings. Citation rates have increased over time and vary by type of case and other factors. Concerns for legitimacy appear to significantly affect the Justices' citation choices, but they do not tell the full story. Citation is not a perfectly political process. Apparently legal and other factors also influence citation rates, and the individual Justices clearly display different individual citation patterns independent of ideology. In addition, higher citation rates seem to increase the influence of decisions in the Supreme Court's network of stare decisis, validating the significance of the measure for research. Further study of citations can inform a variety of decisions about the Court, including the relative evaluation of individual Justices.

486. *See* Robert Anderson IV, *Measuring Meta-Doctrine: An Empirical Assessment of Judicial Minimalism in the Supreme Court*, 32 HARV. J.L. & PUB. POL'Y 1045, 1067 (2009).