



TIME TO REFLECT

Has the research changed
regarding the importance of jury size?

By Erica J. Boyce | December 2021



INTRODUCTION

Half a century ago, the U.S. Supreme Court changed a fundamental structural component of jury trials: the number of jurors required to comprise the petit jury.

*Williams v. Florida*¹ concluded that the Sixth Amendment right to an impartial jury does not require a jury to consist of 12 individuals, permitting state and federal courts to decide for themselves the jury size that best meets their needs for efficient, effective justice. The decision ignited an intense debate among practitioners about the wisdom of straying from the long-standing tradition of 12-person juries.

The *Williams* decision also inspired researchers from a variety of academic disciplines to study the impact of reduced jury size on court efficiencies, the demographic and attitudinal diversity of juries, the dynamics of jury deliberations, and jury verdicts and case outcomes. Empirically designed research efforts continued regularly through the late 1990s and provided an ongoing discussion in the literature outlining the advantages and disadvantages of reducing the size of a jury. Results were widely disseminated and regularly used in arguing for or against the use of a smaller jury. Ultimately only four states opted to reduce jury size for non-capital felony cases, but 16 did so for misdemeanor cases and 17 for civil cases.

Although the focus on jury size has waned somewhat over the past 20 years, researchers from a variety of academic disciplines have continued to study the impact of smaller juries using new analytical methods including complex data modeling designed to predict potential jury size influences that remain difficult to measure. These studies are now receiving new attention from legal policymakers as they face increased caseloads, limited resources, and other constraints that the COVID-19 pandemic has imposed on court operations, especially jury trials.

Prior research shed light on important factors to consider when evaluating the best size of a jury. They include **cost effectiveness, efficiency, predictability of case outcomes, accuracy in producing reliable verdicts**, and **community representation**. This paper reintroduces important considerations for the reduced jury size discussion by reviewing prior empirical findings and presents advancements in learning as to what is lost and gained when courts elect to impanel smaller juries.

¹ *Williams v. Florida*, 399 U.S. 78 (1970)

Cost Effectiveness and Efficiency

Cost effectiveness is one of the main drivers influencing courts to use smaller jury sizes. Proponents argue that reducing the size of juries will improve court efficiency by saving time and money. Prior research found that if courts reduced the jury size from 12 to 6, with two alternates for each, courts would reduce the amount of money spent on jury fees by approximately 40 percent; a reduction from 12 to 8 jurors with the addition of two alternates would reduce this amount by 29 percent.² Additionally, researchers observed a reduction of approximately 28 percent in person days across selection, trial, and deliberations for 8-person juries as compared to 12-person juries.³ Subsequent research in Illinois supported this finding in 2015 through interviews of attorneys regarding the state's change from a 12-member jury to six-member panel in civil litigation matters, who reported anecdotally that the time spent during jury selection was arguably reduced by half.⁴

Empirical findings have also reported contradictory results, offering instead that seating a smaller jury just does not save the judge or the parties much time or expense.⁵ Studies showed that the time saved during voir dire is negligible, at most a matter of a few minutes.⁶ Judge Higginbotham has also challenged the findings, reporting that the actual amount spent on civil juries by federal courts has decreased due to fewer filed cases rather than reduced jury size.⁷ He further argued that changes in technology have already reduced the cost of assembling venire panels and picking juries, far more than shrinking jury size ever could.⁸

The costs and benefits of reducing jury size may extend beyond the courthouse. Research conducted in the 1990s found that community members commonly complain about the time-consuming nature of jury service and its impact on daily responsibilities such as work and family.⁹ Proponents of smaller juries argued that reduced-sized panels served as an appropriate remedy to the reported community frustration because the sheer number of citizens affected by the cost-inhibitive process is reduced.¹⁰ In contrast however, prior research also reported that negative community perception is balanced after serving on a jury. Prior jurors consistently report their experience makes them more appreciative and more trustful of the court system.¹¹

² G. THOMAS MUNSTERMAN, JURY SYSTEM MANAGEMENT 141 (1996).

³ *Id.* at 141.

⁴ Daniel E. Cummins, *Does Jury Size Really Matter? Maybe. Maybe Not*, 60 JUDGES' J. 3 (2021).

⁵ AMERICAN COLLEGE OF TRIAL LAWYERS, REPORT ON THE IMPORTANCE OF THE TWELVE-MEMBER CIVIL JURY IN THE FEDERAL COURTS 32–34 (2001).

⁶ Peter W. Sperlich, *And Then There Were Six: the Decline of the American Jury*, 63 JUDICATURE 262, 276 (1980); William R. Pabst, Jr., *Statistical Studies of the Costs of Six-Man Versus Twelve-Man Juries*, 14 Wm. & Mary L. Rev. 326, 327 (1972).

⁷ Between 1970 and 2020, the civil jury-trial rate dropped from 4.3 percent to 0.5 percent. Patrick Higginbotham et al., *Better by the Dozen: Bringing Back the Twelve-Person Civil Jury*, 104 JUDICATURE 47, 54 (2020).

⁸ *Id.*

⁹ Shari S. Diamond, *What Jurors Think?*, in VERDICT: ASSESSING THE CIVIL JURY SYSTEM 284–85 (Robert E. Litan ed., 1993); Robert Boatright, *Why Citizens Don't Respond to Jury Summonses, and What Courts Can Do About It*, 82 JUDICATURE 156, 158 (1999).

¹⁰ G. THOMAS MUNSTERMAN, A COMPARISON OF THE PERFORMANCE OF EIGHT- AND TWELVE-PERSON JURIES 89 (1990).

¹¹ Diamond, *supra* note 9, at 285–86.



Decreasing
the size of
juries reduces
the likelihood
that the full
range of
community
perspectives
are
considered
during jury
deliberations.

Representativeness

Juries are intended to serve as the conscience of the community. To do so effectively, juries ideally consist of individuals who reflect the demographic and attitudinal characteristics of the larger population so that jury verdicts are more likely to be in line with community values. Reducing the size of a jury reduces the likelihood that the full range of community perspectives are considered during jury deliberations. Jury verdicts that fail to reflect community values may deteriorate public confidence in their legitimacy.¹² Munsterman et al. conducted a two-year study of 133 municipal court trials in California and determined that 8-person juries were more than twice as likely as 12-person juries to include either no black jurors or only one black juror.¹³ Similarly, Saks and Marti conducted a meta-analysis of eighteen studies in 1997 that looked at the effect of group size on a number of variables, including diversity of representation, length and quality of deliberations, and variability in outcomes.¹⁴ The researchers found that smaller juries were less diverse and have a lower likelihood of representing the larger community. Because variety in perspectives among jury members may be partly driven by diverse life experiences, demographic characteristics, and social positions, researchers contended that the threat to jury heterogeneity posed by the 6-person jury was a major concern.¹⁵

¹² Hans Zeisel, *And Then There Were None: The Diminution of the Federal Jury* Hans Zeisel. 38 U. CHI. L. REV. 710, 721 (1971).

¹³ MUNSTERMAN, *supra* note 10, at 2.

¹⁴ Michael J. Saks, et al., *A Meta-Analysis of the Effects of Jury Size*, 21 L. & HUMAN BEHAV. 451, 452 (1997).

¹⁵ *Id.* at 465

The number
of impaneled
jurors can
impact group
dynamics
and quality of
deliberations.

Predictability and Accuracy

Juries decide only a tiny proportion of cases; most cases are resolved by plea agreement or settlement. But jury verdicts provide important benchmarks for parties during settlement negotiations insofar that they reflect the likely outcome of the case in the event that the parties fail to reach a settlement. However, plea bargaining or settlement negotiations become more challenging and unlikely when jury verdicts are viewed as unpredictable or likely to be inaccurate.¹⁶

Research conducted from the late 1970s thru 1990s has focused on the association between jury size and predictability. Smaller juries have shown to have greater variability are therefore more unpredictable.¹⁷ This may be explained through probability theory or the law of large numbers. Saks cites these theories to support his findings on six-person juries. A larger number or sample size, in this case the jury, the more likely one reaches an average closer to the population value.

Group dynamics also change with any group size. Generally speaking, smaller juries communicate in a more cohesive fashion, with more jurors sharing equally in the discussions and deliberation. Larger groups were noted to be more contentious with more vigorous debates and better able to recall more of the evidence.¹⁸ Dissenters in a larger jury may be more likely to have an ally in the jury deliberation room and may be better able to resist pressure to yield to the will of the larger group.¹⁹ Larger juries have shown the advantage of having one sympathizer reduces the pressure to conform.

Although consensus has shown to be more likely achieved in small groups, the quality of deliberations with respect to improved memory and better integration of diverse viewpoints is more likely to occur with larger groups.²⁰ Cumulative memory improves with more individuals and smaller panels have been found to be worse at recalling the evidence.²¹ These findings led some researchers to conclude that a larger jury may be more likely to render more accurate verdicts based on better recall of the evidence and more thorough debate on the merits of the matter. They further argued that more accurate verdicts lead to greater predictability and therefore more settlements of cases before trial.²²



¹⁶ Mnookin and Kornhauser first discussed the relationship between predictability and negotiations in 1979 by assessing how the legal system, associated legal standards, and procedural rules impact negotiations in divorce proceedings. Based on observations, they developed a bargaining theory that allowed for the prediction of how alternative legal rules would affect divorce case outcomes. Rather than having known legal standards and judicial proceedings dictate outcomes, Mnookin and Kornhauser first suggested that pretrial negotiations allow parties to create their own legally enforceable commitments. Robert Mnookin et al., *Bargaining in the Shadow of the Law: The Case of Divorce*, 88 YALE L. J. 950-997 (1979). Marc Galanter further discussed the importance of negotiation in relation to civil litigation, coining the term litigotiation. Marc Galanter, *Worlds of Deals: Using Negotiation to Teach about Legal Process*, 34 J. Leg. Edu. 268-276 (1984).

¹⁷ Saks, *supra* note 14, at 463.

¹⁸ *Id.* at 458.

¹⁹ Saks, *supra* note 14, at 465.

²⁰ Nicholas Fay et al., *Group Discussion as Interactive Dialogue or as Serial Monologue: The Influence of Group Size*, 11 PSYCH. SCI. 481, 485 (2000).

²¹ *Id.* at 483.

²² Saks, *supra* note 19.



NEW EMPIRICAL RESEARCH

Although jury-size research has continued into the twenty-first century, it appears to have shifted in both the academic disciplines leading the efforts and the research methods employed.

Prior to 2000, many of the studies were facilitated by scholars representing the legal, criminal justice, and social science (e.g. sociology and social psychology) fields. Most studies were empirical in nature. Researchers analyzed court data already collected as part of the court reporting infrastructure or conducted mock or experimental juries as a way of measuring the possible impacts of reducing jury size. While they produced results based on data, some critics argue that a mock trial approach lacks realism in that the subjects know that their decisions really have no meaning.²³

Research conducted since the early 2000s has employed different analytic methodologies and has been conducted from varied disciplines such as the field of economics. In addition to using secondary data and mock trials for analysis, recent research frequently uses deductive modeling as an approach for analyzing the effects of jury size. This method depends on computer simulation rather than analytical results supported by data. A model is a simplified description of reality, designed to yield hypotheses about behavior that can be further tested.²⁴ An important feature of a deductive model is reduced design subjectivity.²⁵ It also offers a more nuanced approach in understanding the complexity of influencers and impacts of reduced size jury panels that cannot be easily measured. Although the most current research has varied in methodology and discipline, results have mirrored previous findings and tend to focus on similar issues such as accuracy, efficiency, and representativeness.

²³ Richard Wiener et al., *Mock Jury Research: Where Do We Go From Here?* 29 BEHAVIORAL SCIENCES AND THE LAW, 470 (2011).

²⁴ Sam Ouliaris, *Economic Models: Simulations of Reality*, INT'L MON. FUND (updated Feb. 2020) (available at <https://www.imf.org/external/pubs/ft/fandd/basics/models.htm>).

²⁵ *Id.*

When
12-person
juries were
subdivided
into groups
of four, jurors
reported
greater
participation
during
deliberations.

Accuracy and Efficiency

Prior work on jury accuracy and efficiency has been extended by examining the interplay of jury size and voting requirements on the probability of wrongful convictions, wrongful acquittals, and hung juries. Guerra et al. used the classical jury model to analyze how jury size and voting requirements simultaneously impacted expected trial outcomes.²⁶ This research provides a unique prospective since prior studies looked at both variables independently. Results indicated that the accuracy of verdicts is maximized when requiring unanimous verdicts for small juries or allowing nonunanimous verdicts with large juries.²⁷ When unanimity is required, the use of smaller juries could reduce the probability of a single juror causing a deadlock and may be desirable to empower the jury with the capacity to reach a verdict.²⁸ One way to reduce the risk of deadlock from larger juries is by modifying the jury deliberation structure. Research conducted at the University of Portsmouth suggests that the inequality embedded in the current jury decision-making process could be prevented by restructuring the way in which discussions take place.²⁹ Jury groups comprising of 12 members were subdivided into groups of four during deliberative discussions. Jurors reported contributing more to the decision-making process, which in turn helped to provide a collective representation of the jury verdict.³⁰

Jury data have also recently been analyzed to determine if jury size influences jury processes since prior research was inconclusive. Recent study findings suggest that jury size may affect different stages of the jury trial process. Brunell et al. analyzed jury data from the Fourth Circuit Court, Multnomah County (Portland) Oregon to determine if case factors influenced jury processes including jury size.³¹ The study's data appeared to have a large difference between 6 and 12-person juries when comparing how long it takes to agree on a verdict. However, after controlling for the other factors, such as severity of the crime or case complexity, these differences disappeared.³² In contrast to these findings, Mize et

Alice Guerra et al., *Accuracy of Verdicts Under Different Jury Sizes and Voting Rules*, 28 S. CT. ECON. REV. 221, 225 (2020).

²⁷ *Id.* at 231.

²⁸ *Id.* at 231.

²⁹ Bridget Waller et al. *Twelve (Not So) Angry Men: Managing Conversational Group Size Increases Perceived Contribution by Decision Makers*, 14 GROUP PROC. & INTERGROUP REL. 835, 8 (2011).

³⁰ *Id.* at 9.

³¹ Thomas Brunell et al., *Factors Affecting the Length of Time a Jury Deliberates: Case Characteristics and Jury Composition*, 5 REV. L. & ECON. 559 (2009).

³² *Id.*



Juror
heterogeneity
may influence
hung jury
rates more
than jury size.

al. conducted an analysis of jury size on the length of voir dire in the *State-of-the-States Survey of Jury Improvement Efforts*.³³ Results indicated that after controlling for multiple factors simultaneously, impaneling an 8-person jury added 47 minutes to the length of voir dire, and impaneling a 6-person jury added 71 minutes.³⁴

The relationship between jury size and hung juries may be further explained by diversification. Even into the early 2000s, results indicated that there was no detectable difference between 6-member and 12-member juries with respect to hung jury rates.³⁵ However, to better understand why no difference was detected, Luppi et al. ran economic models to help explain prior empirical data with respect to informational cascades and heterogeneity. The researchers defined informational cascades as instances in which a juror bases their decision solely on the decision of others or likelihood of being swayed. Heterogeneity was defined as a jury consisting of more than one subgroup and possessing equal abilities of reaching a correct decision.³⁶ Jurors' confidence level in reaching a correct verdict was used as a proxy for informational cascades within the data model. Results indicated that in the presence of informational cascades, the effect of jury size on the probability of hung juries may be reduced or even reversed.³⁷ In other words, when a group is comprised of individuals vulnerable to being influenced by other people's opinions, unanimity can be reached just as easily in a jury of 12 as in a jury of six. The same data model produced results regarding the impact heterogeneity has on jury size and ultimately rendered verdicts. Findings revealed that the more diverse a jury is, regardless of size, the less likely they are suspected to give in to informational cascade and changing their opinions. This dynamic increases the likelihood of cases resulting in hung juries.³⁸

The association of the determination of jury size and voting rules has also been approached from a cost-minimization prospective. Recent studies expanded on Saks' work in this area by building models to examine how jury size may impact the probability of making type I and II errors in the justice system. Type I errors occurs when a jury finds a defendant guilty and imposes punishment when he or she was actually innocent. Type II errors represent a failure in determining that the defendant was guilty when in reality, they were. One of the recent models indicated that the probability of committing these errors was not influenced by jury size. Using common assumptions from jury literature such as unanimous voting rule, Helland and Raviv's model demonstrated no association between the variables.³⁹ In contrast, King and Nesbit's model concluded that a jury of nine members and a nonunanimous voting rule was most efficient at decreasing the associated costs of either committing a Type I or Type II error.⁴⁰ This difference between these studies may lie within the specificity of the models. Helland and Raviv used general assumptions whereas King and Nesbit inserted specific costs related to these errors.

³³ GREGORY E. MIZE et al. THE STATE-OF-THE-STATES SURVEY OF JURY IMPROVEMENT EFFORTS: A COMPENDIUM REPORT 27-31 (2007).

³⁴ *Id.* at 30.

³⁵ Theodore Eisenberg et al. *Judge-Jury Agreement in Criminal Cases: A Partial Replication of Kalven and Zeisel's The American Jury*, 2 J. EMPIR. LEG. ST. 171, 182. (2005).

³⁶ Barbara Luppi et al., JURY SIZE AND THE HUNG-JURY PARADOX, 42 J. LEG. ST. 399, 414, (2013).

³⁷ *Id.* at 400.

³⁸ *Id.* at 408.

³⁹ Eric Helland et al., *The Optimal Jury Size When Jury Deliberation Follows a Random Walk*, 134 PUB. CHOICE 255, 259 (2008).

⁴⁰ Kerry King et al., *The Empirical Estimation of the Cost-Minimizing Jury Size and Voting Rule in Civil Trials*, 71 J. ECON. BEHAV. & ORG. 463, 472 (2009).

Smaller sized
juries are
less likely
to contain
members
of racial
minorities.

Community Representativeness

Twelve member juries are more likely than smaller jury panels to include members of a racial minority.⁴¹ Recently conducted studies continue to replicate similar findings to research conducted after *Williams v. Florida* was first decided. In addition to descriptive studies reporting a change in jury demographics for smaller panels, researchers are recently positioning themselves to focus on the *impact* of having a homogeneous jury panel.

Traditionally, many of the research studies have focused on criminal trial proceedings. However, Diamond et al. analyzed jury selection and composition in 277 civil jury trials to determine how jury selection process and size affect diversity.⁴² Results show that while peremptory challenges were systematically related to juror race/ethnicity, the opposing challenges cancelled each other out, producing no overall effect on the makeup of the jury.⁴³ In contrast, jury size had a substantial effect on minority representation, concluding that diversity is most effectively promoted by restoring the 12-member jury.⁴⁴ Reducing jury size inevitably has a drastic effect on the representation of minority group members on the jury. While 28.1 percent of the six-member juries lacked even one Black juror, only 2.1 percent of the 12-member juries were entirely without Black representation.⁴⁵ Research has shown that the effect of jury diversity is most pronounced with six member juries; however, prior studies have also highlighted a lack of diversity within eight-member juries.⁴⁶ Results indicate that eight-member juries fall somewhat in the middle of the jury size and diversity spectrum; twelve member juries having the greatest variability while six-member juries are the most homogeneous. Eight-member juries have proven to be less diverse than 12, but slightly more diverse than a six-member jury. Given that 14 states use eight-member juries for civil cases and two states employ them for misdemeanor cases, the need for further empirical studies exists to determine a clearer understanding of potential implications related to this jury size. Research regarding the impact that eight-member juries have on jury proceedings has been limited and has not served as the focus of recent studies.

During the last decade, research efforts have been directed to understanding how smaller, homogeneous jury panels have affected verdicts. In 2012, Anwar et. al, examined the impact of jury racial composition on trial outcomes using a data set of felony trials in Florida between 2000 and 2010.⁴⁷ They used regression analysis to analyze felony jury trial data for Lake County and Sarasota County, Florida. Findings revealed that juries from all-white jury pools convicted Black defendants significantly (16 percentage points) more often than white defendants.⁴⁸ Additionally, this gap was entirely eliminated when the jury pool included at least one Black member. The data in this study indicated that 36 percent of the jury panels for the criminal trials included no Black potential jurors, and 72 percent of the seated six-person juries did not include a single Black juror.⁴⁹ The disparity problem in convictions that the researchers demonstrated was therefore exacerbated by the widespread exclusion of Black jury members that comes with the six-person jury.

⁴¹ Marc W. Pearce et al., *Is a Jury of Six as Good as One of 12?* 40 JUD. NOTEBOOK 32 (2009).

⁴² Shari S. Diamond et al., *Achieving Diversity on the Jury: Jury Size and the Peremptory Challenge*, 6 J. EMPIR. LEG. ST. 425, 434 (2009).

⁴³ *Id.* at 425.

⁴⁴ *Id.* at 448.

⁴⁵ *Id.* at 442.

⁴⁶ MUNSTERMAN, *supra* note 2, at 141.

⁴⁷ Shamera Anwar et al., *The Impact of Jury Race in Criminal Trials*, 127 QUAT. J. ECON. 1017, 1027 (2012).

⁴⁸ *Id.* at 1028.

⁴⁹ *Id.* at 1019.



CONCLUSION

Current research appears to support several of the prior findings pertaining to jury size such as questioning the accuracy and predictability of smaller-sized juries and that size does not seem to dictate nonunanimous verdicts.

The unique contribution of recent jury-size studies may lie in their ability to provide a window into the complexity of jury deliberations and the factors that interact with each other. Conflict exists between efficient court procedures such as smaller panels and the importance of maintaining community representation. Unseen mitigating factors exist that help facilitate the relationship between jury size and verdict such as the likelihood individuals will be convinced by fellow jurors. All are important considerations to ponder when making the decision to use a reduced size jury.

Perhaps one of the most important takeaways from the body of jury size research is the inability to effectively discuss and make decisions on jury size without including unanimity. Principles 3 and 4 of the *ABA Principles for Juries and Jury Trials* (2005) specifically indicate that juries should consist of 12 members and that decisions should be unanimous.⁵⁰ Empirical results further support these principles by indicating that the impact of jury size is tied to decision rules. Recognizing this relationship may allow courts to compromise on size if they are using a 5/6th or unanimous decision rule to preserve the strengths of larger juries such as recall and heterogeneity.

It is important to remember that many of the recent studies were conducted using predictive models. This type of research methodology is commonly used to build hypotheses. While modeling gives valid results, proxy measures are often used for variables that are difficult to measure and therefore findings are not necessarily empirically grounded. Future research should further test the hypotheses generated by designing empirical studies examining actual court and juror data.

⁵⁰ AM. BAR ASSN., *PRINCIPLES FOR JURIES AND JURY TRIALS*, Principle 3—Juries Should Have 12 Members; Principle 4—Jury Decisions Should Be Unanimous (2016).



The points of view expressed are those of the author and do not necessarily reflect those of the National Center for State Courts (NCSC). For additional information about this paper or cited resources, contact Erica J. Boyce at 757-259-1570 or eboyce@ncsc.org.