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QUESTIONS FROM THE BENCH AND INDEPENDENT EXPERTS: A STUDY OF THE PRACTICES OF STATE COURT JUDGES

Andrew W. Jurs*

I. INTRODUCTION

Research conducted since 1993 demonstrates that judges see themselves as generally more active in gatekeeping since *Daubert*.¹ Yet, nearly twenty years later, very few studies have tested the specific methods used by judges in their gatekeeping role. In *General Electric v. Joiner*, Justice Breyer's concurrence noted that while judges may lack a background in complex science, the Rules of Evidence and Rules of Civil Procedure already contain methods helpful for *Daubert* gatekeeping.² Breyer suggests that any judge facing an issue involving

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¹ See, e.g., *The Changing Role of Judges in the Admissibility of Expert Evidence*, CIVIL ACTION (Nat'l Ctr. for State Courts, Williamsburg, Va.), Spring 2006, at 1, 1–4 (hereinafter *Changing Role*) (showing through a survey of judges that judges believe they have a more active role since *Daubert*); Carol Krafska et al., *Judge and Attorney Experiences, Practices, and Concerns Regarding Expert Testimony in Federal Civil Trials*, 8 PSYCHOL. PUB. POL'Y & L. 309 (2002) (same); Sophia Gatowski et al., *Asking the Gatekeepers: A National Survey of Judges on Judging Expert Evidence in a Post-Daubert World*, 25 LAW & HUM. BEHAV. 433 (2001) (same). See also LLOYD DIXON & BRIAN GILL, RAND INSTITUTE FOR CIVIL JUSTICE, CHANGES IN THE STANDARDS FOR ADMITTING EXPERT EVIDENCE IN FEDERAL CIVIL CASES SINCE THE DAUBERT DECISION 61 (2001) (providing an empirical study of case management that also indicates that judges evaluate reliability more carefully); Jennifer Groscup et al., *The Effects of Daubert on the Admissibility of Expert Testimony in State and Federal Criminal Cases*, 8 PSYCHOL. PUB. POL'Y & L. 339, 364 (2002) (same). For further analysis of prior research in the area, see *infra* Part II.

² Gen. Elec. Co. v. Joiner, 522 U.S. 136, 147 (1997) (Breyer, J., concurring).

expert testimony may wish to resort to advanced factfinding techniques including: examination of the potential expert by the court, appointment of an independent expert to assist the court, use of additional pretrial conferences, or delegation to special masters.³ Do judges follow this advice?

This Study helps to answer that question by investigating the actual judicial use of, frequency of use of, and reasons for use of advanced factfinding methodologies. Specifically, the Study focuses on the two evidentiary methods suggested by Justice Breyer—judicial questioning under Rule 614 and appointment of independent experts under Rule 706—to evaluate their use by judges. In assessing the prevalence of these techniques, this Study helps determine whether the judiciary has the tools necessary to perform gatekeeping. In addition, the Study evaluates whether use of these techniques changes based on characteristics of the judge, and finds a new and previously unknown difference between groups of judges.

To examine these issues, this Study begins in Part II by briefly outlining the *Daubert* standard and the change in judicial role vis-à-vis experts in the 1990s. Since those changes, prior research consistently demonstrates several findings about the judicial role since *Daubert*.⁴ Even if some of the prior research is clear, particularly on the finding that judges see themselves as more active in assessing science, it remains inconclusive on the actual courtroom use of advanced factfinding methodologies.⁵ In Part III, this Study offers new data from a survey of state court judges in the Midwestern United States, measuring the frequency and reasons for use of advanced factfinding methods.⁶ In Part IV, the Study concludes with comments on the findings and then finishes with suggestions for further research.⁷

By measuring the actual practices of state court judges, this survey provides actual data on *Daubert* gatekeeping, the tools used and not used by the judiciary to that end, and whether the aspirational goals of the Supreme Court match reality in courtrooms today.

³ *Id.* at 149–50.

⁴ *See infra* Part II and especially text accompanying notes 20–25.

⁵ *See infra* Part II and especially text accompanying notes 31–37.

⁶ *See infra* Part III.B.

⁷ *See infra* Part IV.

II. THE GATEKEEPING ROLE AFTER *DAUBERT*

In the 1990s, the Supreme Court changed both the substantive standard for and the procedural method of reviewing expert testimony prior to admission in federal court.⁸ The effect of those changes remains debated to this day.

The Court's 1993 ruling in *Daubert v. Merrell Dow Pharmaceuticals* explicitly rejected the prior admissibility standard of "general acceptance" in use in many federal courts since the *Frye* decision of 1923.⁹ Instead of evaluating proposed testimony for general acceptance within the appropriate scientific community, Justice Blackmun endorsed the Rule 702 approach for admissibility, requiring an evaluation of the relevance and reliability of the testimony.¹⁰ For this 702 analysis, Blackmun endorsed several specific factors to consider in the gatekeeping decision, even while noting the inquiry was to be a flexible one.¹¹ The assessment by the gatekeeper was to ensure that any scientist "employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field."¹²

Following *Daubert*, federal judges evaluating expert evidence knew the substantive standard to apply, what factors to consider in the evaluation, and, by 1997, the standard for review of their decisions.¹³ Even with these guidelines, the substantive effect of *Daubert* has been debated among commentators. Many see *Daubert* as lowering the standard for admissibility,¹⁴ some see the opposite,¹⁵ and a

⁸ See *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993).

⁹ *Id.* at 589; *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923).

¹⁰ *Daubert*, 509 U.S. at 589.

¹¹ *Id.* at 593–95.

¹² *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999).

¹³ *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 139 (adopting abuse of discretion standard for appellate review of trial court *Daubert* decision).

¹⁴ DAVID H. KAYE, DAVID E. BERNSTEIN & JENNIFER L. MNOOKIN, *THE NEW WIGMORE: EXPERT EVIDENCE* § 6.3.2 n.61 (2d ed. 2004) (citing case law); David L. Faigman, Elise Porter & Michael J. Saks, *Check Your Crystal Ball at the Courthouse Door, Please: Exploring the Past, Understanding the Present, and Worrying About the Future of Scientific Evidence*, 15 *CARDOZO L. REV.* 1799, 1810 (1994) ("The rules were widely regarded as having been intended to open the courthouse door to scientific expert witnesses somewhat wider than *Frye* had."); Michael J. Saks, *Merlin and Solomon: Lessons from the Law's Formative Encounters with Forensic Identification Science*, 49 *HASTINGS L.J.* 1069, 1077 (1998) ("[T]he most hazardous myth of the *Frye* test is that it is a more stringent, less liberal, standard than that of other tests.").

third group sees *Daubert* and *Frye* as simply different.¹⁶ Even in an area in which the Court had been relatively clear—the substantive burden to establish admissibility under Rule 702—the actual effect in court is contested.

While the Court had offered the standard and relevant factors to consider for substantive review of experts under *Daubert*, it was nearly silent on the procedures that judges should use to accomplish successful gatekeeping.¹⁷ Perhaps to fill the void, Justice Breyer's concurrence four years later in *Joiner* offered suggestions related to procedures judges could use in order to successfully evaluate complex expert evidence.¹⁸ Each method already existed within the Rules of Evidence or Rules of Civil Procedure, yet Breyer suggested more active judicial management of these questions.¹⁹ Beyond that, judges are on their own.

Research since *Daubert* has begun to evaluate *how* judges have addressed gatekeeping. The current research offers some clear findings, but in other ways is incomplete.

One finding shows unusual consistency across studies. Empirical research since *Daubert* demonstrates that judges endorse the active judicial role required by the decision. In their 2001 survey of state court judges, Sophia Gatowski and her colleagues found that 91% of judges supported the gatekeeping function, and 62% saw themselves as actively involved in the admissibility process.²⁰ Most notably, the survey showed no difference in support for active gatekeeping whether the judges followed *Daubert* or *Frye* in their home state.²¹ In 2002, Carol Krafska and her research group found similar support for an active judiciary in a survey of federal judges.²² Of the judges surveyed, 69% indicated that after *Daubert* their

¹⁵ See, e.g., Michael J. Saks, *Judging Admissibility*, 35 J. CORP. L. 135, 141–42 (2009) (citing *Weisgram v. Marley Co.*, 528 U.S. 440, 455–57 (2000)) (“[I]n only seven years the Court re-perceived *Daubert* as a much more austere standard.”).

¹⁶ KAYE ET AL., *supra* note 14, at 204; Faigman et al., *supra* note 14, at 1810; Saks, *supra* note 15, at 140; Saks, *supra* note 14, at 1078.

¹⁷ In *Daubert*, Justice Blackmun did mention the authority of the court to appoint an independent expert, albeit within the discussion of the substantive standard for review of expert testimony. *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 595 (1993).

¹⁸ *Joiner*, 522 U.S. at 149–50.

¹⁹ *Id.* at 147 (suggesting that gatekeepers must make “subtle and sophisticated determinations about scientific methodology and its relation to the conclusions an expert witness seeks to offer”).

²⁰ Gatowski et al., *supra* note 1, at 443.

²¹ *Id.*

²² Krafska et al., *supra* note 1, at 322.

procedures for assessing experts had changed.²³ A 2006 survey of Delaware state judges again affirmed that a majority took an active role as gatekeeper.²⁴ In addition to these surveys, non-survey research also supports the notion that judges have become more active since *Daubert*.²⁵

Even if the research demonstrates a clear endorsement of the active role for the gatekeeping judge, the research does not provide clear answers on which procedures judges use to perform gatekeeping. Only two surveys since *Daubert* have measured judicial attitudes on specific case management techniques.²⁶

In their 2002 study, Krafska and her research team at the Federal Judicial Center asked federal judges about their use of specific procedures for managing complex evidence.²⁷ The survey asked judges about seventeen different procedures that a judge could use to manage complex evidence, and whether they are used at all, used in cases with various types of expert evidence, or used only in those cases with difficult or complicated scientific or technical evidence.²⁸ The survey involved a wide range of judicial options including: independent experts under Rule 706, pretrial hearings, special masters, bifurcation, independent research, or questioning from the bench.²⁹

In response to the survey, the judges affirmed that they use certain techniques in all types of cases (clarifying questions from the bench, expert reports, expert testimony by videotape), but other techniques were more likely to be used only in cases with complex science (pretrial hearing on admissibility, special instruction to the court, or independent experts).³⁰ Of importance to this Study, Krafska found that 88.2% of federal judges question experts from the bench in cases with various types of expert evidence, 5.4% used this technique for only complex expert testimony, and 6.4% did not question experts from the bench at all.³¹ Regarding use

²³ *Id.* at 328.

²⁴ *Changing Role*, *supra* note 1, at 3.

²⁵ *See, e.g.*, DIXON & GILL, *supra* note 1, at 61; Groscup et al., *supra* note 1, at 364.

²⁶ Shirley A. Dobbin et al., *Federal and State Trial Judges on the Proffer and Presentation of Expert Evidence*, 28 JUST. SYS. J. 1 (2007); Krafska et al., *supra* note 1, at 309.

²⁷ Krafska et al., *supra* note 1, at 314. While the study was published in 2002, the surveys provided to the judges on case management techniques had been completed in 1998 and 1991. *Id.* at 312–314.

²⁸ *Id.* at 325.

²⁹ *Id.* at 326.

³⁰ *Id.*

³¹ *Id.*

of independent experts with Rule 706, 10% use the technique in cases with various types of expert testimony, 16% would use it only in cases with complex expert testimony, and 74% would not appoint an expert under Rule 706.³²

Krafka's study examined the procedural methodology of the gatekeeping judge after *Daubert* in the federal system. Dobbin's 2007 study examined the case management practices of state court judges.³³

Dobbin and her colleagues surveyed state court judges about the management of expert testimony using multiple techniques. They also examined whether those techniques are used in cases with difficult expert testimony, with any type of expert testimony, or not at all.³⁴ Similar to Krafka's study, Dobbin found that some methods are commonly used by judges in all cases with expert testimony (clarifying questions from the bench, expert testimony on videotape), while others will be employed only in cases with complex expert testimony (judicial research, special instruction to the court).³⁵ Of interest to this Study, Dobbin found that 64% of state judges question experts from the bench in cases with various types of expert evidence, 5% used this technique for only complex expert testimony, and 18% did not question experts from the bench at all.³⁶ When asked about the use of independent experts, 5% of the state court judges surveyed would use this

³² *Id.* This number is similar to a survey published in the early 1990s, which found that only 20% of federal judges had ever appointed an independent expert. Joe S. Cecil & Thomas E. Willging, *Accepting Daubert's Invitation: Defining a Role for Court-Appointed Experts in Assessing Scientific Validity*, 43 EMORY L.J. 995, 1004 (1994) [hereinafter Cecil & Willging, *Accepting Daubert's Invitation*]. The survey had been sent to judges in 1988. *Id.* Cecil and Willging also evaluated the reasons judges may be reluctant to appoint an independent expert using Rule 706, discussing infrequency of cases needing an expert and respect for the adversarial system. *Id.* at 1015–19. See also JOE S. CECIL & THOMAS E. WILLGING, FED. JUDICIAL CTR., COURT APPOINTED EXPERTS: DEFINING THE ROLE OF EXPERTS APPOINTED UNDER FEDERAL RULE OF EVIDENCE 706, at 18–23 (1993) [hereinafter CECIL & WILLGING, COURT APPOINTED EXPERTS] (same, but also discussing lack of awareness of the procedure, compensation, timing concerns, and selection of the expert).

³³ Dobbin et al., *supra* note 26, at 1. Although the study was published in 2007, the surveys were sent to the judges in 1999. *Id.* at 3.

³⁴ Although the surveys are very similar, the authors clearly indicate that the questions in the surveys to the federal judges are not identical to those given to state court judges. *Id.* at 4. For example, in the Krafka study, federal judges had been asked about the use of 17 separate case management methods. Krafka et al., *supra* note 1, at 326. In the Dobbin study, the state court judges had been asked about 11 case management methods. Dobbin et al., *supra* note 26, at 10.

³⁵ Dobbin et al., *supra* note 26, at 10.

³⁶ *Id.* To compare these results to the surveys of federal judges, see *supra* text accompanying note 31. Dobbin's survey did not divide the judges into groups based on scientific admissibility standard of their state.

technique only in cases with complex expert evidence while 31% would use it in any case with expert evidence, as compared to 57% who would never appoint one.³⁷

The Krafska and Dobbin studies together provide helpful data on the procedural methods used by judges to perform gatekeeping. Yet they are the sole studies on the topic since *Daubert*, and rely on surveys done in the 1990s.³⁸ The issue warrants further study.

III. A NEW SURVEY REGARDING EVIDENCE RULES 614 AND 706

To further evaluate the use of advanced factfinding techniques in the Rules of Evidence, this Study asked state court judges in the Midwestern United States about their use of these techniques. The results update and expand upon research in the earlier Krafska and Dobbin studies.

A. Methodology

This IRB-approved Study assesses the use, frequency of use, and reasons for use of advanced factfinding methodologies in the Rules of Evidence by state trial court judges. To achieve that goal, the Study surveyed state trial court judges in several states to determine their usage of judicial questioning from the bench and appointment of independent experts.

i. Selection of Methods to Study

Prior to the design of a survey or the selection of a sample, the Study initially had to determine which advanced factfinding methods to evaluate. The final selection included the judicial use of questioning from the bench and the appointment of independent experts. A brief word of explanation details why these specific methods were to be used.

Several factors led to the Study including solely these methods. First, both methods have long-standing precedent in common law prior to their inclusion in the Federal Rules of Evidence and similar state rules.³⁹ With this long recognized

³⁷ Dobbin et al., *supra* note 26, at 10. To compare these results to the surveys of federal judges, see *supra* text accompanying note 32. Again, these results were not divided by scientific admissibility standard.

³⁸ See *supra* notes 27 and 33.

³⁹ 2 JOHN HENRY WIGMORE, EVIDENCE § 563, at 648 (3d ed. 1940) (court appointment of an independent expert); 9 JOHN HENRY WIGMORE, EVIDENCE § 2484 (3d ed. 1940) (questions to witnesses by the judge). See also R.E. Barber, Annotation, *Trial Court's Appointment, in Civil Case, of Expert*

acceptance may come familiarity, so the Study would not be measuring judicial handling of new or unknown courtroom procedures.

Second, the two methods included were the only methods from the Rules of Evidence to be specifically endorsed by Justice Breyer in *Joiner*.⁴⁰ The other methods mentioned—special masters and pretrial conferences—are also important to judicial management of complex science, but involve the Rules of Civil Procedure.

A third reason to study these methods, particularly at this point in time, involves the age and timing of the previous studies. The Krafska study of federal judges used survey instruments from 1998 and earlier to evaluate judicial factfinding⁴¹ and Dobbin's study relied on surveys of state court judges from 1999.⁴² These surveys were important and timely considering *Daubert* in 1993, but an updated analysis is also appropriate. Several changes since those surveys were conducted support this conclusion, specifically: the Court's decision in *Kumho Tire v. Carmichael*, which expanded *Daubert* analysis to nonscientific technical expertise,⁴³ the timeline of adoption of *Daubert* in the states after 1993,⁴⁴ and the solidification of the *Daubert* rules over time.⁴⁵ In her study Dobbin specifically

Witness, 95 A.L.R.2d 390 (1964) (court appointment of an expert witness in civil cases); Kristine Cordier Karnezis, Annotation, *Manner or Extent of Trial Judge's Examination of Witnesses in Civil Cases*, 6 A.L.R.4th 951 (1981) (court examination of witnesses in a civil case); Stephen A. Saltzburg, *The Unnecessarily Expanding Role of the American Trial Judge*, 64 VA. L. REV. 1, 52–80 (1978) (reviewing and analyzing arguments in favor of and opposed to the judicial power to call and question witnesses, including expert witnesses); John M. Sink, *The Unused Power of a Federal Judge to Call His Own Expert Witness*, 29 S. CAL. L. REV. 195, 206–08 (1956) (discussing judicial authority to employ independent experts before the enactment of Federal Rules); C.S. Wheatley, Jr., Annotation, *Propriety of Conduct of Trial Judge in Propounding Questions to Witnesses in Criminal Case*, 84 A.L.R. 1172 (1933) (analyzing judicial authority to examine a witness in a criminal case before the enactment of Federal Rules).

⁴⁰ See *supra* text accompanying note 3.

⁴¹ Krafska et al., *supra* note 1, at 312–14.

⁴² Dobbin et al., *supra* note 26, at 3.

⁴³ *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 138 (1999).

⁴⁴ See Alice B. Lustre, Annotation, *Post-Daubert Standards for Admissibility of Scientific and Other Expert Evidence in State Courts*, 90 A.L.R.5th 453 (2001); KAYE ET AL., *supra* note 14, at 225 n.16 (providing a list of state courts adopting *Daubert* after 1993); Martin S. Kaufman, *The Status of Daubert in State Courts*, ATL. LEGAL FOUND. (Mar. 31, 2006), <http://www.atlanticlegal.org/daubertreport.pdf> (same).

⁴⁵ Dobbin et al., *supra* note 26, at 14.

recommended future follow-up “now that *Daubert* is such an accepted part of the legal landscape.”⁴⁶

Fourth, as *Daubert* ages, data suggest judges may be experiencing difficulty with managing complex evidence in the courtroom.⁴⁷ If judges are having difficulty with science and statistics, then judges themselves, along with policymakers and court administrators, should have accurate information on how other judges manage expert testimony in the courtroom. With appropriate data, parties can analyze if change is either mandated or desirable.

Finally, this Study evaluates these factfinding methods as a way to test one surprising result from the earlier studies. Gatowski and her colleagues found that judicial attitudes about active gatekeeping did not change based on the admissibility standard within the judge’s home state.⁴⁸ By studying judges from jurisdictions that use either *Daubert* or *Frye*,⁴⁹ this Study can also test whether use of factfinding tools varies based on a jurisdiction’s admissibility standard.

⁴⁶ *Id.*

⁴⁷ See, e.g., Richard Lempert, *Befuddled Judges: Statistical Evidence in Title VII Cases*, in LEGACIES OF THE 1964 CIVIL RIGHTS ACT 263, 278 (Bernard Grofman ed., 2000); NAT’L RESEARCH COUNCIL, EVOLVING ROLE OF STATISTICAL ASSESSMENTS AS EVIDENCE IN THE COURTS 72 (S.E. Fienberg ed., 1989) (“[S]tatistical evidence poses problems for courts.”); Stephen E. Fienberg, *The Increasing Sophistication of Statistical Assessments as Evidence in Discrimination Litigation*, 77 J. AM. STAT. ASS’N 784, 784 (1982) (“[C]ourts are increasingly presented with complex issues of measurement, sampling methodology, and statistical inference.”); Gatowski et al., *supra* note 1, at 433 (noting that only 5% of surveyed judges demonstrated a clear understanding of falsifiability and that only 4% demonstrated a clear understanding of error rate); Valerie P. Hans, *Judges, Juries, and Scientific Evidence*, 16 J.L. & POL’Y 19, 19 (2007) (noting that the assessment of scientific evidence has created “challenges for judge and jury alike”). See generally Stephen Breyer, *Introduction* to FED. JUDICIAL CTR., REFERENCE MANUAL ON SCIENTIFIC EVIDENCE 1, 4 (2d ed. 2000) (“[M]ost judges lack the scientific training that might facilitate the evaluation of scientific claims or the evaluation of expert witnesses who make such claims.”); CARL F. CRANOR, TOXIC TORTS: SCIENCE, LAW AND THE POSSIBILITY OF JUSTICE 291–92 (2006) (noting that judges are not trained and therefore lack the correct background to assess science done by experts); DAVID L. FAIGMAN, LEGAL ALCHEMY: THE USE AND MISUSE OF SCIENCE IN THE LAW 53–54 (1999) (noting that most jurists have “little or no appreciation for the scientific method and lack the ability to judge whether proffered research is good science, bad science, or science at all”). For a more detailed assessment of this issue, see Andrew W. Jurs, *Balancing Legal Process with Scientific Expertise: A Comparative Assessment of Expert Witness Methodology in Five Nations, and Suggestions for Reform of Post-Daubert U.S. Reliability Determinations*, 95 MARQ. L. REV. 1329, 1344–50 (2012).

⁴⁸ Gatowski et al., *supra* note 1, at 443; text accompanying note 21.

⁴⁹ See *infra* Part III.B.ii.a.

ii. Selection of Sample

To collect data on the use of advanced factfinding, I began with lists of currently-appointed state court judges in three Midwestern states: Iowa, Nebraska, and North Dakota. The lists included all state trial court judges from the appropriate state judiciary website.⁵⁰ All judges serving at the highest-level trial courts in the state would be eligible to participate.⁵¹ The initial survey group contained a total of 209 participants.

The three states selected for the Study—Iowa, Nebraska, and North Dakota—were selected due to several factors. First, each of the three selected states has Rules of Evidence for judicial questioning and independent experts that are nearly identical to each other and the Federal Rules of Evidence.⁵² Second, the states occupy a similar geographic area which may limit any effect of regional or cultural differences on the use of these techniques. Finally, the states included represent a variety of approaches on scientific gatekeeping standards. North Dakota uses the *Frye* standard,⁵³ Nebraska follows *Daubert*,⁵⁴ and Iowa has a third approach.⁵⁵ With the different rules, I could then compare the use of different techniques in jurisdictions with different scientific admissibility standards.

⁵⁰ Each list of state court judges was obtained from the following state websites: http://www.iowacourts.gov/District_Courts/ (Iowa, collected Jan. 17, 2011); <http://www.supremecourt.ne.gov/district-court/dist-judges-addr.shtml?sub3> (Nebraska, collected Jan. 17, 2011); <http://www.ndcourts.gov/court/Districts/Judges.htm> (North Dakota, collected Feb. 18, 2011).

⁵¹ The title of the judge varies by state, but this survey includes both District Court Judges (Iowa and Nebraska), and District Judges (North Dakota). Selection of these judges is intended to ensure that they have the judicial authority to hear the highest-level claims, often involving complex evidence.

⁵² Regarding Iowa, see IOWA R. EVID. 5.614 (noting that court has authority to call and question witnesses); IOWA R. EVID. 5.706 (explaining that court has authority to appoint independent expert witness). Regarding Nebraska, see NEB. REV. STAT. § 27-614 (explaining that court has authority to call and question witnesses); *id.* § 27-706 (noting that court has authority to appoint independent expert witness). Regarding North Dakota, see N.D. R. EVID. 614 (noting that court authority to call and question witnesses); N.D. R. EVID. 706 (stating that court has authority to appoint independent expert witness).

⁵³ *City of Fargo v. McLaughlin*, 512 N.W.2d 700, 704 (N.D. 1994).

⁵⁴ *Schafersman v. Agland Coop.*, 631 N.W.2d 862, 876 (Neb. 2001) (explicitly adopting the standard in *Daubert*).

⁵⁵ *Leaf v. Goodyear Tire & Rubber Co.*, 590 N.W.2d 525, 532–33 (Iowa 1999) (*Daubert* factors may be considered, but not controlling on determining admissibility; Iowa committed to state “liberal standard” for admissibility from *Hutchinson*) (citing *Hutchinson v. Am. Family Mut. Ins. Co.*, 514 N.W.2d 882, 885 (Iowa 1994)).

iii. Survey Instrument and Response Rate

Every judge meeting the sample qualifications received an initial survey, accompanied by a cover letter explaining the Study and its goals, and a stamped return envelope. The survey asked judges about their use of, and opinions regarding, advanced factfinding methods. Specifically, Judges were asked about questioning fact witnesses from the bench under Rule 614, about questioning expert witnesses from the bench under Rule 614, and about the appointment of independent experts under Rule 706.⁵⁶ In addition to identifying whether they used the technique, the survey asked them the frequency with which they did so as well as the reasons for choosing a particular approach. Independent of their own use of the technique, judges were also asked whether—in general—the technique is appropriate and why.⁵⁷ Finally, the survey asked for an explanation of why judges rarely appoint independent experts.⁵⁸

Following the first round of surveys, I sent a second round of follow-up surveys to those judges who had not yet responded. Following the second wave of responses, the Study resulted in a final response group of 118 judges, for a total response rate of 56%.

B. Analysis of Survey Responses

Following collection of the survey responses, I analyzed the patterns of use for these factfinding techniques among all respondents. Judges were then grouped into different categories, including state of origin (which accounts for the scientific admissibility standard);⁵⁹ gender; number of years of experience on the bench; and by the judge's assignment to a rural or urban location.⁶⁰

Over half of the survey responses came from Iowa, a state that follows neither *Frye* nor *Daubert* for scientific admissibility (62%, $n=73$). The remainder of the surveys came from the *Frye* jurisdiction of North Dakota ($n=21$) and the *Daubert*

⁵⁶ A copy of the survey is attached to this study as Appendix A.

⁵⁷ See Appendix A, Questions 3, 6 and 9.

⁵⁸ *Id.* at Question 10. Regarding the rarity of independent expert appointments, see Dobbin, *supra* note 26, at 10 (57% of state judges would not consider appointing an independent expert); Krafka et al., *supra* note 1, at 326 (74% of federal judges would not consider appointing an independent expert); Cecil & Willging, *Accepting Daubert's Invitation*, *supra* note 32, at 1004 (20% of federal judges have ever appointed an independent expert). See also text accompanying notes 32 and 37.

⁵⁹ See *supra* notes 53–55 and accompanying text.

⁶⁰ Regarding the designation of what constitutes “urban” and “rural,” see *infra* text accompanying notes 72–73.

jurisdiction of Nebraska ($n=24$). A substantial majority of the survey respondents were male (86%, $n=102$) and from rural areas (69%, $n=81$). Finally, the survey respondents had a wide range of experience, with 59% ($n=70$) having greater than ten years of experience on the bench, and 41% with ten or fewer.

I then analyzed the frequency of use and reasons for use of different techniques among all respondents, and then further analyzed the responses to determine if there were any statistically significant differences in the use of advanced fact-finding methods between the different categories of gender, experience, or location.⁶¹

i. Do Judges Question Witnesses and Appoint Independent Experts? If So, How Often and Why?

Judges' use of the three methods of factfinding varied widely between methods. Judges were much more likely to question a fact witness from the bench using Rule 614 than appoint an independent expert witness.

A substantial majority of the judges in the survey have used the authority of Rule 614 to question a fact witness from the bench. Of the judges surveyed, 84% have used this factfinding tool ($n=99$). This compares to 57% of judges who have questioned an expert witness pursuant to Rule 614, and 22% who have ever appointed an independent expert pursuant to Rule 706.

	Number Who Have Used the Method	Percentage
614: Fact Witness	99	83.8
614: Expert Witness	69	58.4
706: Independent Expert	26	22.0
	Total Responses = 118	

Figure 1: Percentage of Judges Who Use Each Factfinding Technique

In addition to the great difference between use of Rule 614 and Rule 706, the frequency of use also contrasted. Nearly 45% of all judges, and 54% of those who had ever used Rule 614, had questioned a fact witness in excess of twenty times ($n=53$). That compares to 3.4% of all judges, and 15% of judges who had appointed an independent expert, who had appointed a Rule 706 expert over twenty times ($n=4$). The percentage of judges who have questioned an expert witness using Rule 614 fell between the two other techniques, with 12% of all judges—and

⁶¹ Analysis of the statistical significance of the differences between categories used a chi-square comparison.

20% of those who have ever used this method—using the technique over twenty times ($n=14$).

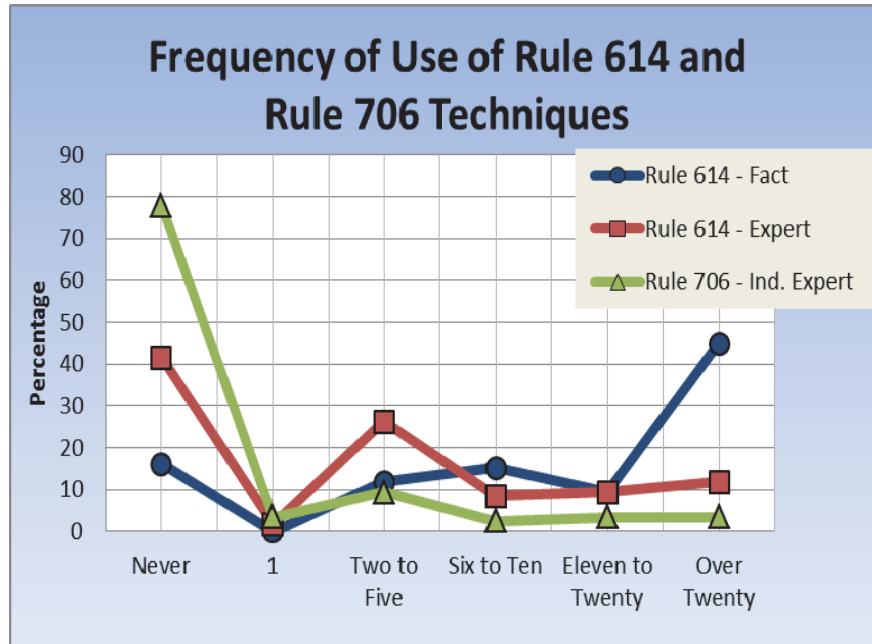


Figure 2: Frequency of Use of Each Method

Just as judges’ use of these techniques varies widely, the reasons for use also vary. One survey question asked when use of factfinding techniques would be appropriate by any judge. There were four options to choose from, or an open-ended “other” category.

Judges had similar response patterns for the appropriateness of questioning a fact witness and an expert witness using Rule 614. When asked if it was appropriate for a judge to question a witness to clarify a discrete point contained within previous testimony, 88% of judges responded it was appropriate with a fact witness, compared to 81% for an expert witness ($n=104, 95$). The responses were similar for other categories: explaining more than one point about previous testimony (78% to 70%, $n=92, 83$), clarifying a discrete point contained within previous testimony (60% to 51%, $n=71, 60$), and clarifying a discrete point not contained within previous testimony (53% to 46%, $n=63, 54$).

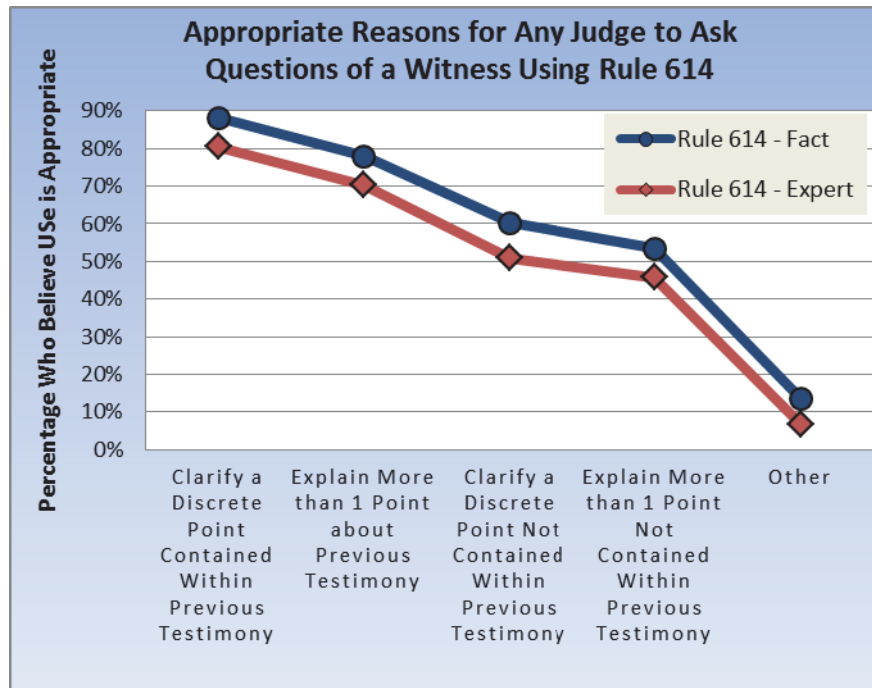


Figure 3: Circumstances When It Is Appropriate for Judges to Question a Witness Using Rule 614

The findings of when judges believe Rule 614 questioning is appropriate contrast sharply to the reasons judges approved of appointment of an independent expert. For this rule, a minority of judges believed it was appropriate for judges to use it for any of the given reasons. When asked if it was appropriate for a judge to appoint a Rule 706 expert to clarify a discrete point contained within previous testimony, 37% indicated it was appropriate ($n=44$). The responses were similar for other categories: explaining more than one point about previous testimony (39%, $n=46$), clarifying a discrete point not contained within previous testimony (33%, $n=39$), and clarifying more than one point not contained within previous testimony (40%, $n=47$). These responses indicate judges are equally likely to use the technique for complicated issues as for others, in sharp contrast to the responses regarding the appropriate reasons for Rule 614 questioning reflected in Figure 3.

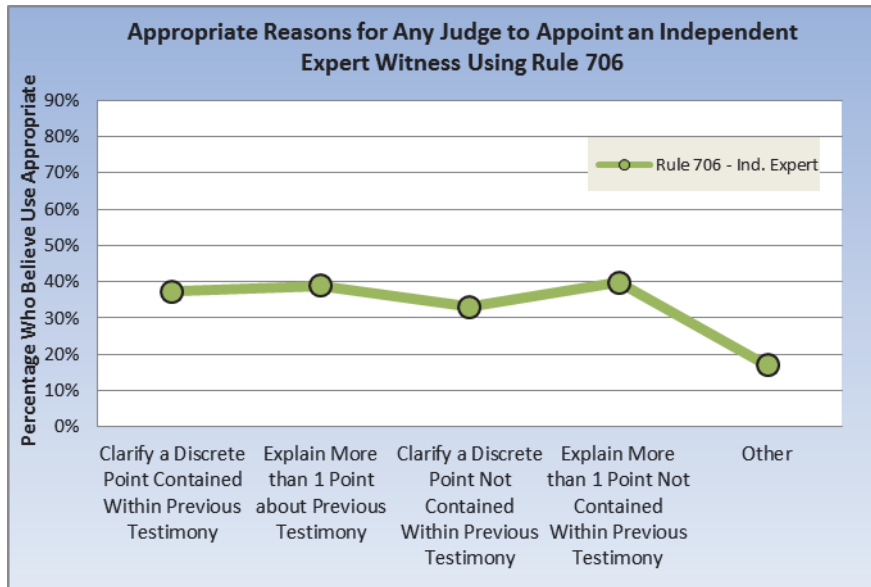


Figure 4: Circumstances When It Is Appropriate for Judges to Appoint an Independent Expert Using Rule 706

In addition to responses on the general appropriateness of a technique, the Survey also asked those judges who had used a specific technique to clarify the reasons they used the method. The same four rationales for use remained as response options, along with the open-ended “other” category.

Judges who used Rule 614 to question a fact witness or an expert witness had similar response patterns. Large majorities of judges who had used the technique approved of asking questions of a fact witness (86%) or expert witness (87%) for the purpose of clarifying a discrete point contained within previous testimony. Similar percentages of judges approved of asking questions to explain more than one point about prior testimony (62% Fact, 70% Expert), clarifying a discrete point not contained within previous testimony (44% Fact, 38% Expert), or explaining more than one point not within previous testimony (40% Fact, 33% Expert).

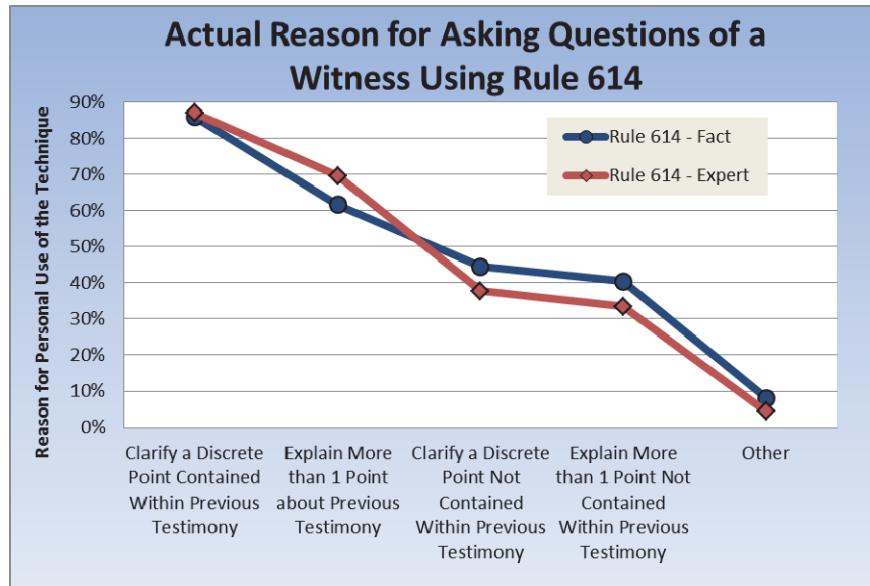


Figure 5: Reasons Judges Have Used Rule 614 to Question Witnesses

The findings for reasons judges actually use Rule 614 to question witnesses contrast sharply to the reasons given for appointment of independent experts. For an independent expert, only 12% of judges who had used the technique felt it was appropriate to clarify a discrete point contained within previous testimony. An identical percentage believed it was appropriate to use an independent expert to clarify a discrete point not contained within previous testimony. Substantially more judges used this technique to explain more than one point about previous testimony (27%), or to explain more than one point not contained within previous testimony (35%). The most common reason chosen for appointing an independent expert was “other,” selected by 50% of judges who had used the technique ($n=13$).

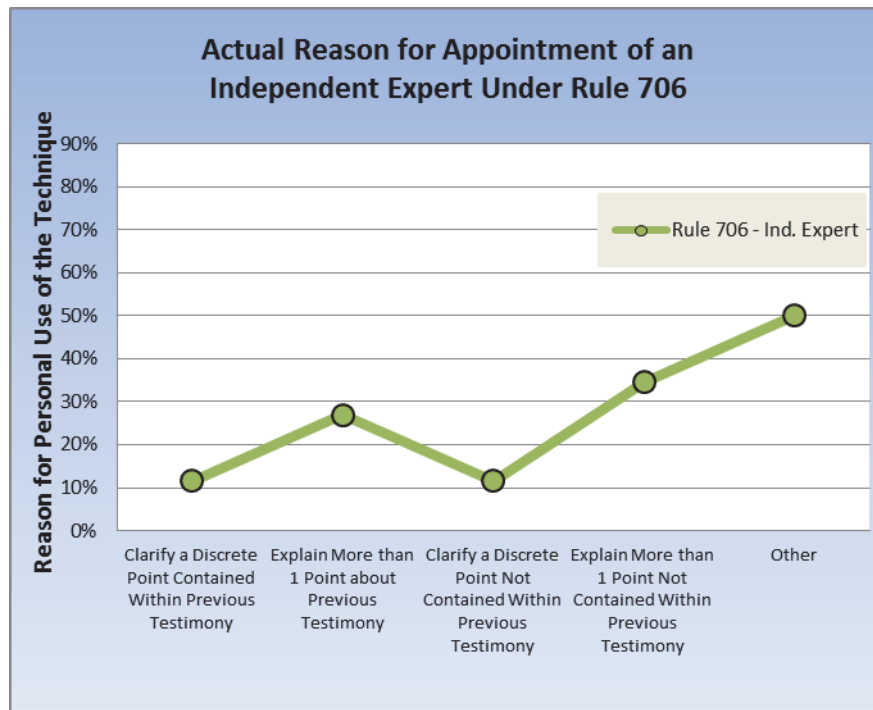


Figure 6: Reasons Judges Have Used Rule 706 to Appoint an Independent Expert

Because a substantial portion of judges who have appointed an independent expert selected “other” as the reason, additional explanation is useful to help clarify their responses. Of these thirteen judges, several offered an explanation that the appointment was intended to assist them in analyzing the evidence, stating: “obtain an independent explanation of specific evidence disclosed before trial,” “for an independent analysis & explanation of issues before the court,” or “give an opinion as to elements of proof.” Other respondents noted procedural limitations, such as the desire to use the method solely in non-jury trials or only at the request of counsel. Finally, a third group noted their use of independent experts related to specific issues in family court, stating: “ordered a child custody evaluation,” “[a]ll family law cases—appoint a custody evaluator,” or “custody evaluations, mental health & substance abuse evaluations.” While these comments indicate certain types of cases are more likely to require specialized assistance, it does appear that some judges see the appointment of an independent expert as necessary to assist the judge in evaluation of complex evidence before the court.

In addition, since prior studies demonstrated that a majority of judges have not appointed an independent expert using Rule 706,⁶² the survey also asked judges to choose explanations why independent experts are not often used. The judges could choose from four specific reasons that might explain the rarity of independent expert appointment: lack of knowledge about the procedure, concern about interference with adversarial norms, rarity of cases where a Rule 706 expert is necessary, and the use of party experts make independent experts unnecessary. Judges could select any they deemed appropriate, or select an open-ended “other” category.

In comparing the reasons, the sole explanation that a substantial majority of judges believed explained the lack of use of Rule 706 was “concern about interference with the adversarial system,” which 77% of judges chose ($n=91$). A small majority of judges—58%—also selected “rarity of cases which make a Rule 706 expert necessary” as an explanation ($n=69$). Judges were almost evenly divided on whether “party experts make Rule 706 experts unnecessary,” with 52.5% selecting this response ($n=62$) while 47.5% did not ($n=56$). A majority of judges rejected “lack of knowledge about the procedure” as the explanation for lack of use of the rule, with only 31% agreeing with this reason ($n=37$). Finally, many of the judges who selected “other” as an explanation mentioned one issue—cost or payment of expenses—as the reason for lack of use of Rule 706. Of the twenty-one judges who responded with “other,” seventeen had a concern about cost or expenses. Comments included: “expense of hiring and paying,” “no court funds to pay for experts,” “Cost. Who Pays?,” “cost is a huge factor,” and “COST!”⁶³

In measuring the frequency of use of these factfinding techniques, and then finding explanations for that use, the survey has provided a new sample of data explaining the modern trend among state court judges in use of Rule 614 and Rule 706.

ii. Are There Differences in Use of Judicial Questioning and Independent Experts Based on Demographic Characteristics of the Judge?

In addition to finding the general use of these techniques among all judges in the survey, I also grouped the judges based on four characteristics: state/scientific admissibility standard, gender, years of experience, and urban/rural location. I then

⁶² See *supra* text accompanying notes 32 and 37.

⁶³ Emphasis in original. Future studies may wish to include this factor as an explanation, to see how it would compare to the other explanations if specifically stated, see *infra* Part IV.B.iii.

analyzed whether there were statistically significant differences between the responses given by judges in different categories.

a. Scientific Admissibility Standard

Each state in the survey represented a different scientific admissibility rule, as North Dakota adheres to *Frye*, Nebraska follows *Daubert*, and Iowa uses a state-specific standard.⁶⁴

One important question raised by previous studies was whether the scientific admissibility standard had an effect on judicial behavior vis-à-vis expert witnesses.⁶⁵ Using three samples, I could test whether there were differences in use of techniques between judges with different scientific admissibility standards.

On the use of Rule 614 to question a fact witness, the survey responses from judges showed minor variations in the percentage of who uses the technique and also how often they do so. For example, in Nebraska 78% of judges stated they have used the technique, while in Iowa 86% of judges have done so. The percentage in North Dakota was between these numbers, with 81% of respondents answering affirmatively. There was remarkable consistency in the frequent use of Rule 614 to question a fact witness, with 46% of judges in Iowa, 48% in North Dakota, and 43% in Nebraska reporting using the technique over twenty times. Minor variations in frequency of use are detailed in Figure 7.

⁶⁴ See *supra* notes 53–55.

⁶⁵ See *supra* text accompanying notes 20–23.

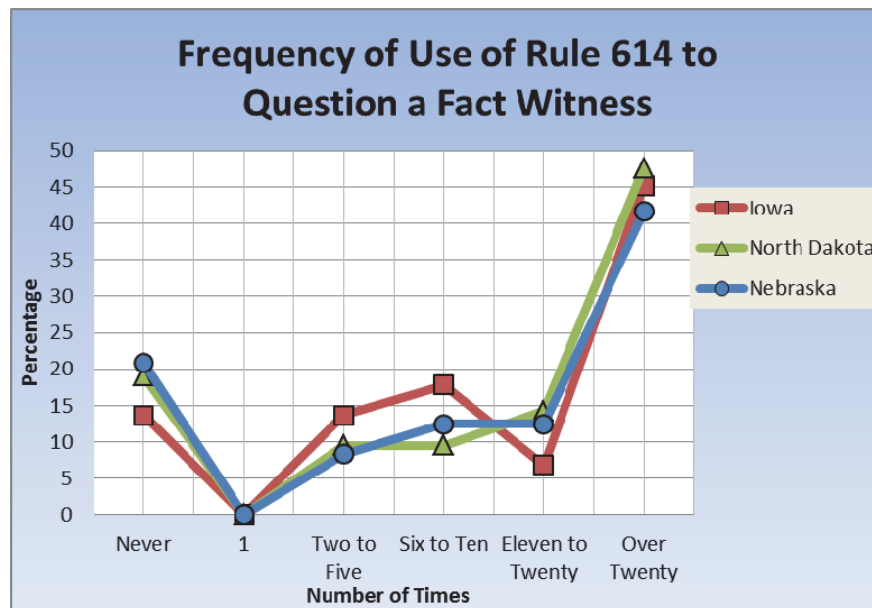


Figure 7: Frequency of Use of Rule 614 to Question a Fact Witness, by State

In analyzing the data, I found that none of the differences in frequency of use between judges of different states rose to the level of statistical significance.

I also analyzed the use of Rule 614 to question expert witnesses, again to see if there were differences in use of this technique between respondents with different state scientific admissibility standards. In Iowa, a majority of judges have used this technique (55%), while in North Dakota a substantial majority had (71%). Judges in Nebraska were between the other states, with 58% having questioned an expert witness using Rule 614. These differences were not statistically significant. In comparing frequency of use, judges from different states varied, with 8% in Iowa, 24% in North Dakota, and 17% in Nebraska reporting having used the technique over twenty times. These distinctions also did not reach statistical significance.

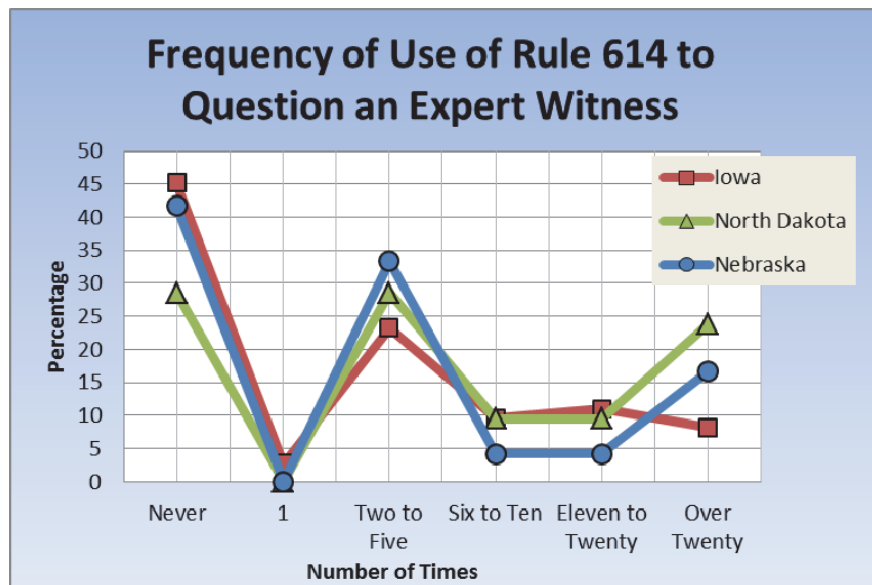


Figure 8: Frequency of Use of Rule 614 to Question an Expert Witness, by State

Similar results occurred in evaluating the differences in use of independent experts under Rule 706. In Nebraska, 37.5% of judges had ever appointed an independent expert, while in North Dakota 29% have, and only 15% have done so in Iowa. When calculating solely the issue of use or nonuse of independent experts, the difference in use between Iowa and Nebraska did rise to the level of statistical significance.⁶⁶ The survey responses also demonstrate small differences in frequency of use, although these are not statistically significant.

⁶⁶ $\chi^2 = 5.55$; $p < 0.05$. This result is confirmed using Fisher's exact test, where p remains less than the threshold of 0.05. See ALAN AGRESTI & CHRISTINE FRANKLIN, STATISTICS 514 (2007) (explaining that Fisher's exact test is more appropriate for small sample analysis).

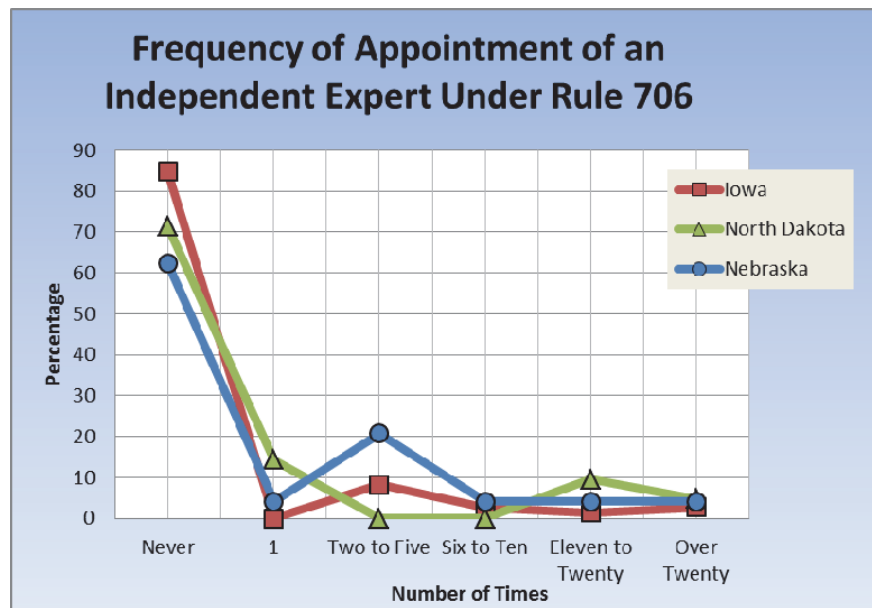


Figure 9: Frequency of Use of Rule 706 to Appoint an Independent Expert, by State

Based on these data, the standard for admissibility of expert testimony appears to have little effect on the overall use, or frequency of use, of the advanced factfinding methods in Rule 614 and Rule 706.⁶⁷ Having analyzed these data in detail, the same remains true of the reasons judges gave for their own questioning of a witness or their appointment of a Rule 706 expert, as well as appropriate reasons for any judge to use those techniques.

b. Gender

In addition to analyzing responses by the judge's state scientific admissibility standard, I also analyzed whether judges' responses on use of these techniques varied between genders.

To determine if there is a statistically significant difference, the first analysis included whether overall use of the three techniques changed between male and female survey respondents. For the use of Rule 614 to question a fact witness, the two groups showed similar responses, with 87.5% of female judges and 83% of

⁶⁷ *But see supra* text accompanying note 66 (noting as an exception the statistically significant difference between Nebraska and Iowa on whether or not a judge has ever appointed an expert pursuant to Rule 706).

male judges using this technique ($n=14$, 85). The judges were similar with use of Rule 706 to appoint an expert, with 25% of female judges, and 22% of male judges having reported using this technique ($n=4$, 22). In response to the question regarding the use of Rule 614 to question an expert witness, the survey responses showed that 44% of female and 61% of male judges had used this factfinding method ($n=7$, 62). The difference did not, however, rise to the level of statistical significance.⁶⁸

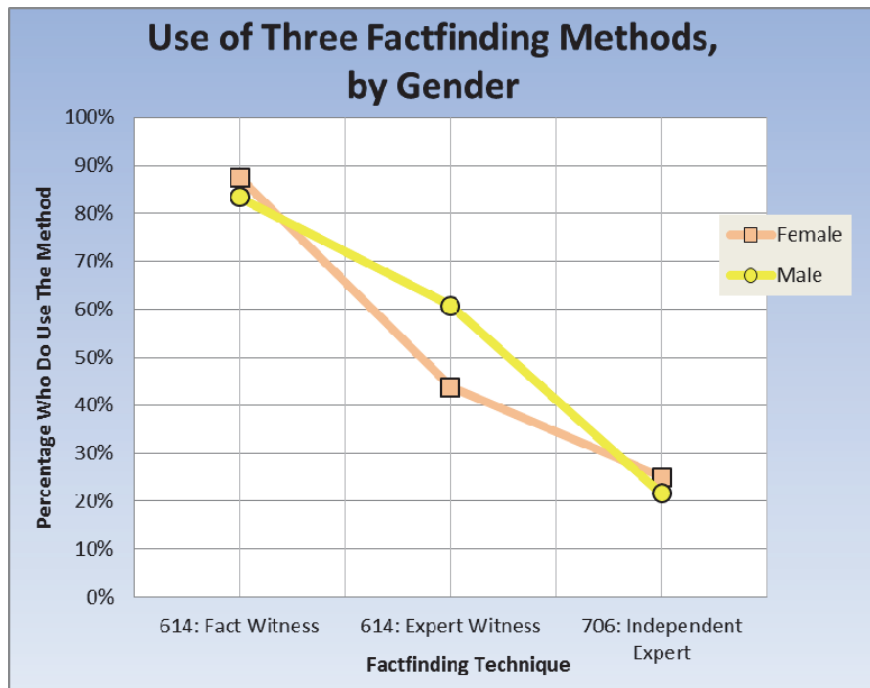


Figure 10: Frequency of Use of Rule 614 and Rule 706, by Gender

In addition to whether or not judges used a technique at all, I also analyzed the frequency of use, the reasons for personal use of the techniques, and the reasons it may be appropriate for any judge to use the technique. In no case could I find a statistically significant difference between the survey respondents based on gender.

Based on this survey, the gender of the judge appears to have little effect on the overall use, frequency of use, or reasons for use of the advanced factfinding methods in Rule 614 and Rule 706.

⁶⁸ $\chi^2 = 1.65; p > 0.05$.

c. Years of Experience

Having found no major differences in judicial use of advanced factfinding techniques by either scientific admissibility standard or by gender, the next category I analyzed was the years of experience the judges had on the bench. To do so, I split judges into two categories: those with ten years or less on the bench, and those with over ten years ($n=48, 70$).⁶⁹

In analyzing the overall use of the three methods of factfinding, the two categories of experience showed remarkable consistency in use of Rule 614. Regarding Rule 614, 84% of the more experienced judges and 83% of the less experienced judges had questioned a fact witness from the bench ($n=59, 40$). This compares to 60% of the more experienced judges, and 56% of less experienced judges, who had questioned an expert from the bench using Rule 614 ($n=42, 27$). These differences do not demonstrate a statistically significant difference in the use of Rule 614 based on the judge's level of experience.

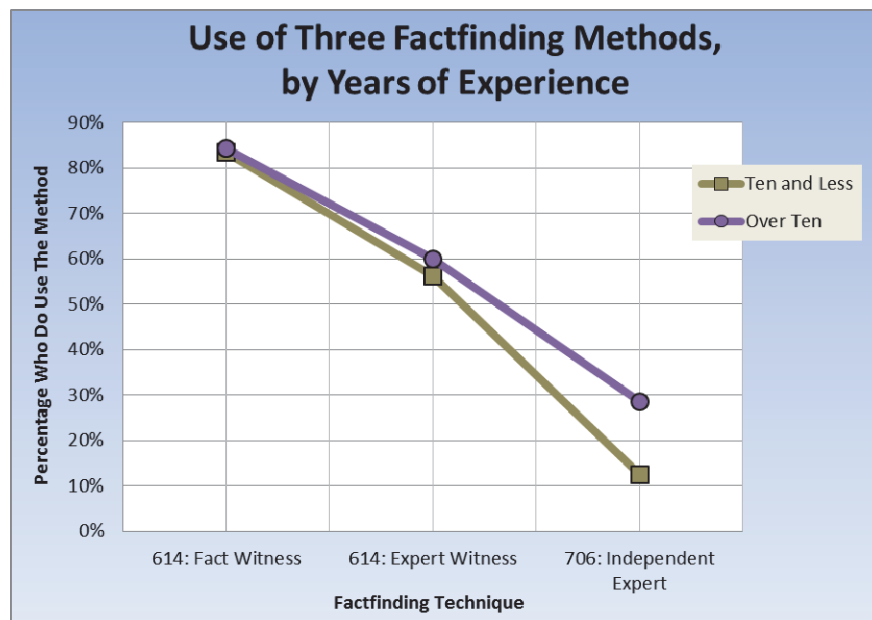


Figure 11: Frequency of Use of Rule 614 and Rule 706, by Years of Experience

⁶⁹ In so doing, those judges who had served on a lower-level court were considered judges when the previous court was a county court appointment (North Dakota, Nebraska), or District Associate Judge (Iowa). These judges are likely to have used the state rules of evidence at these levels.

Although the use of Rule 614 did not vary due to experience, the same cannot be said of Rule 706. For judges with less experience, only 12.5% had ever appointed an independent expert using Rule 706 ($n=6$). In comparison, 29% of the group of more experienced judges had done so ($n=20$). This result did demonstrate statistical significance.⁷⁰ That being said, it may be a function of the relative rarity of cases where a Rule 706 expert may be necessary. In the survey, 58% of all judges had indicated that Rule 706 may not be used because of the rarity of relevant cases,⁷¹ and perhaps that explains the disparity in the percentage of less experienced judges who have availed themselves of this factfinding technique.

As with the categories of gender, the frequency of use, the reasons for personal use of the techniques, and the reasons it may be appropriate for any judge to use the techniques, were analyzed based on the years of experience. With the one exception noted above, no other statistically significant differences between the respondents were found.

Based on this survey, the experience level of the judge appears to have little effect on reasons for use of the advanced factfinding methods in Rule 614 and Rule 706, whether with regard to personal use or use by others. The only effect it has is on the likelihood that a judge has personally used an independent expert under Rule 706, which may likely be a function of the scarcity of cases in which an independent expert is necessary.

d. Urban and Rural

The final categorical analysis of the survey respondents was by the location of the appointment, specifically whether it was rural or urban in nature. Data from the 2010 Census on the population of U.S. Metropolitan Areas was used to establish the two categories.⁷² Areas deemed “urban” included solely the central county of a metropolitan statistical area with a population over 200,000, based on U.S. Census Data ($n=37$).⁷³ The “rural” category would encompass all other judges ($n=81$). These categories were selected prior to any data analysis.

⁷⁰ $\chi^2 = 4.28$; $p < 0.05$.

⁷¹ See *supra* text accompanying notes 62–63.

⁷² U.S. CENSUS BUREAU, 2010 CENSUS NATIONAL SUMMARY FILE OF REDISTRICTING DATA: METROPOLITAN STATISTICAL AREAS OF THE UNITED STATES OF AMERICA, Tables P1 and H1 (2010), available at http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_NSRD_GCTPL2.US24PR&prodType=table.

⁷³ This study therefore includes the following urban areas: Lincoln, NE; Omaha-Council Bluffs, NE-IA; Des Moines, IA; Davenport, IA; Cedar Rapids, IA; and Fargo, ND. *Id.*

Urban and rural judges used the methodologies studied with similar frequency. For Rule 614, 84% of urban and 84% of rural judges had used this technique to question a fact witness ($n=31, 68$). Similarly, 65% of urban and 56% of rural judges had used Rule 614 to question an expert ($n=24, 45$). Finally, 24% of urban and 21% of rural judges had appointed a Rule 706 expert ($n=9, 17$). These differences are not statistically significant.

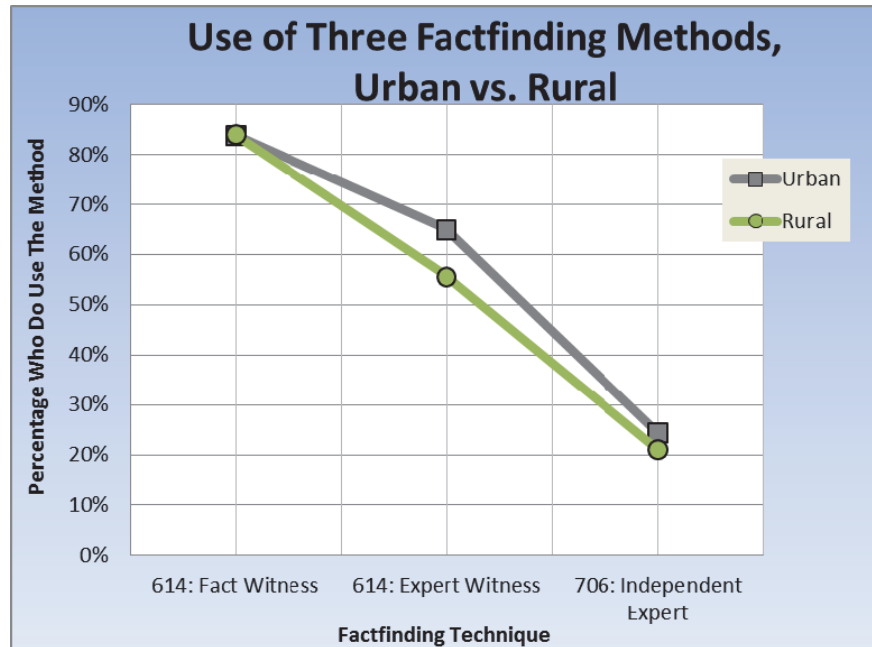


Figure 12: Frequency of Use of Rule 614 and Rule 706, Urban and Rural Judges

Just as with the other demographic categories, these survey responses were then analyzed to find any statistically significant differences between urban and rural judges on why they had used, and when it was generally appropriate to use, Rule 614 and Rule 706. Several of these responses did show significant differences.

When asked for the reason why they had personally used Rule 614 to question a fact witness, judges showed similar response rates for the categories of: “clarify a discrete point contained within previous testimony” (90% urban, 84% rural), “clarify a discrete point not contained within previous testimony” (42% urban, 46% rural), and “explain more than one point not contained within previous testimony” (45% urban, 38% rural). Yet, on the issue of asking questions to “explain more

than one point about previous testimony,” rural judges were significantly more likely to have chosen this as a reason for their own use of Rule 614 techniques with a fact witness—69% having done so compared to 45% of urban judges.⁷⁴ This is not the sole statistically significant difference between the survey responses of urban and rural judges.

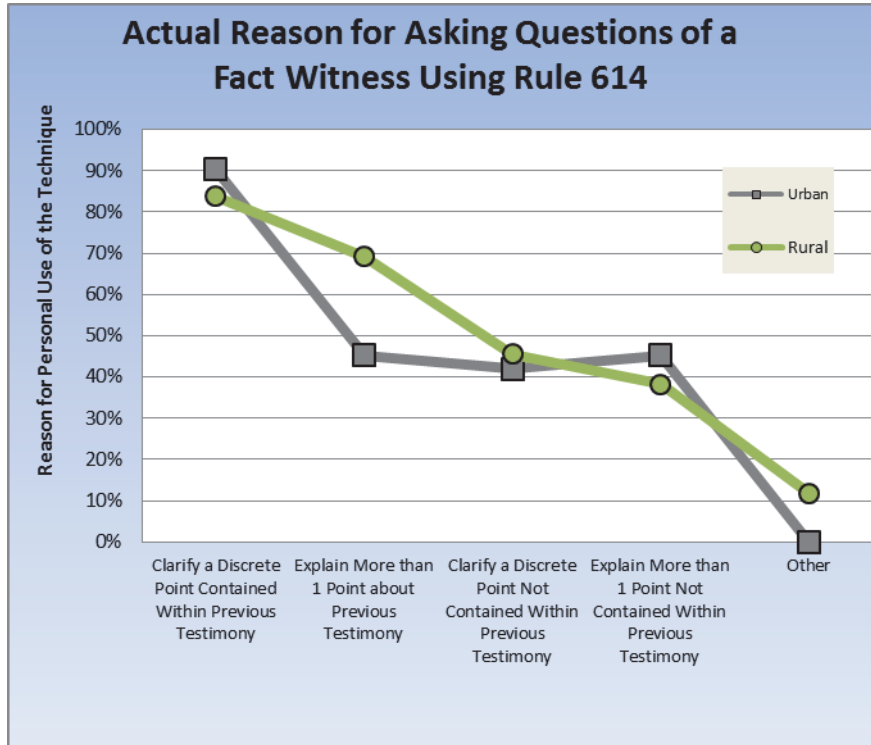


Figure 13: Reasons Judges Have Used Rule 614 to Question a Fact Witness, Urban and Rural Judges

Judges in rural and urban areas also varied on the reasons they believe it is appropriate for any judge to question a fact witness using Rule 614. Just as with the actual reasons for use, three of the four categories resulted in similar answers: “explain more than one point about previous testimony” (73% urban, 80% rural), “clarify a discrete point not contained within previous testimony” (59% urban, 60% rural), and “explain more than one point not contained within previous testimony” (57% urban, 52% rural). On the fourth, however, the responses showed a

⁷⁴ $\chi^2 = 5.17; p < 0.05$.

difference. On whether it is appropriate for a judge to question a fact witness in order to “clarify a discrete point contained within previous testimony,” rural judges were again more likely to agree, with 94% believing this is an appropriate reason compared to 76% of urban judges. This result is statistically significant.⁷⁵

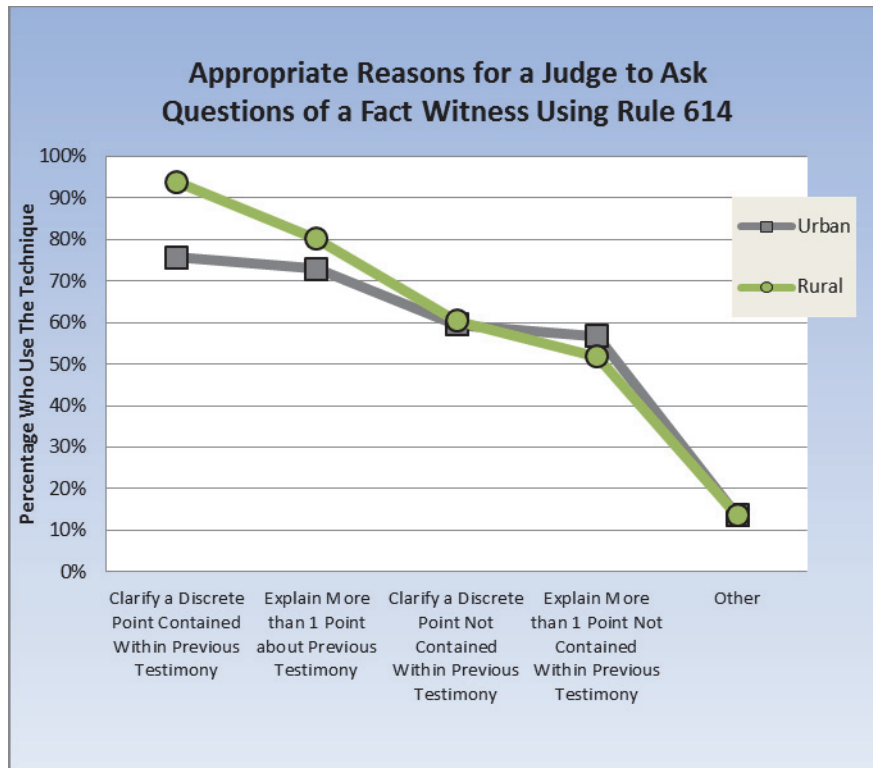


Figure 14: Reasons It Is Appropriate for a Judge to Question a Fact Witness Using Rule 614, Urban and Rural Judges

As with the use of Rule 614 to question witnesses, urban and rural judges varied on appointing independent experts as well. When asked to explain reasons for appointing an expert using Rule 706, urban and rural judges had similar response rates to three of four categories. Yet for the category to “explain more

⁷⁵ Using only a chi-squared analysis would indicate this difference is statistically significant ($\chi^2 = 8.00$; $p < 0.05$). However, Fisher’s exact test is more appropriate, since the expected frequency of one of the subcategories would drop below 5.0. AGRESTI & FRANKLIN, *supra* note 66, at 514 (Fisher’s exact test more appropriate for small sample analysis). Fisher’s test gives a p -value of 0.011, clearly under the threshold of 0.05 for statistical significance.

than one point about previous testimony,” the percentage of respondents choosing that reason diverged. For urban judges, no respondents indicated this was the reason they had appointed an independent expert. With the rural judges however, 42% of those who had appointed an independent expert have done so for this reason ($n=7$).⁷⁶

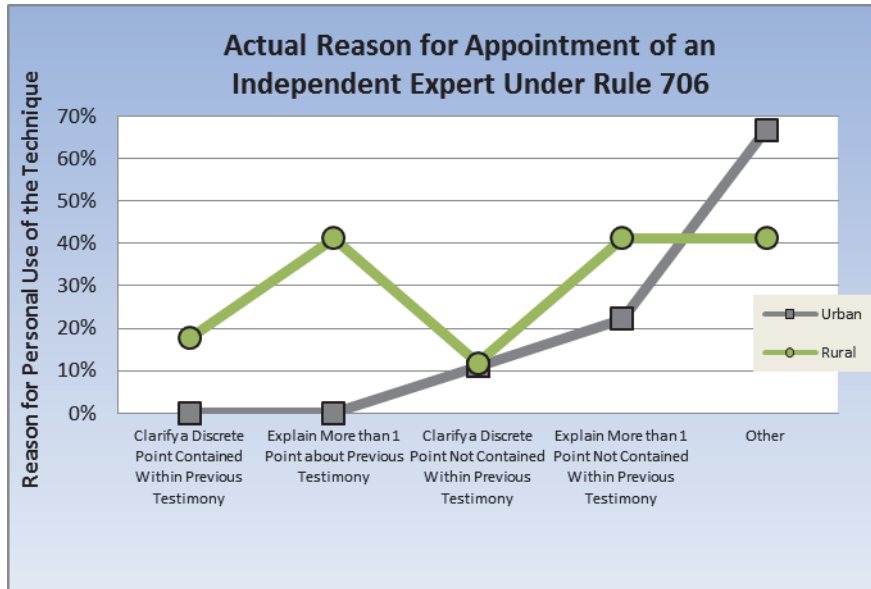


Figure 15: Reasons Judges Have Used Rule 706 to Appoint an Independent Expert, Urban and Rural Judges

The survey response data displayed in Figures 13, 14, and 15 demonstrate several differences between urban and rural judges regarding Rules 614 and 706.

⁷⁶ Using only a chi-squared analysis would indicate this difference is statistically significant ($\chi^2 = 5.07$; $p < 0.05$). However, as with the analysis above, the correct test to run is Fisher’s exact test. AGRESTI & FRANKLIN, *supra* note 66, at 514 (Fisher’s exact test more appropriate for small sample analysis, when expected frequencies drop below 5). Fisher’s test gives a p -value of 0.058, just over the required threshold of 0.05 for statistical significance. The inability to find statistical significance for such a large percentage difference (42%) between the groups demonstrates how much variance increases with smaller response groups, as with this group including a total of 26 judges. Clearly a larger sample size would allow one to find whether there is a statistically significant difference in use patterns between rural and urban judges with Rule 706 experts. See *infra* Part IV.B.i.

IV. DISCUSSION

The responses of Midwestern judges in this survey suggest that few characteristics of a judge have an effect on the manner in which the judge uses advanced factfinding techniques under the Rules of Evidence. Interestingly, the scientific admissibility standard to be applied by the judge appears to have no effect on the use of, and reasons for use of, Rule 614 and Rule 706 techniques. Yet the Study does offer other conclusions meriting discussion, such as the frequency with which judges avail themselves of these techniques and data on why Rule 706 experts are infrequently appointed.

A. *Implications of State Court Judges' Survey Data*

The survey updates and expands upon prior studies in the area of judicial factfinding. Both those results that did show statistical significance, as well as those that did not, merit discussion.

The design of the Study could have resulted in a finding that the scientific admissibility standard does have an effect on how often the judge is likely to use advanced factfinding of the type endorsed by Justice Breyer in *Joiner*.⁷⁷ Further analysis has shown this is not the case. In fact, judges in *Daubert* jurisdictions, *Frye* jurisdictions, or state-specific test jurisdictions use Rule 614 and Rule 706 in very similar ways.⁷⁸ If this is true, then the effect of *Daubert* is not that it directly affects the procedures used. Instead, it is consistent with studies that demonstrate a system-wide effect of increased scrutiny of expert evidence by all judges.⁷⁹ This is also consistent with the finding of the 2001 Gatowski study, where *Daubert* and *Frye* were not found to affect the judicial perception of gatekeeping.⁸⁰

Even if *Daubert* has no effect, this Study also measured whether responses differed in a statistically-significant way between different groups of judges. Both the judge's gender and the judge's length of experience on the bench had little effect on the judge's use of these advanced fact-finding techniques.⁸¹ This alone suggests a continuity of judicial response to similar evidentiary issues.

⁷⁷ See *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 149–50 (1997) (Breyer, J., concurring).

⁷⁸ *Supra* Part III.B.ii.a and especially text accompanying note 67.

⁷⁹ See *supra* text accompanying notes 20–25.

⁸⁰ See *supra* text accompanying note 21.

⁸¹ The only exception to this was the likelihood that a judge had actually used an independent expert, using Rule 706. Judges with ten years of experience or fewer were less likely to have actually used this technique, as described *supra* text accompanying note 70.

On the issue of the rural and urban judges, the survey did not indicate a difference in the likelihood each would use a particular technique.⁸² But rural judges and urban judges did have statistically significant differences in the actual reasons for use of, and appropriate reasons for use of, Rule 614 to question fact witnesses.⁸³ As for the actual reasons given by judges for use of independent experts under Rule 706, the survey responses varied by over forty percentage points but the result did not reach statistical significance.⁸⁴ The difference in use patterns between rural and urban judges for these advanced factfinding methods is a new finding and merits further investigation.⁸⁵

Regardless of the categories of judges, the overall results also update prior studies of judicial use of these factfinding techniques. Both Krafska in 2002 and Dobbin in 2007 had studied the use of these techniques, but did so using survey data from the 1990s.⁸⁶ In her study Krafska found that only 6.4% of federal judges would not question an expert from the bench, and Dobbin found 18% of state court judges would not do so.⁸⁷ In this survey, 42% of state judges stated they had never questioned an expert witness from the bench.⁸⁸ Regarding use of independent experts, Krafska found 74% of federal judges would not appoint an expert using Rule 706 while Dobbin found 57% of state court judges unwilling to do so.⁸⁹ This Study found that 78% of the judges surveyed had never appointed an independent expert.⁹⁰ In evaluating the use of advanced factfinding methods, this Study has updated certain findings of prior studies.⁹¹

⁸² *Supra* Figure 12.

⁸³ *Supra* text accompanying Figures 13–14.

⁸⁴ *Supra* note 76 and accompanying text.

⁸⁵ *See infra* Part IV.B.ii.

⁸⁶ *See supra* text accompanying notes 27–37 (discussion of Krafska and Dobbin studies); notes 27 & 33 (surveys given in 1990s).

⁸⁷ *Supra* text accompanying notes 31 & 36.

⁸⁸ *See supra* Figure 1.

⁸⁹ *See supra* text accompanying notes 32 & 37.

⁹⁰ *See supra* Figure 1. This is consistent with one other study, done prior to *Daubert*. In Cecil and Willing's study prior to *Daubert* (1988 survey), they determined 20% of federal judges had appointed an independent expert. *See supra* note 32.

⁹¹ Of course, the difference may be a product of who is surveyed, as Krafska surveyed federal judges only. It could also be a function of the changing judicial role since the surveys of Krafska and Dobbin were performed in 1991, 1998 and 1999. *See supra* notes 27 & 33 and text accompanying notes 43–46.

The survey is useful to analyze one additional issue—why judges are reluctant to appoint independent experts using Rule 706. Both this Study and the ones before it have found a majority of judges are unwilling to appoint or have never appointed an independent expert.⁹² Only one set of studies, pre-dating *Daubert*, has discussed the reasons for judicial reluctance to do so.⁹³ Responses to this survey can also offer some explanation as to why this reluctance exists.

A large majority of judges (77%) surveyed believed concerns about interference with adversarial norms explains the judicial reluctance to appoint Rule 706 experts.⁹⁴ The survey data also suggest that rarity of Rule 706 cases could also explain the failure of many judges to use the procedure, while party experts and lack of knowledge about the procedure were not selected by a clear majority of respondents.⁹⁵ This finding contrasts with the only previous study in the area, where a majority of judges believed it was the rarity of cases, and not adversarial norms, that resulted in rarity of Rule 706 appointments.⁹⁶

If a large majority of judges believe the rule is inappropriate due to adversarial norms, then two options exist. One option is to decide to leave the rule as it is; with this option, the rule will remain largely unused due to concern with adversarial norms. The second option is to consider modifications to the rule in order to change its characterization as anti-adversarial or otherwise encourage its use.⁹⁷

Under current circumstances, having a rule that is in effect but unlikely to be used due to the underlying perception of its illegitimacy is inconsistent at best, and certainly the issue merits additional study.⁹⁸

⁹² See *supra* text accompanying notes 89–90.

⁹³ See Cecil & Willging, *Accepting Daubert's Invitation*, *supra* note 32; CECIL & WILLGING, COURT APPOINTED EXPERTS, *supra* note 32.

⁹⁴ *Supra* Part III.B.i and text following note 62.

⁹⁵ *Id.*

⁹⁶ Cecil & Willging, *Accepting Daubert's Invitation*, *supra* note 32, at 1015–18 (50 of 81 judges cited appointment as an extraordinary action for rare cases with unusual issues, compared to 39 of 81 who believed adversarial norms explain the infrequency).

⁹⁷ See Edward K. Cheng, *Independent Judicial Research in the Daubert Age*, 56 DUKE L.J. 1263, 1280–83 (2007) (similar in arguing that independent judicial research is not uniquely anti-adversarial and is appropriate in many circumstances including in handling complex scientific evidence). For thoughts on modifications to Rule 706, see Jurs, *supra* note 47, at 1402–15.

⁹⁸ See *infra* Part IV.B.iii.

B. Potential Areas of Future Research

Looking at the results of this survey, and considering the limitations thereof, several areas of future research seem apparent.

i. Expand Size of Survey

With any survey, the clarity of the results partially depends on the number of responses. 118 judges responded to the survey, and this led to interesting results vis-à-vis the prior studies and also with the demographic analysis. However, a larger survey size could result in additional findings, both in the areas this Study produced statistically significant results (urban vs. rural) and potentially in other areas such as the scientific admissibility standard.

In addition to replicating, clarifying, or expanding on state court use of these techniques, a new survey could also answer a major question suggested by Krafka and Dobbin’s research, namely whether there is a difference in the use of these techniques between state and federal judges.⁹⁹

ii. Evaluation of Urban Versus Rural Judicial Role

Considering the finding of statistically significant differences between responses of rural and urban judges regarding advanced factfinding techniques,¹⁰⁰ further study could help elucidate the cause of this distinction. A more detailed survey in this area could replicate, but also help clarify the differences in judicial practice between rural and urban areas. A larger survey could also expand the range of judicial tools studied, in order to see if any additional differences can be found.

Additional study could both clarify how broad the distinction is between the practices of urban and rural judges, as well as help answer the question of why these differences exist.¹⁰¹ If so, those findings would be very useful in offering suggestions to improve the administration of justice.

iii. Further Evaluation of Rule 706

The survey responses in the area of explaining judicial reluctance to use independent experts under Rule 706 has important ramifications on whether it

⁹⁹ See *supra* text accompanying notes 31–37.

¹⁰⁰ See *supra* Part III.B.ii.d.

¹⁰¹ See, e.g., Barry C. Feld, *Justice by Geography: Urban, Suburban, and Rural Variations in Juvenile Justice Administration*, 82 J. CRIM. L. & CRIMINOLOGY 156 (1991); Sean Flammer, *Persuading Judges: An Empirical Analysis of Writing Style, Persuasion, and the Use of Plain English*, 16 LEGAL WRITING 183, 198–203 (2010).

should remain as currently written.¹⁰² Further study could help inform what options should be considered with the rule.

Possible future inquiries could focus on aspects of Rule 706 appointments. One might evaluate the types of cases where independent experts do get appointed. Those cases could demonstrate what considerations lead judges to overcome their reluctance to appoint that purportedly stems from the desire to preserve adversarial norms. A second approach would be non-statistical and involve collecting judicial comments on the rule, the frequency of use, and reasons for its use.

If having an active but unused rule is to be avoided, then further study could assist the decisions of what parts of the rule to modify, what parts are working, and why that is so. These issues have not been studied in great detail and therefore could prove invaluable to judges and policymakers.

CONCLUSION

While use of advanced factfinding techniques in Rules 614 and 706 have been a part of the Federal Rules of Evidence since their inception, the *Daubert* decision in 1993 and the endorsement of these methods in 1997 by Justice Breyer in *Joiner* placed new emphasis on judicial factfinding methodologies. The purpose of this Study was to measure the use of these techniques, and identify the explanations for, and frequency of, their use. In addition, the survey allowed for comparison of judges from different perspectives.

The Study first described the survey responses of all judges, regarding use of Rule 614 and Rule 706 for factfinding by the judiciary. The Study also identified the most significant reason why judges are reluctant to appoint Rule 706 experts, considering that only 22% of respondents had ever done so. Finally, by evaluating the differences in results among demographic profiles, the Study for the first time shows some differences in opinions of these factfinding techniques between urban and rural judges.

¹⁰² See *supra* text accompanying notes 94–98.

APPENDIX A

1. Have you ever questioned a FACT WITNESS under the authority of Rule of Evidence 614?
 - NO (please skip to Question #3)
 - YES: If so, how many times have you done so?
 - 1 case.
 - 2-5 cases.
 - 6-10 cases.
 - 11-20 cases.
 - More than 20 cases.

2. In those situations in which I questioned a FACT WITNESS under the authority of Rule of Evidence 614, I did so for the following reason(s):
 - Clarify a discrete point contained within previous testimony.
 - Explain more than one point about previous testimony given.
 - Clarify a discrete point not contained within previous testimony.
 - Explain more than one point not contained in previous testimony.
 - OTHER: Please explain:

3. It is appropriate for a judge to ask questions of a FACT WITNESS under the authority of Rule 614 of the Rules of Evidence in the following situation(s):
 - Clarify a discrete point contained within previous testimony.
 - Explain more than one point about previous testimony given.
 - Clarify a discrete point not contained within previous testimony.
 - Explain more than one point not contained in previous testimony.
 - OTHER: Please explain:

4. Have you ever questioned an EXPERT under the authority of Rule of Evidence 614?
 - NO (please skip to Question #6)
 - YES: If so, how many times have you done so?
 - 1 case.
 - 2-5 cases.

- _____ 6-10 cases.
- _____ 11-20 cases.
- _____ More than 20 cases.
5. In those situations in which I questioned an EXPERT under the authority of Rule of Evidence 614, I did so for the following reason(s):
- _____ Clarify a discrete point contained within previous testimony.
- _____ Explain more than one point about previous testimony given.
- _____ Clarify a discrete point not contained within previous testimony.
- _____ Explain more than one point not contained in previous testimony.
- _____ OTHER: Please explain:
6. It is appropriate for a judge to ask questions of an EXPERT under the authority of Rule 614 of the Rules of Evidence in the following situation(s):
- _____ Clarify a discrete point contained within previous testimony.
- _____ Explain more than one point about previous testimony given.
- _____ Clarify a discrete point not contained within previous testimony.
- _____ Explain more than one point not contained in previous testimony.
- _____ OTHER: Please explain:
7. Have you ever appointed an expert under the authority of Rule of Evidence 706?
- _____ NO (please skip to question #9)
- _____ YES: If so, how many times have you done so?
- _____ 1 case.
- _____ 2-5 cases.
- _____ 6-10 cases.
- _____ 11-20 cases.
- _____ More than 20 cases.
8. In those situations in which I appointed an expert under the authority of Rule of Evidence 706, I did so for the following reason(s):
- _____ Clarify a discrete point contained within previous testimony.
- _____ Explain more than one point about previous testimony given.

- Clarify a discrete point not contained within previous testimony.
- Explain more than one point not contained in previous testimony.
- OTHER: Please explain:

9. It is appropriate for a judge to appointed an expert under the authority of Rule of Evidence 706 in the following situation(s):

- Clarify a discrete point contained within previous testimony.
- Explain more than one point about previous testimony given.
- Clarify a discrete point not contained within previous testimony.
- Explain more than one point not contained in previous testimony.
- OTHER: Please explain:

10. Why have few judges appointed experts under Rule of Evidence 706? (Check all that apply)

- Lack of knowledge about procedure for appointment under Rule 706.
- Concern about interference with the adversarial system.
- Rarity of cases where a Rule 706 expert is necessary.
- Party Experts make Rule 706 Experts unnecessary.
- OTHER: Please explain: