

Is Expertise Gendered?

AN EXPLORATION OF GENDER REPRESENTATION AMONG
EXPERT WITNESSES IN FEDERAL DISTRICT COURTS

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Abstract:

Anecdotal evidence suggests that expert witnesses in civil litigation are overwhelmingly identified as male. This raises questions about epistemic injustice and representation for women both specifically when serving in this critical role and more broadly in terms of social constructions of expertise. This paper explores the issue by assessing court rulings on challenges to expert witness testimony in several district courts in 2021 to determine the ratio of experts identified as women and men. It also attempts to identify if different fields of testimony or types of cases have variable representation by women, compares qualifications of identified witnesses across gender and compares the number of women serving as expert witnesses to the likely available expert witness pool by briefly looking at the percentage of women with those qualifications in the population as a whole.

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At one level it should not be controversial to acknowledge the United States legal system has a long history of reinforcing gender imbalances. Whether in Justice Holmes' infamous support for state sterilization of the "mentally feeble" in *Buck v. Bell*, 274 US 200 (1927) or statutory presumptions excluding women from jury service persisting into the 1970s when they were struck down by *Taylor v. Louisiana*, 419 US 522 (1974), until relatively recently the law was if anything openly hostile to the very concept of gender equality, much less equity. This hostility is eloquently illustrated by the careers of the first two women to serve on the US Supreme Court, even when the doors to law schools were opened to women it is not as though pathways to successful careers to the law were made available on an equal footing. Both future Justices O'Connor and Ginsburg were initially shut out of the "preferred" pathway for legal success for a variety of reasons including the casual misogyny of hiring partners at major law firms ("Sandra Day O'Connor" n.d.; "The academic side of RBG", n.d.)

It is undoubtedly true that some strides have been made in the last several decades. Assuming the confirmation of Ketanji Brown Jackson four women will serve on the Supreme Court for the first time, and three of them additionally represent religious, ethnic or racial minorities. President Barack Obama made a conscious effort to add more diversity to the Federal bench, and particularly adding women of color at the district court level (Slotnick, Goldman and Schiavoni 2017: 395, 401). Law schools routinely brag about their steps for gender equality (Merritt and McEntee 2021). More broadly, women have made a massive increase in their representation in STEM occupations since the 1970s and currently represent anywhere from 28 to 80% of all graduate students in different STEM fields. ([Martinez & Christnacht, 2021](#)); Zhou and Gao, 2021: B11)

At the same time, there is more than a little evidence that an abiding gender imbalance persists in many of the key roles in the legal system and is resistant to change. Gender equity has proven far more elusive in law schools than raw numerical parity in enrollments (Merritt and McEntee 2021). Although women are closer to parity than ever at the Supreme Court, they are still a distinct minority in the Federal Judiciary as a whole at less than third of all judges (Boyd 2016: 788-789; Epstein 2016: 2048). Moreover, most senior partners in major law firms are still overwhelmingly men (St. Eve & Luguri, 2021: 5-6). A recent ABA study showed that the percentage of women making oral arguments in the Seventh Circuit has barely changed in a decade (St. Eve & Luguri, 2021:11). Finally, several studies on issues like oral arguments and appellate briefing suggest that women are still interrupted more, speak less, and generally have to conform to gender norms to achieve success (Jacobi & Schweers, 2017; Patton & Smith, 2017; Gleason & Ivy, 2021). The law may nominally be gender neutral, but it still seems to speak with a man's voice and mannerisms most of the time.

This evidence suggests that gender based epistemic injustices exist both on an individual and collective level (Fricker 2007). As Fricker notes, this type of injustice occurs when power imbalances create or sustain a construction in which only people should be given the presumption of being a valid authority or source of knowledge. Within the broader idea of epistemic injustice a particular subtype is testimonial injustice – when a person's characteristics such as race, gender or ethnicity suggest are used as a basis for discounting their testimonial accounts (Fricker 2007: 11). In a society that claims to be dedicated to principles of equality, persistent, gender based testimonial injustice should be unacceptable.

The goal of this article is to explore the scope and extent of testimonial injustice in the current state of the United States' legal system. In particular, the focus is placed on a distinctive feature of the system – the party-retained testifying expert witness. Because of the adversarial, party-driven nature of litigation, these witnesses are seen as both critical to the outcome of many disputes and reflect the underlying judgement of senior attorneys when they put a trial strategy together. Moreover, because in most cases that advance significantly the parties' take steps to eliminate or limit the testimony of the other side's witnesses in *Daubert/Kumho* hearings, a rich documentary source exists that can allow for documenting the scope and nature of this imbalance.

As the goal of this article is largely about establishing the scope of the gender imbalance and resulting testimonial injustice in this area, the effort at this stage is primarily descriptive. Specifically a census of civil cases involving expert witness disputes with substantive rulings on *Daubert* challenges during 2021. in 9 of the 94 United States District Court was established. This census was then assessed for the relevant frequency with which experts were men or women, as identified by the pronouns reflected in the judge's ruling on *Daubert* issues. Additional factors were identified including the qualifications of the expert, the gender of the judicial officer and nature and outcome of the challenge to expert testimony.

This resulted in 92 proceedings and 199 entries relating to individual experts (this difference owes to the fact that in many cases there are more than one expert for the respective sides). The basic conclusion is that there is still a persistent and significant gender gap when it comes to testifying experts. In particular, experts are roughly five times as likely to be identified as men than women. This gap, moreover, is much more prominent when an

expert's primary credentials are experience or training based, or in fields like engineering or calculations of damages. At the same time, there does not appear to be a gender gap in the admission rate by judges, although so few women are presented as experts in some of the main fields of expert testimony as to make it impossible to draw any firm conclusions at this time.

These findings are followed by a brief discussion of potential causes of this imbalance. While prior generations, ala Lawrence Summers, may have asserted that women simply aren't inclined to engage as experts or that there simply aren't qualified women available, statistics on women's engagement in a wide range of fields suggests this can be rejected. Instead, what seems most likely but is not susceptible to testing at this point is that senior partners who direct cases and make the hiring decisions on issues like retaining experts are likely injecting their own subjective construction of what is persuasive to a judge or jury. In keeping with studies of prosecutors and juries, this likely is not reflective of the merits of women as experts or their ability to convey testimony clearly but relies on peripheral processing about issues like credibility and persuasiveness. This suggests yet another reason to wonder if the United States' adversarial system can ever be compatible with the stated gender-neutral nature of the law.

A. The Interaction of Experts and District Court Judges in American Legal Disputes

Expert witnesses represent a unique confluence of influences that surface a number of tensions inherent in the legal system. Initially, experts are allowed because of the presupposed assistance they can provide a trier of fact – whether a judge or jury – but they exist within an adversarial system and as such are largely a reflection of one side or the other's preferred version of the truth rather than any sort of objective testimony (Vidmer 1995:171-173; Schauer and Spellman 2013: 13-14). Moreover, the content of testimony is often shaped by the

requirements of legal precedent rather than the best practices of a field, resulting in the creation of “legal science” that may have only a passing resemblance to what would be accepted in other contexts (Jasanoff 1997:130-131; Jasanoff 2008: 128-129; Beyea and Berger 2001: 348-360). Ultimately, moreover, the task of trying to ensure that only reliable expert testimony is admitted is left primarily to the discretion of a cadre of generalist judges who are simultaneously tasked with guarding against misleading testimony while also preserving a perception of neutrality on the ultimate truth or falsity of any such testimony (See Federal Rules of Evidence 702 et seq.; *Daubert v. Merrill Dow Pharmaceuticals* (1993) 506 US 579; *General Electric Co. v. Joiner* (1997), 522 U.S. 136; *Kumho Tire Co. v. Carmichael* (1999) 526 U.S. 137). These conflicts both make this an area rife with possibilities for academic research and all but ensure that legal disputes and decisions will likely reflect dominant social constructs on a wide range of issues, including but not limited to gender perceived roles.

The task of the expert in law is linked to the fact-finding component of legal cases. Specifically, under Federal Rule of Evidence (FRE) 702, an expert is anyone possessing training, knowledge or experience that would “assist the trier of fact to understand the evidence or to determine a fact in issue.” This is intentionally broad and can encompass anything from a fire inspector who learned their trade on the job to a professor with a Ph.D. in chemistry explaining how gas chromatography works to establish the identify of different compounds in a sample. The common thread is that their expertise will provide a different context or meaning for jurors than the raw information would. This skillset in turn allows experts to testify even if they have no other connection to the case than being retained by a party, and to testify in the form of opinions about how to interpret various pieces of evidence (FRE 702 et seq.; cf. FRE 602, 701).

This leeway in turn gives experts a unique place in trial strategy. The mere presentation of material as coming from an “expert” can impact credibility assessments (Schweitzer and Saks 2009). Expert witness testimony is often the key to a wide range of subjects and get used by trial counsel to dramatically weave together disparate evidence into a coherent narrative (Vidmer 1995: 171-173). At the same time, jurors have a hard time spotting or understanding validity problems with scientific evidence (McAuliff, et al 2009: 252-253; McAuliff and Duckworth 2010: 495-497; Levitan 2017: xiii-xxii). Moreover, trying to provide scientific education in the guise of expert testimony can be difficult since “battles of the experts” can lead to people either rejecting both sides or falling back on peripheral issues like appearance, demeanor and background (Levett and Kovera 2007: 369-370; Vidmer 1995: 122-123, 150, 171-173).

To prevent an excess of partisan zeal, federal district judges are supposed to assess proposed expert testimony for its legal reliability. This sort of early engagement in shaping cases is part of a broader trend in the legal system in the last several decades. It is fair to state at this point that Federal district courts are not mainly trial courts, but facilitators of resolution (Hornby [2007]2013:113-114). In the criminal system this has led to the rise of plea bargaining as a tool; in civil cases through negotiated settlements (Boyd 2013: 194). That said, district court judge rulings on everything from scheduling to the admissibility of evidence routinely make a range of decisions that push civil cases to settle or lead them to go to trial, as they can impact the perceived costs and likelihood of success (Bornstein and Robicheaux 2008: 10-11; Kagan 2001: 112-117). It is not an overstatement to say judges can make or break a case by their rulings on a variety of issues. Indeed, if an expert is excluded judges will frequently

terminate cases short of trial, either by summary judgment or directed verdict (Beecher-Monas 2011: 39; Dixon and Gill 2002: 294-296). It is also highly likely that exclusion drives disfavored parties to settle cases, although that link is harder to track.

In order to assess expert witnesses, under what are known as the *Daubert/Kumho* (or just *Daubert*) standards, district court judges are supposed to employ a multi-factored approach to assess if testimony has adequate rigor. Under *Daubert*, for scientific testimony a non-exclusive list to be considered are derived from a Popperian conception of science and include falsifiability, error rate/replicability, the use of standards and the subjection of results to peer review (*Daubert*, 506 U.S. at 593-594; Jasanoff 1997: 63). This was subsequently expanded in *Kumho* to an obligation to subject all proposed expert testimony to analysis for intellectual rigor, although the exact factors that might be applied would vary depending on the nature of the testimony (526 U.S. 137 at 146, 150). What this generally collapses into is a set of considerations about whether the expert is qualified, if the methods are broadly reliable (typically by showing it follows some type of pre-existing standard), if the testimony is relevant and whether the testimony conforms with judicial expectations of the proper scope of the testimony (Dzeguze 2018).

It is not clear if the *Daubert/Kumho* standards have resulted in consistent, effective screening of proposed testimony. On the one hand, judges believe these cases have altered their behavior (Gatowski, et al. 2001:443-445). However, judges are not very literate about science and technology as a group or individually, and therefore may be inclined to avoid the issues at the heart of *Daubert/Kumho*. They do seem to understand more “objective” criteria like peer-review and general acceptance within a community of experts, and cite general

acceptance of a method most in assessing evidence (Dixon and Gill 2002: 284-285). Similarly, challenges that are rooted in questions that are more familiar to judges – things like relevance and the relative role of judges, juries and witnesses – are much more likely to succeed than objections that go to something more complicated like the validity of particular methods (Dzeguze 2018). Indeed, bringing a methods based challenge is inversely associated with the likelihood of any judicial action, suggesting judges are largely opposed to weighing in on such issues except in extreme situations (Dzeguze 2018). Regardless of whether and how judges are undertaking their tasks under *Daubert/Kumho*, these standards have not resulted in much shift in the overall number of experts, as over 80% of experts that are challenged are allowed to testify (Dzeguze 2018).

The subject of expert witnesses generated a substantial amount of literature both before but especially after *Daubert*. There have been a significant number of doctrinal assessments based on unsystematically selected cases to make claims about trends in practice (e.g. Schwartz and Silverman 2006). There have also been several assessments of case outcomes after *Daubert/Kumho* (Cheng and Yoon 2005; Buchman 2007; Merlino, Springer and Sigillo 2011; Helland and Klick 2012). There have also been descriptive assessments of the conduct of judges linked to textual analysis and surveys (Gatowski, et al. 2001; Bayea and Berger 2001; Dixon and Gill 2002)). Dzeguze (2018) represented an effort at assessing whether multiple prevalent theories of influences on judicial decision making generally ranging from the legal model to cognitive influences like heuristics and biases.

However, while these studies have assessed a wide range of factors from the political and personal identity of the judge to the impact of different types of testimony or challenges,

there has been less focus on the characteristics of experts. As noted, Vidmer (1995) previously looked at expert characteristics through the lens of jury decision making but did not focus on the impact of gender or look to systemically investigate who was being put forth as experts in different fields. By comparison scholars who have looked at the impact of gender in law more generally have tended to focus on the gender of judges (see e.g. Boyd 2013; 2016) or as attorneys (St. Eye & Luguri, 2021) rather than expert witnesses. As a whole, this has created a lacuna in the literature that this study seeks to begin to address.

B. Case Selection and Methodology

As noted, this effort is an initial exploration of the existence and scope of a gender imbalance in expert testimony in district court proceedings that may point to larger issues of testimonial injustice in the American legal system. Because direct observation would be impractical, this analysis relied on written judicial decisions about the admission of expert witnesses in the face of *Daubert/Kumho* challenges. At one level, this type of ruling has the advantage of being fixed and not subject to post-hoc manipulation. Additionally, these challenges are a matter of routine in most major civil cases because of the value of expert witnesses. At the same time, it must be acknowledged that it is possible that experts who were never subject to challenge may reflect a different distribution of perceived gender identity.

It also should be acknowledged that this is relying on judicial perception of gender rather than the self-identification of gender by the experts themselves. To avoid subjective interpretation by the author, the perceived gender identity of the witness is coded based on the pronouns and gendered titles adopted by the judge in ruling on the admissibility of evidence. This avoided relying on assumptions based on the names of experts, but it did

exclude cases where judges used gender neutral titles and pronouns. It is also possible that judges intentionally or inadvertently misgendered some witnesses. However, as the ultimate focus of this study is whether the social construction of expertise includes a perceivable gender imbalance, these limitations do not threaten the validity of the observation.

This study adopted a purposive sampling approach to case selection to ensure inclusion of some key differences while retaining overall representativeness. (Seawright and Gerring 2008: 300-301). This research is an extension of prior work on the area of judicial decision making in the context of expert witnesses (Dzeguze 2018). One of the key findings of that research was a significant degree of variability of outcome in challenges to experts based on the circuit a case was heard in. Experts in certain districts in the Ninth Circuit Court of Appeals were more likely to be rejected than in either the Fourth or Seventh Circuit even when controlling for factors like judicial ideology. This is likely due to differences in circuit court interpretations about the impact of erroneous rulings on expert testimony (*Mukhtar v. California State University, Hayward*, 299 F.3d at 1064-1066; Dzeguze 2018). For this reason, the present study retained a goal of including multiple district courts across multiple circuits.

At the same time, there are certain district courts that are so atypical as to their surroundings or in terms of their dockets as to potentially skew any results. For example, The Northern District of California and the Eastern District of Texas have disproportionately high numbers of patent cases, while the Northern District of Illinois is dominated by the city of Chicago and in turn would have so many more cases than any other district in the Seventh Circuit as to be unrepresentative. Instead, a choice was made to identify three matched clusters

of three courts each in different circuits (Ninth, Seventh, Fourth). As there are 94 Federal district courts, this sample of nine courts should provide a broad range of cases and experts.

For each circuit, the goal was to select three courts that together would provide a representative cross-section of the typical work load of courts while avoiding atypical situations. All the courts in each cluster were geographically adjacent to at least one other court in the cluster while each represented a unique element of the cluster itself. They included the District of Oregon, Western District of Washington and Eastern district of Washington within the Ninth Circuit, the Northern District of Indiana, Southern District of Indiana and Southern District of Illinois in the Seventh Circuit, and the Eastern, Middle and Western District of North Carolina in the Fourth Circuit. Each cluster contains one district dominated by major metropolitan region – Seattle in the Western District of Washington, Indianapolis in the Southern District of Indiana and Charlotte in the Middle District of North Carolina. Each contains a district that includes one significant but secondary city with a large population and is otherwise more scarcely populated - Portland in the District of Oregon, Fort Wayne in the Northern District of Indiana and Raleigh in the Eastern District of North Carolina. Finally, the remaining district in each cluster (the Eastern District of Washington, Southern District of Illinois and Western District of North Carolina) lacks any large cities although each has some regional population centers such as Spokane, Washington; Springfield, Illinois; and Asheville, North Carolina.

To ensure that this study would capture typical cases that involved expert witnesses, a broad set of LEXIS searches were conducted to capture all substantive rulings on expert testimony in each cluster during 2021. This search embraced all cases mentioning the terms

Daubert, Kumho or the number 702 within 25 words of the term expert. Cases were reviewed to exclude all non-district court rulings (including both appellate court and bankruptcy court proceedings), criminal cases, those that were from irrelevant districts, were duplicative, did not apply the Federal Rules of Evidence or lacked any substantive analysis of the question of expert admissibility (such as scheduling orders, instances of summary adoption of a magistrate's recommendation or cases in which the ruling was held in abeyance pending trial). Previous efforts have shown that these searches will capture all substantive rulings when compared with PACER results (Dzeguze 2018). This resulted in 199 rulings across the nine courts in 92 different proceedings.

The cases were coded at the outcome level rather than the case level. This is consistent with Buchman (2007) and Dzeguze (2018) and allows for normalization between judges who resolved each challenge to a particular expert in a separate opinion and those who preferred to issue omnibus opinions covering a number of motions. The rulings were coded by last 4 digits of the case number as an identifier, circuit, district and date of ruling. As the focus at this stage was a descriptive assessment of the identity of experts, coding was limited to matters directly related to the expert, their background and the subject of their testimony. The intent is to build an open scaffold that will permit integration other variables of interest when/if additional research is warranted. As to each expert, they were identified by last name to note repeat players and coded with a dummy variable for the perceived gender of the expert was based on the pronouns and titles used by the judge in their ruling, 0 for men, 1 for women and 99 where no gendered pronouns were used. Additionally, each expert received a nominal code based on

whether their credentials were primarily linked to an advanced degree, training or experience as these are three independent bases for expertise under FRE 702.

Finally, the subject of testimony was coded nominally in broad subject matter categories based on the primary focus of the testimony. Based on prior work the range of testimony sometimes defies categorization, but most testimony can fit into one of the bins of scientific/medical, technical, engineering, accounting/economic impact/damages, or industry practices, while a code of other was reserved for atypical situations. Although prior work has used different, more specific categories (Merlino, Springer and Sigillo (2011)), its focus on toxicology, psychology/psychiatry, accounting/economics/damages and engineering proved non-representative in more recent studies (Dzeguze 2018). In particular, toxicology and psychology are not very common, and differentiating between engineering in a formal sense and more applied/technical fields that can have engineering components like fire investigation or accident reconstruction is warranted in light of the frequency of both. Medical was defined to include both physicians and direct care providers as well as secondary fields like medical care planners, and accounting, economic impact and other forms of financial related analysis were all placed together as they typically but not universally are used in damages calculations.

At this stage, analysis is primarily limited to providing descriptive statistics and assessing resulting patterns. In light of these findings and the overall number of observations, more extensive coding and development of a more robust dataset may be warranted in the future. At present, however, more advanced statistical analysis is not necessary to establishing the basic scope of perceived gender imbalance amongst expert witnesses.

C. Women are Underrepresented as Experts in Several Key Dimensions

The basic finding of this study was to confirm the suspicion that women are significantly underrepresented as expert witnesses in district court proceedings. This was true across all the observed courts, with the imbalance growing in courts that handled more proceedings. Additionally, women are much more likely to rely on an advanced degree as the basis for their qualification as an expert and are much more heavily clustered in certain categories of testimony than men. If there is one silver lining, at this level it does not appear that judges are more likely to reject women as experts than men – although that underscores that the gender gap is not a function of a lack of qualified candidates, and in turn raises questions of why it persists.

Initially, as shown in Table 1 below, women are simply not presented as experts at the same rate as men. The gender gap was very consistent in courts in the 7th and 9th Circuit, where most of the expert challenges were heard. As shown, women were involved in one out of every eight challenges. The percentage of women was notably higher in cases from the 4th Circuit, although there were significantly fewer proceedings overall. The 4th Circuit cluster also produced the only case in which the majority of experts – 3 out of 4 – were identified as women. By comparison, in the overwhelming number of instances in which both sides' experts were discussed the majority were identified as men.

Experts by Perceived Gender	4 th	7 th	9 th	Total
Men -Number	30	83	53	166
Percentage	70	87	88	84
Women - Number	13	12	7	32
Percentage	30	13	12	16
Total	43	96 (1 unidentified by pronoun or gendered title)	60	199

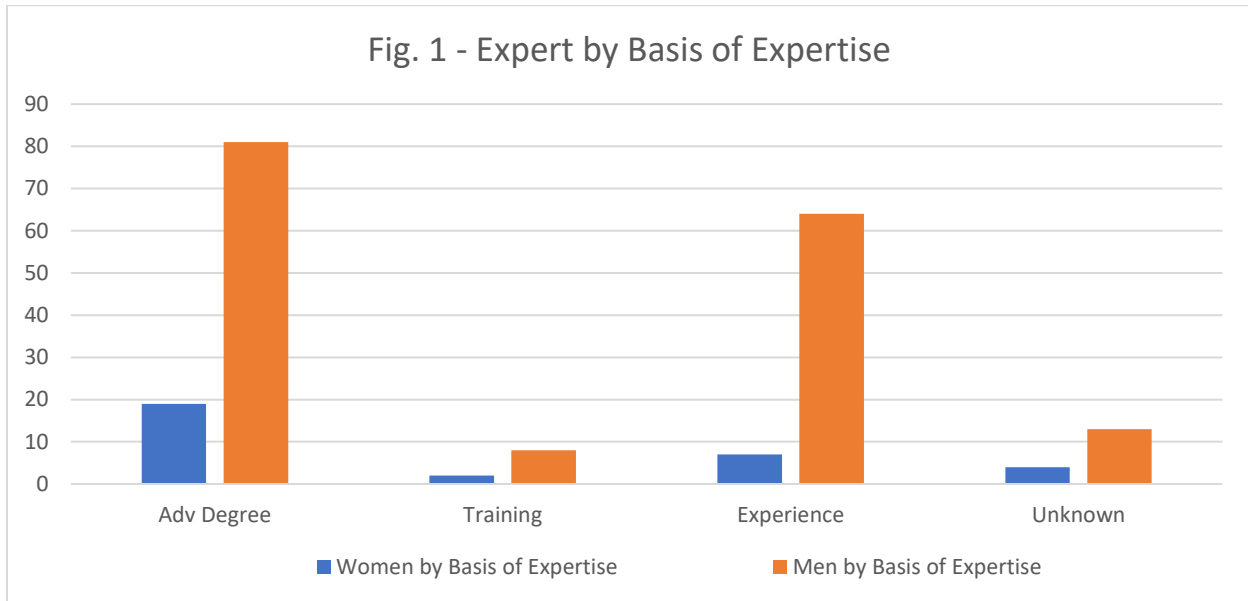
Table 1- Experts by Circuit and Perceived Gender

Prior research suggests the 4th Circuit has both a lenient approach to admission of experts and an emphasis on avoiding formal *Daubert/Kumho* challenges (Dzeguze 2018). It is also worth noting that the cases in the 4th Circuit included far fewer large cases like class actions. As a result this may be a somewhat unrepresentative result. Nonetheless, it suggests that there may be meaningful circuit level distinctions worthy of further investigation.

Beyond the raw numbers, there are some notable patterns that help shed some light on what might be responsible for at least part of this gap. Under FRE 702, experts can be qualified as a function of education, training or experience. Judges are not required to specify what basis exists for the claim of expertise, and sometimes parties do not challenge it. Most of the time though, judges will recite elements of the vita of the experts they are considering and will often comment on issues like education and experience.

As shown in Fig. 1 below, both men and women are most likely to be qualified on the basis of an advanced degree, such as an MD or Phd. However, whereas almost 40% of men qualify based solely or primarily on expertise, for women that percentage is closer to 20%.

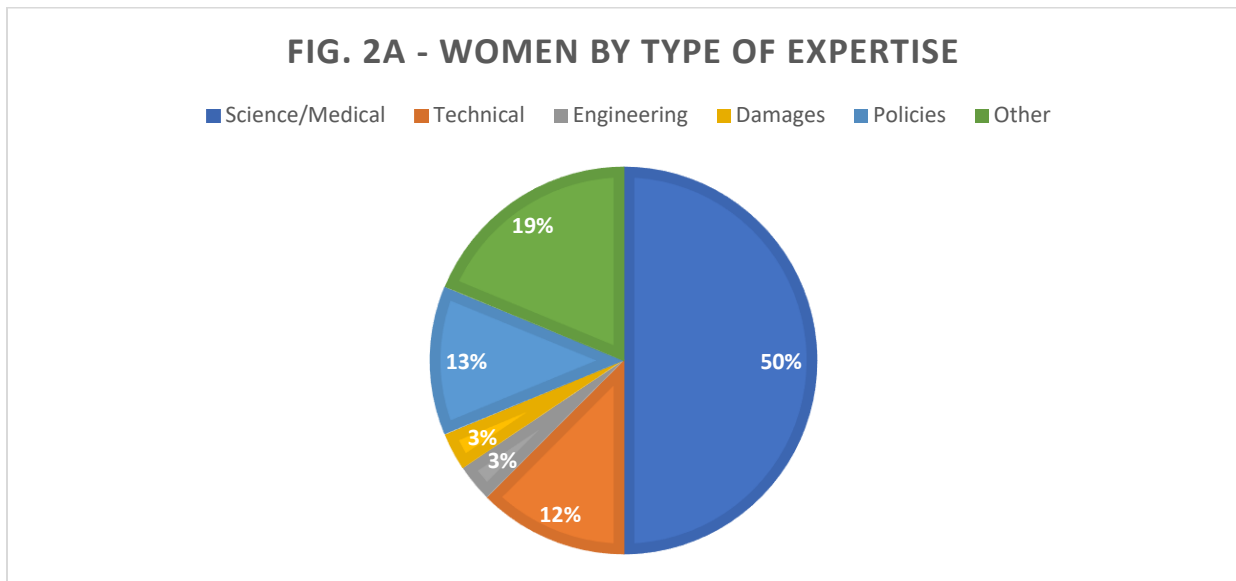
Moreover, given the overall small sample size of women experts the broader pattern may be even starker. Again this suggests a need for further investigation.



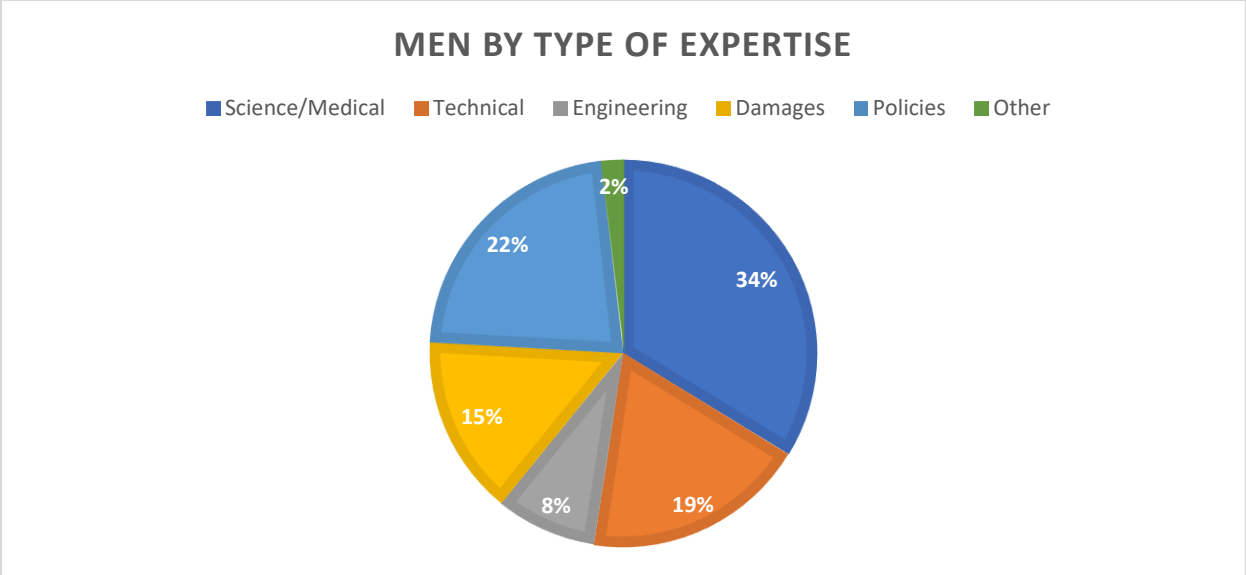
When the focus is placed on the subject matter of testimony rather than the basis of expertise, yet another gendered pattern emerges. Experts can in theory speak to any number of subjects, but most of the time their testimony will fall broadly into categories of scientific or medical information, technical or engineering assessments, damage calculations or statements of industry practices and procedures. There are also some categories that are unique enough that they defy categorization, such as an attorney trying to testify to probable cause standards or a non-lawyer testifying to legal conclusions (and in both cases being prevented from doing so) or commentary on the response rate of direct mail solicitation.

As shown in Fig 2a, women were called on disproportionately to testify in areas of science or medicine. Fully half the experts identified as women were called on to testify to things like scientific causation or medical treatment. This in keeping both with the high rate of expertise being linked to advanced degrees, and women's higher rates of achievement of

advanced degrees in health sciences and biology compared with other fields of STEM education ((Zhou & Gao, 2021: B19). Only one woman testified to engineering issues and similarly only one was called to address technical issues. In fact the second most common type of testimony would be categorized as “other” or miscellaneous.

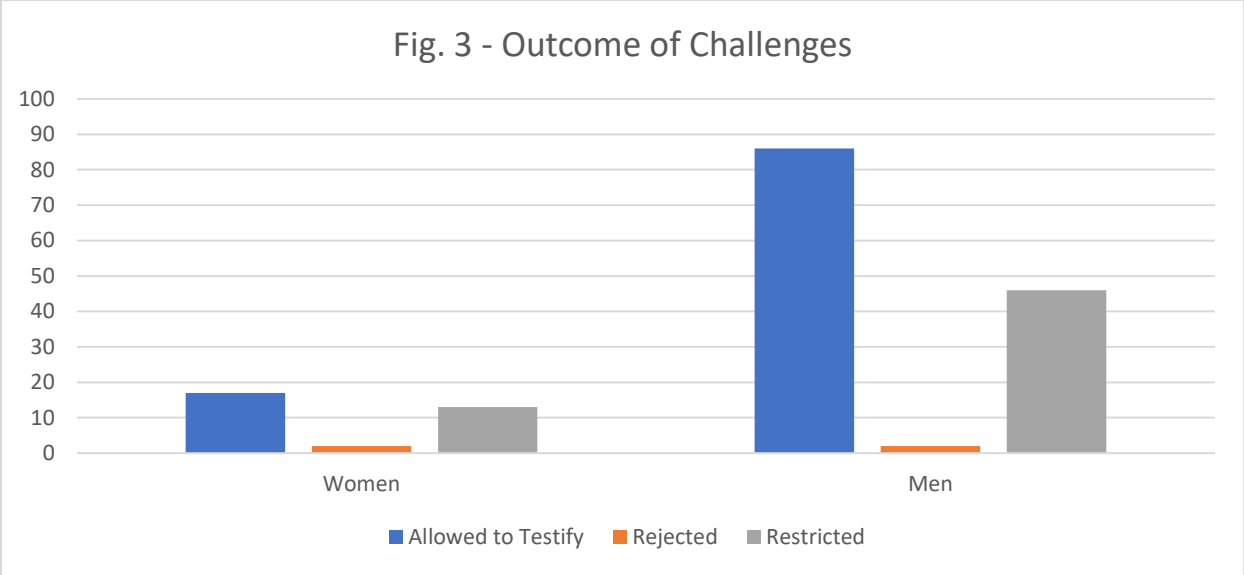


By comparison, as shown in Fig. 2b, men were called on to testify in a more balanced way. Almost none of their testimony was in the “other” category. While science and medicine were still the largest portion of testimony, it was not nearly as dominant as with women. Men also were the overwhelming majority of experts on technical issues and were called on at a much higher rate to assess damages. All of this points to how the law reflects and reinforces societal gender perceptions and gaps, which in turn reinforces testimonial injustice.



Whereas who is called and for what reason reveals a stark gender gap, the outcome of challenges does not. The *Daubert/Kumho* rulings emphasized that admission should be the default standard – that gatekeeping was not meant to be an unduly harsh or rigorous standard, but a place to assess the basic admissibility of evidence and leave assessments of credibility to juries. Prior studies show that approximately 80% of experts are ultimately allowed to testify, although a large percentage of challenges do result in restrictions on testimony -typically because a party has included some impermissible commentary such as a legal conclusion in the expert’s proposed testimony (Dzeguze 2018).

Here, a similar pattern held true for both men and women. As shown in Fig. 3, the majority of challenges to both men and women experts failed completely. Only in the most extreme cases were experts excluded entirely from testifying. At the same time, a large portion of challenges to both men and women did result in some restrictions being placed on the testimony in question. While the percentage of restrictions was higher for women, this again may be an artifact of the overall small sample size of women as experts.



While the fact that women and men seem to be assessed similarly by judges is somewhat heartening, it underscores the significance of other gaps. If women and men will be permitted to testify at similar rates, why are so few women being called to testify? Although a full investigation of that question is beyond the scope of this paper, the evidence suggests that in this as in so much of the law the fundamental nature of American litigation places disproportionate power in the hands of men who then replicate their own subjective preferences.

D. How the Adversarial System (Likely) Reinforces a Gendered Hierarchy Among Experts

A prior generation might have been able to look at this gender imbalance and see it as reflective of women’s role in society or interests. But with the growth of women’s participation in all elements of the labor force and representation in higher education, such simplistic explanations ring hollow (Zhou & Gao, 2021; Martinez & Christnacht, 2021). Although this paper cannot conclusively assess the root causes of this imbalance, a plausible hypothesis rests in the adversarial nature of both litigation in the United States generally and the way by which

experts are selected in particular. Namely, the overwhelming gender imbalance in lead litigation counsel and their subjective views of what makes an expert convincing to jurors likely leads to that pattern of male dominance being reflected in the selection of experts.

As previously noted, the selection of an expert witness is first and foremost an element of an adversarial litigation process. The attorneys who have to make the decision of what expert to hire are facing multiple levels of consideration. These include just how important or necessary the testimony is, how susceptible to challenge the expert's conclusions are, and how persuasive the testimony is apt to be. Questions of actual scientific validity or whether the expert in any way enhances the diversity and equity of the overall legal system are unlikely to matter. The goal, first and foremost, is to win.

The plain truth is that most of the people making these decisions are men (St. Eve & Luguri, 2021; Merritt & McEntee, 2019). Men dominate the ranks of lead trial and appellate counsel (St. Eve & Luguri, 2021). They are the overwhelming number of equity partners (Merritt & McEntee, 2019). So in deciding who the critical experts are in major litigation, the decision making process is apt to reflect male preferences.

Research on similar topics suggest that these decisions will all but certainly reflect the internal assumptions and biases of the decision makers. In particular, the lead attorneys will try to assess what will be persuasive to a judge or jury as the finder of fact, but that will almost certainly reflect first and foremost their own assumptions of how to construct credibility. (Frohmann, 1997). Just as prosecutors in trying to place themselves in the role of jurors replicated their own bias, it seems likely lead counsel will do the same. Similarly, given that jurors often focus on anything but the substance of scientific testimony to make up their minds,

these assessments are not inaccurate given the goal is winning rather than accuracy. (Vidmar, 1995; McAuliff et al., 2009).

Moreover, any attempt at an “objective” assessment of experts may well just reinforce the perception that men are more persuasive as experts. The issues of gender bias in measures such as student evaluations are well documented. (Kreitzer & Sweet-Cushman, 2022). Judges and juries are likely to possess similar biases. Thus, to the extent that lawyers see their experts as first and foremost teachers of the jury they are likely to look for traits that are associated with high teacher evaluations – things like authoritativeness and expressiveness – that do not necessarily accurately reflect the effectiveness of the presentation.

Unfortunately, this suggests that this gap will persist unless and until the system actively addresses it. One way to do that would be to de-emphasize the use of experts as tools of adversarial litigation. However, while judges have the power to appoint expert witnesses, they are highly reluctant to do so. (Cecil & Willgang, 1993:18-21). Instead, the expectation is that the parties will curb any excesses or overreach through rebuttal and cross-examination (*Eastman Chemical Company v. Plastipure, Inc.*, 775 F.3d 230 (5th Cir. 2015) (noting with approval trial court’s refusal to intervene in a “battle of the experts”). This is predictable, as judges are, first and foremost, lawyers socialized to believe in the power of the very adversarial system that helps generate and reinforce a host of testimonial injustices.

E. Conclusion

This study largely confirms that there is a persistent gender gap in the number and type of experts called in Federal Court. It remains to be seen if a wider and deeper sample might reveal if different circuit procedures might ameliorate the gap to some extent, or if

demographic shifts can ultimately improve it. Similarly, further investigation of the impact of the gender of both lead counsel and judges is likely warranted to see if either women as lead counsel make different decisions about who to call or if lawyers generally evaluate who to call in light of who they appear before. Overall, though, it seems likely that the American legal system will continue to have a persistent gender gap so long as the primary filter used by counsel is one of adversarial advantage and the overwhelming number of people making those determinations are men.

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