

# FORWARD-LOOKING ACADEMIC IMPACT RANKINGS FOR U.S. LAW SCHOOLS

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## ABSTRACT

*Although the very concept of law school rankings is currently under fire, rankings abolitionism is misplaced. Given the number, diversity, and geographic dispersion of the more than 190 law schools fully accredited by the American Bar Association, rankings are essential to enable various stakeholders to make comparisons between schools. However, the current rankings landscape is dire. The U.S. News law school rankings rely on poorly designed, highly subjective surveys to gauge “reputational strength,” rather than looking to easily available, objective citation data that is more valid and reliable. Would-be usurpers of U.S. News use better data but make other arbitrary choices that limit and distort their rankings. One flaw common to U.S. News and those who would displace it is the fetishization of minor differences in placement that do not reflect actual differences in substance. This information is worse than trivial: it is actively misleading. This Article proposes a new set of law school rankings free from all of these defects.*

*The Forward-Looking Academic Impact Rankings (“FLAIR rankings”) introduced in this Article are based on data that shows how many times law review articles by each of 5,139 individual faculty members at 191 American law schools have been cited by other law review articles in the last five years. The FLAIR rankings can be used as an objective guide to the relative academic impact of law schools, or as a component in broader objective rankings. The FLAIR rankings are based on publicly available, reliable, and objective data obtained from law school websites and the research platform HeinOnline. The FLAIR rankings include all fully ABA-accredited law schools, unlike alternative rankings of academic influence that are selective, often arbitrarily so. Moreover, the FLAIR rankings are designed to impart meaningful information by clustering schools into tiers based on their*

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*distance from the mean of all schools and deemphasizing ordinal rankings. Thus, the FLAIR rankings enable readers to make rational comparisons between law schools, rather than simply creating a hierarchy for hierarchy's sake.*

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## INTRODUCTION

Scholarly impact, academic influence, or faculty reputation: call it what you will, the intellectual work that law professors do outside the classroom is widely believed to be an important part of what law schools have to offer, and what distinguishes one from another. If the academic impact of law schools matters, then the way this impact is assessed and ranked also matters. Faculty reputation plays a substantial role in the much-maligned U.S. News & World Report (“U.S. News”) rankings of American law schools,<sup>1</sup> and a number of prior studies have attempted to create standalone rankings of academic influence.<sup>2</sup> The rankings proposed in this Article are a response to the

1. See Robert Morse & Eric Brooks, *Methodology: 2024 Best Law Schools Rankings*, U.S. NEWS & WORLD REP. (Apr. 8, 2024, 9:00 PM), <https://www.usnews.com/education/best-graduate-schools/articles/law-schools-methodology> [<https://perma.cc/H7SZ-MDZ7>]. For more details, see *infra* notes 22-27 and accompanying text.

2. See Brian Leiter, *Measuring the Academic Distinction of Law Faculties*, 29 J. LEGAL STUD. 451 (2000) [hereinafter Leiter, *Measuring Academic Distinction*]; Brian Leiter, *Top 25 Law Faculties in Scholarly Impact, 2005-2009 (and Highest Impact Faculty in 13 Areas of Specialization)*, BRIAN LEITER'S L. SCH. RANKINGS [hereinafter Leiter, *Top 25 Law Faculties*], [http://www.leiterrankings.com/faculty/2010\\_scholarlyimpact.shtml](http://www.leiterrankings.com/faculty/2010_scholarlyimpact.shtml) [<https://perma.cc/HY5K-MFYF>] (last visited Apr. 10, 2024) (discussing results of law

manifest flaws in the way U.S. News estimates faculty reputation and to the arbitrary and incomplete construction of alternative ranking systems, such as the Sisk rankings of academic influence.<sup>3</sup> The Forward-Looking Academic Impact Rankings (or “FLAIR rankings”<sup>4</sup>) introduced in this Article are based on data that shows how many times law review articles by each of 5,139 individual faculty members at 191 American Law schools have been cited in law reviews in the last five years.<sup>5</sup> The FLAIR rankings can be used as an objective guide to the relative academic impact of law schools,<sup>6</sup> or as a component in broader objective rankings.

In November 2022, the Dean of Yale Law School announced that despite consistently ranking first, Yale would no longer cooperate with the annual U.S. News rankings of American law schools.<sup>7</sup> By the following January, seventeen other schools had followed suit,<sup>8</sup> leading

professor citation ranking); Bernard S. Black & Paul L. Caron, *Ranking Law Schools: Using SSRN to Measure Scholarly Performance*, 81 IND. L.J. 83, 85 (2006); Gregory Sisk et al., *Scholarly Impact of Law School Faculties in 2018: Updating the Leiter Score Ranking for the Top Third*, 15 U. ST. THOMAS L.J. 95 (2018) [hereinafter Sisk et al., *Scholarly Impact in 2018*]; Paul J. Heald & Ted Sichelman, *Ranking the Academic Impact of 100 American Law Schools*, 60 JURIMETRICS 1 (2019); J.B. Ruhl, Michael P. Vandenberg & Sarah E. Dunaway, *Total Scholarly Impact: Law Professor Citations in Non-Law Journals*, 69 J. LEGAL EDUC. 782 (2020); Gregory Sisk, Nicole Catlin, Alexandra Anderson & Lauren Gunderson, *Scholarly Impact of Law School Faculties in 2021: Updating the Leiter Score Ranking for the Top Third*, 17 U. ST. THOMAS L.J. 1041 (2022) [hereinafter Sisk et al., *Scholarly Impact in 2021*] (updating previous rankings).

3. See *infra* note 41 and accompanying text for discussion of Sisk’s selection of schools and *infra* notes 118-21 and accompanying text for an assessment of the impact of these exclusions.

4. The rankings are forward-looking in the sense that they incorporate changes in faculty composition scheduled to take effect at the beginning of the 2023 academic year for reasons explained *infra* Section I.C. Although some readers may be mortified by redundancy inherent in “FLAIR rankings,” I believe that, as with DC Comics, PIN numbers, and the HIV virus, redundancy sometimes aids clarity and readability.

5. For details on data sources and methods, see *infra* Part II.

6. On the distinction between impact and merit, see *infra* Section I.B.1.

7. Heather K. Gerken, *Why Yale Law School Is Leaving the U.S. News & World Report Rankings*, YALE L. SCH. (Nov. 16, 2022), <https://law.yale.edu/yls-today/news/dean-gerken-why-yale-law-school-leaving-us-news-world-report-rankings> [<https://perma.cc/QV6T-QUTQ>] (“[T]he U.S. News rankings are profoundly flawed [because] they disincentivize programs that support public interest careers, champion need-based aid, and welcome working-class students into the profession.”).

8. For reasons that echo Yale’s criticisms, see, e.g., Kerry Abrams, *Message from Dean Abrams Regarding Withdrawal from U.S. News Rankings*, DUKE L. (Nov. 21, 2022), <https://law.duke.edu/news/message-dean-abrams-regarding-withdrawal-us-news-rankings> [<https://perma.cc/WFP6-4CQS>] (“The rankings rely on flawed survey techniques and opaque and arbitrary formulas, lacking the transparency needed to help applicants make truly informed decisions.”); Jenny S. Martinez, *Stanford Law School Will Not Participate in US News Law School Ranking*, STAN. L. SCH. (Nov. 18, 2022), <https://law.stanford.edu/press/stanford-law-school-will-not-participate-in-us-news-law-school-ranking> [<https://perma.cc/N2LG-ATKW>] (noting that the U.S. News rankings methodology “distorts incentives” in several ways, including that it discourages public service, devalues interdisciplinary expertise, and discourages need-based financial aid). See generally Francie Diep, *Is*

U.S. News to promise to make significant changes in its rankings formula.<sup>9</sup> Whether these changes will be enough to mollify the critics is yet to be seen; nonetheless, U.S. News has declared its intention to continue ranking law schools regardless of their cooperation.<sup>10</sup> The U.S. News rankings of law schools are deeply flawed,<sup>11</sup> but those in the legal community who take an abolitionist stance and propose to do away with rankings altogether have missed an essential truth: we actually do need law school rankings, we just need them to be better.

In a complex legal education market serving hundreds of thousands of people contemplating which law school to apply to,<sup>12</sup> and roughly half a million potential employers,<sup>13</sup> rankings provide an important data point in a potentially life-changing decision. There were 191 fully American Bar Association-accredited law schools in the United States at the time data was collected for the 2023 FLAIR rankings;<sup>14</sup> in many jurisdictions, only graduates of these schools are eligible for admission as attorneys. These schools are too varied and too dispersed for potential applicants and employers to make comparisons based on first-

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*This the Beginning of the End of the 'U.S. News' Rankings' Dominance?*, CHRON. HIGHER EDUC. (Nov. 22, 2022), <https://www.chronicle.com/article/is-this-the-beginning-of-the-end-of-the-u-s-news-rankings-dominance> [<https://perma.cc/36T5-NRZK>] (citing similar criticisms from other law deans).

9. Melissa Korn, *U.S. News & World Report to Revamp Parts of Its Law-School Ranking*, WALL ST. J. (Jan. 2, 2023, 9:00 AM), <https://www.wsj.com/articles/u-s-news-world-report-to-revamp-parts-of-its-law-school-ranking-11672667620#> [<https://perma.cc/3RZU-VY7M>].

10. *Id.*

11. These flaws include some of the objections raised by schools that have announced their intention not to cooperate with U.S. News, *see supra* notes 7-8, but there are also deep structural flaws with the design and presentation of U.S. News, as discussed below, *see infra* Section I.A.

12. According to the Law School Admission Council, which administers the most common standardized test for law school admission, the Law School Aptitude Test or LSAT, 128,892 people took the LSAT in 2021-2022. *See Test Registrants and Test Takers*, LAW SCH. ADMISSION COUNCIL, <https://report.lsac.org/TestTakers.aspx?Format=PDF> [<https://perma.cc/BNN3-GRN9>] (Apr. 19, 2024).

13. According to market research firm IBISWorld, there were 436,508 law firms in the U.S. in 2019. *See* CLAIRE O'CONNOR, IBISWORLD, IBISWORLD INDUSTRY REPORT 54111: LAW FIRMS IN THE US (2019), <https://jus-tice.co.il/wp-content/uploads/2022/06/54111-Law-Firms-in-the-US-Industry-Report.pdf> [<https://perma.cc/8LKR-WWJ2>]. In addition, approximately twelve percent of graduate lawyers are hired by municipal, state, and federal governments. *See Law by the Numbers: New ABA Profile of the Legal Profession*, A.B.A., <https://www.americanbar.org/news/abanews/aba-news-archives/2019/08/profile-of-the-profession-report/> [<https://perma.cc/SDL8-KPAK>] (last visited Apr. 10, 2024).

14. The planned merger of Penn State Law and Penn State Dickinson Law is not reflected in this data. *See* Laura Spitalniak, *Penn State Will Work to Re-Merge Its Law Schools*, HIGHER ED DIVE (Nov. 30, 2022), <https://www.highereddive.com/news/penn-state-recombines-law-schools/637673/> [<https://perma.cc/EZ3P-NZAE>]. Note also that Florida Coastal was excluded from the data in this Article because that school was winding down as its accreditation would soon be terminated. *See* AM. BAR ASS'N, NOTICE OF EXECUTIVE COMMITTEE DECISION: FLORIDA COASTAL SCHOOL OF LAW (2021), [https://www.americanbar.org/content/dam/aba/administrative/legal\\_education\\_and\\_admissions\\_to\\_the\\_bar/council\\_reports\\_and\\_resolutions/june-2021/2021-june-florida-coastal-teach-out-plan.pdf](https://www.americanbar.org/content/dam/aba/administrative/legal_education_and_admissions_to_the_bar/council_reports_and_resolutions/june-2021/2021-june-florida-coastal-teach-out-plan.pdf) [<https://perma.cc/ZH4N-ET53>].

hand knowledge or word-of-mouth. In the face of such scale and complexity, rankings are both inevitable and indispensable. They are inevitable because there is clearly a market for this information, as U.S. News has demonstrated.<sup>15</sup> Indeed, the U.S. News rankings in various fields have proved so successful that they have “outlived the print edition of U.S. News itself.”<sup>16</sup> Rankings are indispensable because students, lawyers, judges, and academics need some basis to make meaningful comparisons between schools where their personal knowledge is lacking.

Thus, the problem is not with rankings *per se*, but with how these systems are constructed and presented (or, in the case of U.S. News, how they are marketed). The U.S. News rankings, and several other rankings systems discussed in this Article, rely on dubious inputs and tend to fetishize minor differences in ordinal rankings that do not reflect actual differences in substance.<sup>17</sup> Their focus on minor differences between schools or small changes over time is worse than trivial: it is actively misleading. Several alternatives to U.S. News’s overall rankings have been proposed focusing on one distinct element: academic impact as measured by citation counts. These approaches tend to be more rigorous than the U.S. News survey methodology. However, the would-be usurpers have repeated the key failing of U.S. News: they also tend to fetishize minor differences in ordinal rankings. Furthermore, the most successful of these alternative rankings, the Sisk rankings, are premised on an arbitrary selection of which law schools deserve to be counted in the first place.<sup>18</sup>

This Article sets forth a new ranking system that is a timely alternative to the overall U.S. News rankings and to the various attempts that have been made to rank law schools by their academic impact in the past.<sup>19</sup> In contrast to U.S. News, the FLAIR rankings are based on publicly available, reliable, and objective data. Unlike other attempts to rank schools by academic influence, the FLAIR rankings consider the potential of all fully ABA-accredited law schools. Moreover, the FLAIR rankings are designed to impart meaningful information and thus enable readers to make rational comparisons between law schools, rather than simply creating a hierarchy for hierarchy’s sake. The legal community and those who aspire to join it place inordinate

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15. Megan McArdle, *Top Law Schools Bow Out of U.S. News Rankings. What’s the Thinking?*, WASH. POST (Nov. 20, 2022, 7:00 AM), <https://www.washingtonpost.com/opinions/2022/11/20/us-news-law-school-rankings-withdraw> [<https://perma.cc/XHP6-DW2U>].

16. *Id.*

17. See *infra* Section I.A (discussing flaws in U.S. News and other ranking systems).

18. For discussion of Sisk’s selection of schools, see *infra* note 41 and accompanying text. For an assessment of the impact of these exclusions, see *infra* notes 118-21 and accompanying text.

19. See *infra* Section I.A.

weight on trivial differences in ordinal rankings.<sup>20</sup> There is no meaningful difference between Northwestern and Duke reflected in the fact that one of these schools was ranked ninth by U.S. News and one was ranked twelfth,<sup>21</sup> or in the fact that Duke and Northwestern have swapped places in the U.S. rankings at various times. There are important differences between Northwestern and Duke in terms of location, physical environment, culture, and networks, but none of these intangibles are reflected in the difference between their U.S. News ranks.

This Article breaks new ground in two ways. First, it shows how rankings of law school faculties' academic impact can be based on valid, objective, publicly available data without being arbitrarily limited to a small subset of the fully ABA-accredited law schools. Second, it demonstrates how law school rankings can be constructed to emphasize meaningful differences and deemphasize essentially meaningless ones. This is achieved by constructing brackets or tiers of schools determined by the number of standard deviations above and below the mean.

To be clear, citation counts will reflect the structural inequalities that pervade the legal academy.<sup>22</sup> A glance at the most common first names among law school doctrinal faculty in the United States is illustrative. In order of frequency, the fifteen most common first names are Michael, David, John, Robert, Richard, James, Mark, Daniel, William, Stephen, Paul, Christopher, Thomas, Andrew, and Susan.<sup>23</sup> It should be immediately apparent that this group is more male and probably a lot whiter than a random sample of the U.S. population would predict. Citation counts are a measure of impact, not merit. This is not a problem with citation counts as such; qualitative assessments and reputational surveys suffer the same problem. There is no objective way to assess what the academic impact of individuals or faculties would be in an alternative universe free from racism, sexism, and ableism. A better system of ranking the academic impact of law school faculties will more accurately reflect the world we live in. While increased accuracy might help make the world better at the margins, it won't do much to fix underlying structural inequalities.

This Article proceeds as follows. Part I sets out the conceptual foundations of the FLAIR rankings, beginning with a survey of the

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20. In a letter to the Washington Post, Yale Professor James Forman Jr. explains that the U.S. News rankings "encourages students to make decisions based on the rankings—and nothing else" and gives a particularly vivid example. See James Forman Jr., *3 Reasons Yale Law Was Right to Quit the U.S. News Rankings*, WASH. POST (Nov. 25, 2022, 7:00 AM), <https://www.washingtonpost.com/opinions/2022/11/25/us-news-rankings-yale-law-quit/> [<https://perma.cc/CK66-8GEH>].

21. If you turned to this footnote to ascertain which was which, you have missed the point.

22. See *infra* Section I.B.1.

23. Author's calculation based on the data used in the FLAIR Rankings.

problems with existing rankings. This Part also addresses the validity of citations as a measure of academic impact. It then addresses two important questions that are simultaneously philosophical and operational: first, exactly whose citations should be counted to determine a faculty's academic impact? And second, how should faculty data be aggregated? Part II explains the data and methods used to create the FLAIR rankings. It explains how citation data for individuals was obtained from HeinOnline, why the HeinOnline citation data is arguably superior to the alternatives, how I obtained faculty data directly from law school websites, and how these data sources were matched and reconciled. This extensive discussion may strike some as a bit "in the weeds," but it is essential for transparency and replicability—two features almost completely absent from other ranking systems.<sup>24</sup> Part III sets forth a preliminary analysis of the faculty citation data, demonstrating that the data is fundamentally skewed and explaining why segmenting the data into tiers based on standard deviations from the mean produces more meaningful information than simply publishing an ordinal ranking of law schools. Finally, Part IV unveils the FLAIR rankings for 2023.

## I. CONCEPTUAL FOUNDATIONS

### A. *Problems with U.S. News and Other Assessments of Academic Impact*

The U.S. News rankings are determined by a complicated formula that takes into account such things as graduate employment statistics; "faculty resources"; student quality as measured by LSAT scores, GRE scores, and undergraduate GPA; and "opinions by law schools, lawyers and judges on overall program quality."<sup>25</sup> Within this scheme, the annual survey of the opinions of selective law school faculty members and Deans has historically accounted for twenty-five percent of the total.<sup>26</sup> According to U.S. News, its survey is sent to "[l]aw school deans, deans of academic affairs, chairs of faculty appointments and the most recently tenured faculty members."<sup>27</sup> Survey recipients are asked to rate every ABA law school on a scale from one to five, where one indicates

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24. There is one exception. On January 4, 2023, a previously unknown organization called Law School Views released the "Law School Views & Rankings Report" on X. Law School Views & Rankings Report (@lsviews), X (Jan. 4, 2023, 10:00 AM), <https://x.com/lsviews/status/1610652339848749056> [<https://perma.cc/MD3E-TYWU>]. Little is known about this organization. According to the tweet, the LSV rankings combine publicly available information on law faculties comprising employment, enrollment and graduate data, bar passage data, faculty citations, and journal citations. The faculty citations data links to data published with a previous version of this Article when the FLAIR rankings were at the proof-of-concept stage.

25. See Morse & Brooks, *supra* note 1.

26. *Id.*

27. *Id.*

“outstanding” and five indicates “don’t know.”<sup>28</sup> Arguably, scores from one to four should be averaged and the fives should be disregarded, but instead, U.S. News takes the mean from one to five, on the implicit assumption that the ignorance of the survey respondent reflects poorly on the school in question.<sup>29</sup>

As a former Associate Dean who worked closely with my law school’s marketing staff, I know from first-hand experience that a school’s reputation score is very hard to change and that reputation scores are not sensitive to improvements in faculty quality, even substantial ones.<sup>30</sup> The reason for this is simple: most people selected for the U.S. News surveys are almost entirely ignorant about other law school faculties, except perhaps for those inside their immediate geographic region.<sup>31</sup> The average survey respondent may have some personal knowledge of one or two faculty from a school within their field, or some vague awareness of the occasional superstar with a broader reputation. This ignorance is entirely rational: why would anyone invest time in learning about the merits of faculty outside their academic interest in law schools far away?<sup>32</sup> Deans may think that they know other schools better, but if you talk to them, you quickly realize they mostly just know other law deans and people who were in their field of expertise before they became deans. So, beyond the idiosyncratic and subjective personal knowledge described above, survey respondents rely on a general sense of reputation. This reliance ensures that schools with stronger reputations will get higher marks, but the reality behind these reputations is never tested and it is difficult to say, for example, how much of Boston College’s strong placement in U.S. News is due to its successful undergraduate football team. Indeed, the U.S. News survey is almost perfectly designed to ensure that the assessment of faculty quality in any given year will primarily reflect the law school’s ranking in previous years. This is more than conjecture. In 2019, Professors Paul Heald and Ted Sichelman showed empirically

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28. *Id.*

29. *Id.*

30. I was the Associate Dean for Faculty Research and Development at Loyola Chicago from 2019 to 2021.

31. I offer the following example. Recently, I asked a law professor friend at the University of Illinois in Urbana Champagne, ninety miles from Chicago, how much they knew about Loyola L.A. compared to Loyola Chicago. Even though the schools are unrelated, they share a Jesuit background and are roughly equivalent in size, student body, and median citation count. Predictably, this professor responded that they knew very little about Loyola L.A., but that they knew several people at Loyola Chicago. “Several” turned out to be three, and the third person named was a professor who retired from DePaul Law School in Chicago several years ago.

32. Ilya Somin, *US News Makes Beneficial Changes to Its Law School Rankings System*, REASON: VOLOKH CONSPIRACY (Jan. 2, 2023, 2:41 PM), <https://reason.com/volokh/2023/01/02/us-news-makes-beneficial-changes-to-its-law-school-rankings-system/> [<https://perma.cc/787R-SLHF>] (arguing that due to rational ignorance, “most of those surveyed have little idea of what goes on at most schools”).



that U.S. News reputation scores have very little to do with a faculty's actual academic impact and that they are little more than an echo of the overall U.S. News rankings in the previous year.<sup>33</sup> Heald and Sichelman found that peer assessments have a .96 correlation with the previous year's overall U.S. News ranking. Thus, despite their nominal weight of twenty-five percent, "because peer assessment essentially tracks that ranking, its effective weight in the overall ranking is very low."<sup>34</sup>

The obvious solution to the echo chamber problem is to forego dubious subjective opinion surveys and replace them with a more objective measure of academic impact, namely citation count data. U.S. News is apparently set to "reduce[] emphasis on the peer assessment surveys," but how exactly is not clear.<sup>35</sup> Rather than down-weighting the surveys, U.S. News should trash them altogether in favor of a more reliable and objective insight into the academic impact of law faculties. This insight is not novel: rankings based on citation counts are commonplace in other disciplines,<sup>36</sup> and several authors have proposed rankings of academic impact in law based on citation counts. For example, in 2021, Professor Gregory Sisk and his co-authors published the most recent version of their triannual ranking related to the "Scholarly Impact of Law School Faculties," based on citation counts found in Westlaw.<sup>37</sup> That effort derives from an earlier study by Professor Brian Leiter.<sup>38</sup> In 2019, Heald and Sichelman published an alternative ranking combining citation counts from HeinOnline and SSRN download counts.<sup>39</sup> Also in 2019, Professors J.B. Ruhl, Michael Vandenberg, and Sarah Dunaway showed that it was possible to construct a ranking

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33. See Heald & Sichelman, *supra* note 2, at 32-34; see also Christopher J. Ryan, *Of Law School Rankings, Disparity, and Football*, 110 GEO. L.J. ONLINE 19, 25-26 (2021). For additional criticisms, see, for example, Karen Sloan, *US News' Rough Year Just Got Worse: Law School Rankings Changed a Third Time*, LAW.COM (Mar. 29, 2021, 11:00 AM), <https://www.law.com/2021/03/29/us-news-rough-year-just-got-worse-law-school-rankings-changed-a-third-time/?srlreturn=20210817163005> [<https://perma.cc/DDY5-9WT4>].

34. Heald & Sichelman, *supra* note 2, at 33.

35. In a letter to law school deans on January 9, 2023, U.S. News representatives explained how they would continue ranking schools that declined to cooperate by providing information and that "there will be some changes in how we weight certain data points, including a reduced emphasis on the peer assessment surveys of academics, lawyers and judges, and an increased weight on outcome measures." See Scott Jaschik, *Will Law Schools Respond to 'U.S. News' Changes?*, INSIDE HIGHER ED (Jan. 8, 2023), <https://www.insidehighered.com/admissions/article/2023/01/09/us-news-changes-approach-law-school-rankings> [<https://perma.cc/MD4V-PL97>].

36. See, for example, the QS World University Rankings by Subject which combines two different citation metrics with more subjective measures of reputation and network strength. Chloe Lane, *How to Use the QS World University Rankings by Subject*, TOP UNIVERSITIES, <https://www.topuniversities.com/subject-rankings/methodology> [<https://perma.cc/DNR7-HJ6S>] (last updated Apr. 11, 2024).

37. See Sisk et al., *Scholarly Impact in 2021*, *supra* note 2.

38. See Leiter, *Measuring Academic Distinction*, *supra* note 2.

39. See Heald & Sichelman, *supra* note 2.

of law school faculties based on their citation in non-law publications using citation counts and other author information available through the Web of Science database.<sup>40</sup> Some of these proposals are a genuine improvement on the U.S. News surveys, but all of them suffer from two fundamental limitations. First, like U.S. News, each of them presents their rankings in a manner that suggests that small differences in ordinal rankings are meaningful; this Article shows they generally are not. Second, none of these proposed rankings systems are comprehensive.

Professor Sisk ranks an arbitrary list of schools considered potentially good enough to make it into the top third; he then reports the top sixty-eight from that list.<sup>41</sup> However, the initial selection of which schools might be worth considering is based on Professor Sisk's own intuition and his perception of school reputations.<sup>42</sup> This is obviously not much better than the U.S. News surveys, except that it allows room for Professor Sisk's insight that his own law school, which was not in the U.S. News top 100 when he published his last set of rankings, might be worth considering.<sup>43</sup> The Heald and Sichelman ranking is based on the U.S. News top 100, which is more defensible than simply picking schools based on a hunch or past impressions, but again this incorporates the flaws in U.S. News as much as it addresses them.<sup>44</sup> The Ruhl, Vandenberg, and Dunaway study of non-law citations of law faculty is certainly interesting; but once again it is limited to, and premised on, the U.S. News rankings of the top twenty-five law schools.<sup>45</sup>

Calculating academic impact ranks for some schools without even considering others is deeply problematic. One might speculate that law schools outside the top twenty-five, the top third, or the top 100 do not

40. See Ruhl et al., *supra* note 2.

41. See Sisk et al., *Scholarly Impact in 2021*, *supra* note 2. For an assessment of the impact of these exclusions, see *infra* notes 118-21 and accompanying text.

42. Professor Sisk elaborated on this issue in his comments on PrawfsBlawg in response to the proof-of-concept version of the rankings proposed in this Article. He explained that "Loyola-Chicago[] was not included in this year's study" because "we ha[d] included Loyola-Chicago in the past, where it did not approach the top third ranking." See Greg Sisk, Comment to *A Fair and Inclusive Alternative to the Sisk Academic Impact Rankings*, PRAWFSBLAWG (Sept. 28, 2021) [hereinafter *A Fair and Inclusive Alternative*], <https://prawfsblawg.blogs.com/prawfsblawg/2021/09/draft-postlong-version-author-matthew-sag-title-a-fair-and-inclusive-alternative-to-the-sisk-academic-impact-ranki.html> [https://perma.cc/2HW4-9KCA]. Professor Sisk has graciously acknowledged that "faculties change, and, based on Professor Sag's findings, I agree that we should include Loyola-Chicago again. And I promise we will next time around." *Id.* But of course, how would we know that faculties change if we don't look at them?

43. Professor Sisk is based at the University of St. Thomas, Minnesota, which was ranked at 127th by U.S. News, although that ranking is now higher. The University of St. Thomas fares substantially better on the Sisk rankings, and indeed on the FLAIR rankings. See *infra* Figure 9.

44. Heald & Sichelman, *supra* note 2.

45. See Ruhl et al., *supra* note 2.

prioritize scholarship or academic impact, or that even if they do, their efforts are such that they are better off not being ranked.<sup>46</sup> In addition to being astonishingly condescending, such speculation runs contrary to well-accepted economic theory with respect to the unraveling of private information.<sup>47</sup> Assume for the sake of argument that the rankings were initially cut off at 70: the school ranked 71st is much better off having that ranking disclosed than simply being unranked and thus subject to an implied ranking of the average of 71 and 191 (i.e., 131st). If the rankings are then expanded to include the 71st ranked school, the same logic applies to the school ranked 72nd, and so on. The situation unravels because every school with a rank higher than the average of the unranked is made better off by expanding the rankings until only one school is left unranked. If there are good reasons to cut rankings short, it is not because we are doing anyone a favor. Moreover, even if there are valid reasons for not drawing undue attention to ordinal rankings within the bottom tier, those schools still need to be part of the calculation in order to make statistically valid calculations about the distribution of the data as a whole.

### *B. The Validity of Citations as a Measure of Academic Impact*

#### *1. Objections to Quantification*

The prospect of data-driven decisionmaking raises some justifiable concerns. Using simple measurements to capture complex human qualities or interactions is inherently reductive, and in some contexts, perhaps even dehumanizing.<sup>48</sup> Several recent best-selling books warn of “algorithms of oppression,” “automating inequality,” “weapons of math destruction,” “the new Jim Code,” and the ills of “surveillance capitalism.”<sup>49</sup> True enough, data can be biased, and data can be used

46. Responding to a previous version of this Article, Professor Sisk speculated that he “would not be surprised if most of the schools in Professor Sag’s bottom 100 would have been just as pleased to be omitted.” See Greg Sisk, Comment to *A Fair and Inclusive Alternative*, *supra* note 42.

47. See George Akerlof’s Nobel Prize winning work, *The Market for Lemons*, establishing that there is always an incentive for the highest quality member of any undifferentiated group to reveal their quality, and that this self-revelation unravels such that all but the lowest ranked member prefers revelation in normal conditions. George A. Akerlof, *The Market for “Lemons”: Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970).

48. Candidates subject to AI assessments of employment interviews report finding the process “alienating and dehumanizing.” See Ifeoma Ajunwa, *Automated Video Interviewing as the New Phrenology*, 36 BERKELEY TECH. L.J. 1173, 1180 (2021).

49. CATHY O’NEIL, *WEAPONS OF MATH DESTRUCTION: HOW BIG DATA INCREASES INEQUALITY AND THREATENS DEMOCRACY* (2016); VIRGINIA EUBANKS, *AUTOMATING INEQUALITY: HOW HIGH-TECH TOOLS PROFILE, POLICE, AND PUNISH THE POOR* (2017); SAFIYA UMOJA NOBLE, *ALGORITHMS OF OPPRESSION: HOW SEARCH ENGINES REINFORCE RACISM* (2018); RUHA BENJAMIN, *RACE AFTER TECHNOLOGY: ABOLITIONIST TOOLS FOR THE NEW JIM CODE* (2019); SHOSHANA ZUBOFF, *THE AGE OF SURVEILLANCE CAPITALISM: THE FIGHT FOR A*

in irresponsible ways, in ways that harm the integrity of the data subject, or in ways that lead to arbitrary, biased, and unfair decisions.<sup>50</sup> But data can also confront bias and inequality.<sup>51</sup> In the context of academic impact rankings, the careful use of citation data has the potential to free us from the tyranny of reputation, allowing for law school faculties to be judged on their recent achievements, not their marketing budgets or the strength of their universities' basketball teams.<sup>52</sup>

The validity of citation counts as a measure of academic impact is distinct from the more existential question of whether academic impact itself is important. Certainly, academic impact is not the *only* criteria by which to judge a law school. Citations may not say much of anything about real-world impact. Some schools provide a solid legal education but place far less emphasis on the production of legal scholarship. However, in my own field of expertise, copyright law, I doubt that anyone can be an effective teacher without keeping up with the academic literature, and this usually goes hand-in-hand with being part of the academic conversation. If this intuition is correct, it explains the results of studies indicating a positive correlation between citation counts and measures of teacher performance.<sup>53</sup> Those who disdain legal scholarship and claim it has no value to the outside world will probably never read the studies demonstrating the relevance of

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HUMAN FUTURE AT THE NEW FRONTIER OF POWER (2019). For a more optimistic take on the potential of AI, see ORLY LOBEL, *THE EQUALITY MACHINE: HARNESSING DIGITAL TECHNOLOGY FOR A BRIGHTER, MORE INCLUSIVE FUTURE* (2022).

50. There is now a significant literature addressing these concerns and demands for "Fairness, Accountability, and Transparency" in machine learning and a parallel literature addressing legal implications. A good starting point on the former is SOLON BAROCAS, MORITZ HARDT & ARVIND NARAYANAN, *FAIRNESS AND MACHINE LEARNING: LIMITATIONS AND OPPORTUNITIES* (2019), and for the latter, Danielle Keats Citron, *Technological Due Process*, 85 WASH. U. L. REV. 1249 (2008).

51. See LOBEL, *supra* note 49. Among several examples, Lobel recounts the story of how Nancy Hopkins, a tenured biology professor at MIT in 1994, used a tape measure to compare the size of her lab to those of her male colleagues. Hopkins found that she had less than half the lab space of her male colleagues. She even had less than the average junior male professor. *Id.* As Lobel summarizes, "Hopkins's measuring tape catalyzed measurable, systemic change." *Id.* at 74.

52. At the undergraduate level, studies generally show that winning a football or basketball national championship increases the quantity and quality of applications. See, e.g., Devin G. Pope & Jaren C. Pope, *The Impact of College Sports Success on the Quantity and Quality of Student Applications*, 75 S. ECON. J. 750 (2009). This is not just a question of whether well-funded and well-run schools are doing better at everything; applications and freshman enrollments increase at schools that perform unexpectedly well at the NCAA Basketball Tournament. Trevor Collier, Nancy Haskell, Kurt W. Rotthoff & Alaina Baker, *The "Cinderella Effect": The Value of Unexpected March Madness Runs as Advertising for the Schools*, 21 J. SPORTS ECON. 783 (2020).

53. Benjamin Barton, *Is There a Correlation Between Law Professor Publication Counts, Law Review Citation Counts, and Teaching Evaluations? An Empirical Study*, 5 J. EMPIRICAL LEGAL STUD. 619, 619 (2008); James Lindgren & Allison Nagelberg, *Are Scholars Better Teachers?*, 73 CHI.-KENT L. REV. 823, 823 (1998).

legal scholarship to attorneys, judges, and others.<sup>54</sup> Anyone who believes that legal scholarship is intrinsically unimportant probably gave up on this Article long before now, but perhaps some readers still harbor doubts that the effervescent qualities of academic impact can really be captured by reductive statistics on citation counts. A citation to a particular work usually indicates that the work being cited says something interesting or important. Of course, some citations are mere fluff and other citations may be critical or disparaging. No one citation is a guarantee of quality or novelty, but on average, law review articles with more citations in the legal literature are more relevant, more interesting, or more important than those with fewer. In other words, although not every single citation means the same thing or carries the same weight, citation counts are nonetheless a valid measure of academic impact on the whole.

## 2. *Impact Versus Merit*

Many objections to using citation counts to measure academic impact stem from the confusion between impact and merit. The legal academy is hardly immune to structural inequality.<sup>55</sup> Citation counts will almost inevitably reflect other structural biases in modern American society. Thus, measuring academic impact through citation counts will reflect existing patterns of unfairness against women, minorities, people with disabilities, and those with intersectional identities.<sup>56</sup> Academics with better resources, more free time, and more impressive letterheads have a clear advantage in the production and placement of legal scholarship. The fact that these advantages carry forward into citation counts does not show that privileged faculties and privileged individuals within faculties are more meritorious, but their greater influence and impact is hard to deny. To elaborate, women and minorities may be disadvantaged in terms of the time and resources

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54. Lee Petherbridge & David L. Schwartz, *An Empirical Assessment of the Supreme Court's Use of Legal Scholarship*, 106 NW. U. L. REV. 995, 1016-19 (2012); David L. Schwartz & Lee Petherbridge, *The Use of Legal Scholarship by the Federal Courts of Appeals: An Empirical Study*, 96 CORNELL L. REV. 1345, 1359-64 (2011).

55. See Meera E. Deo, *Intersectional Barriers to Tenure*, 51 U.C. DAVIS L. REV. 997 (2018) (arguing that compared to the issue of student diversity, little attention has been given to the racial and gender identity of law faculty); see also MEERA E. DEO, *UNEQUAL PROFESSION: RACE AND GENDER IN LEGAL ACADEMIA* (2019) (providing an overview); Keerthana Nunna, W. Nicholson Price II & Jonathan Tietz, *Hierarchy, Race, and Gender in Legal Scholarly Networks*, 75 STAN. L. REV. 71, 71 (2023) (concluding, based on an analysis of star notes in law review articles, that “[h]ierarchy, race, and gender all have substantial impacts on who gets acknowledged and how, what networks of knowledge co-production get formed, and who is helped on their path through the legal academic world”).

56. See sources cited *supra* note 55.

available for legal scholarship,<sup>57</sup> bias in the article selection process,<sup>58</sup> and bias in citations to published works.<sup>59</sup> It is not hard to see how privilege is self-reinforcing. Junior faculty and those looking to move up in the world may be more likely to cite the work of more senior scholars who they think might end up writing tenure/promotion/lateral letters for them or scholars at higher-ranked schools where they would like to be hired. Likewise, we are all more likely to cite scholars we meet at conferences, but participation at conferences is a function of status and resources. Moreover, those of us with disabilities or family obligations are not as free to attend conferences as others.

However, these and other structural inequalities do not undermine the importance of academic impact; they simply reinforce the importance of distinguishing between academic impact and much more elusive notions of academic merit. Individual merit is a contested concept that no simple measure like citation counts or publication totals could hope to measure with precision or free from distortion.

Structural inequality is not the only concern. For individuals, citation counts are something of a lagging indicator. Citation counts should not be used to evaluate the potential of junior scholars because academics who have not held tenure-track positions for very long usually have not had the opportunity to produce a body of scholarship that would generate citations. Conversely, citations to senior scholars may not reflect current endeavors if these individuals are simply coasting on articles from the distant past. In both cases, citation counts remain a valid measure of current impact, although they may be worse as a signal of merit or as a predictor of future impact. Just as citation counts are affected by length of experience, they are also contingent on field of study. Citations in some fields of inquiry are easier to come by than in others because more people write in those fields. In the American legal academy, scholars of the Law of the Sea are writing for a much narrower audience than those who write about more fashionable

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57. The minority tax in academia is well-documented. See Virginia Gewin, *The Time Tax Put on Scientists of Colour*, 583 NATURE 479, 480 (2020) (explaining the “Black Tax” that results when marginalized people “are asked by institutions, colleagues and peers to do work that is uncompensated, unacknowledged and unrewarded”).

58. Shontee M. Pant, Note, *Calculating the Gender Gap in Legal Scholarship: An Empirical Study*, 65 ST. LOUIS U. L.J. 199 (2020).

59. See generally LawProfBlawg & Darren Bush, *Law Reviews, Citation Counts, and Twitter (Oh my!): Behind the Curtains of the Law Professor’s Search for Meaning*, 50 LOY. U. CHI. L.J. 327 (2018) (contending that scholarship metrics are biased against women, minorities, non-doctrinal faculty, and faculty from lower-ranked schools). The evidence for this last point is far from compelling. Compare Deborah Jones Merritt, *Scholarly Influence in a Diverse Legal Academy: Race, Sex, and Citation Counts*, 29 J. LEGAL STUD. 345, 347 (2000) (finding a small effect for race and gender), with Christopher A. Cotropia & Lee Petherbridge, *Gender Disparity in Law Review Citation Rates*, 59 WM. & MARY L. REV. 771, 771 (2018) (finding that “articles authored by women receive significantly more citations than articles authored by men”), and Ian Ayres & Fredrick E. Vars, *Determinants of Citations to Articles in Elite Law Reviews*, 29 J. LEGAL STUD. 427, 427-29 (2000). However, it would be surprising to me if it was not true.

topics such as intellectual property.<sup>60</sup> Once again, this demonstrates that the relationship between citation counts and abstract notions of importance, quality, and merit may be quite fuzzy. If we used citation counts to measure these latent qualities, we would have to acknowledge some questions as to validity and the likelihood of substantial errors in measurement caused by confounding factors—some known and some unknown. Without downplaying the reality of structural inequality, differential experience, or differences between fields—all of which may decouple intrinsic merit from discernable impact—as long as we remain clear-eyed about the difference between merit and impact, citation counts are a reliable and valid measure of the latter.

Professors Adam Chilton and Jonathan Masur suggest that an ideal ranking system would somehow control for seniority, race, gender, and field.<sup>61</sup> The suggestion is misguided, even apart from the obvious practical objections about the difficulty of collecting the necessary data and resolving a whole new set of arguments about the correct way to make any such adjustments. The suggestion is misguided because these controls would essentially be an attempt to adjust the data to reflect a latent variable of academic merit more accurately. Academic impact and academic merit are no doubt correlated in the aggregate, but as explained above, we should not confuse one for the other.

Some may object that if we quantify academic impact, law schools will make hiring decisions to maximize what they can measure, rather than pursuing more worthy inchoate virtues like academic merit. This sounds like an objection grounded in lofty ideals, but the problem with insisting that one can safely ignore academic impact and select for merit without reference to impact is that merit is in the eye of the beholder. Insisting that faculty hiring decisions should routinely be made without reference to objective indicia of academic impact is usually little more than asking for a license to engage in unchecked and unaccountable self-replication or virtue signaling. Even setting aside problems of accountability and moral hazard, those who advocate for assessing scholars on subjective assessments of merit completely divorced from actual evidence of impact should ask themselves whose interests would be served by such choices. All other things being equal, it is difficult to see how our students, our universities, or society at large benefit from hiring hypothetical high-quality, low-impact

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60. There are several dozen specialty journals relating to intellectual property and only two relating to the Law of the Sea: the *Ocean and Coastal Law Journal* published by the University of Maine School of Law and the *USF Maritime Law Journal* published by the University of San Francisco.

61. See Adam Chilton & Jonathan Masur, *What Should Law School Rankings Measure and How Should We Measure It: A Comment on Heald and Sichelman's Rankings*, 60 *JURIMETRICS* 61, 64 (2019).

scholars. To be clear, law faculties should not ruthlessly optimize for citation metrics in the same way that they have reverse engineered the U.S. News rankings.<sup>62</sup> If a candidate has statistics but no substance, they should be passed over. Our students and our intellectual culture benefit from diverse methodologies, interests, and backgrounds, in addition to racial and gender diversity; we should not maximize measurable academic impact to the point of neglecting these factors.

### 3. *Aggregate Validity Versus Individual Validity*

For all the reasons discussed in the previous subsection, using citation counts to assess the merit and contribution of individual scholars can be a fraught undertaking. If we are really interested in the impact of individual scholars, we need to assess the objective evidence in context; that context comes from reading their work and understanding the field as a whole. In contrast, no one could be expected to read the works of an entire faculty to get a sense of its academic influence. Indeed, citation counts or other similarly reductive measures are the only feasible way to make between-faculty comparisons with any degree of rigor. The key point is that not only are citation counts more necessary in faculty-to-faculty comparisons, but they are also far more valid. Aggregating the data at the faculty level reduces the impact of individual distortions, much like a mutual fund reduces the volatility associated with individual stocks.<sup>63</sup>

Aggregate validity is important to keep in mind when considering the pros and cons of particular methodological choices. When we transition from thinking about citation counts in the abstract to thinking about any specific method of counting citations, we are forced to reconcile with the inherent limitations and distortions of any given source of data. As discussed in more detail below, the data underlying the FLAIR rankings comes from HeinOnline. This particular data source focuses on U.S. law reviews and does not capture citations to books, articles outside law, or overseas publications. For some individual scholars, this leads to a significant distortion. On my own faculty, Professor John Witte is a leading scholar of legal history, religious freedom, and law and religion.<sup>64</sup> Professor Witte has published 40 books and over 300 articles, but mostly in non-law review forums. As a result, although he has been cited 1,953 times in the last five years in the broader universe captured by Google Scholar,<sup>65</sup> making him the second

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62. For examples, see *infra* note 96.

63. Harry M. Markowitz, *Portfolio Selection*, 7 J. FIN. 77 (1952).

64. *John Witte Jr.*, EMORY L., <https://law.emory.edu/faculty/faculty-profiles/witte-profile.html> [<https://perma.cc/CB2N-APQU>] (last visited Apr. 10, 2024).

65. See *John Witte Jr.*, GOOGLE SCHOLAR, <https://scholar.google.com/citations?user=UnW8OKMAAAAJ&hl=en&oi=ao> [<https://perma.cc/5WBZ-HAUW>] (last visited Apr. 10, 2024).



most cited member of the Emory Law faculty on that metric, his HeinOnline five-year citation count is comparatively low and places him below the median.<sup>66</sup> This illustrates the major drawback of using HeinOnline: it only captures citations *of* and *in* law review articles.<sup>67</sup> Looking at HeinOnline citation count numbers alone gives a misleading and unfair impression of Professor Witte's contribution, but no one should try to assess the impact of an individual legal academic this way! They should look at citations in the Westlaw database and Google Scholar, and they should, at a minimum, read book reviews and letters of recommendation. With apologies to Professor Witte, although using any particular data source will occasionally disadvantage some individuals, these distortions are far less consequential in the aggregate, at the law faculty level. So long as each faculty has a diverse portfolio of scholars, differences between fields of inquiry or the idiosyncrasies of any particular data source should not have a meaningful impact on between-faculty comparisons.

### C. Whose Citations Should Be Counted?

For the purposes of this Article, the "faculty" of a law school consists of those people identified by their school as professors, assistant professors, and associate professors, but excluding faculty who are generally considered non-doctrinal, i.e., clinical professors, professors of practice, and legal writing faculty. In most law schools, clinical professors, professors of practice, and legal writing faculty are employed on long-term contracts and are not tenured or eligible for tenure.<sup>68</sup> The appropriateness of maintaining this distinction is beyond the scope of this Article. This Article adopts a narrow and somewhat traditional definition of the faculty because the production of legal scholarship is a core element of the job description, criteria for appointment, and retention of tenure-track doctrinal faculty. Conversely, the production of

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66. Professor Witte is sixteenth out of twenty-five Emory Law doctrinal faculty who have been on the tenure track for more than six years.

67. To be clear, there are even more considerable problems with using Google Scholar at present. The most obvious is that many law professors, possibly even the majority, have not set up Google Scholar profiles.

68. LawProfBlawg, *Legal Writing Professors: A Story of A Hierarchy Within A Hierarchy*, ABOVE L. (Sept. 4, 2018, 4:04 PM), <https://abovethelaw.com/2018/09/legal-writing-professors-a-story-of-a-hierarchy-within-a-hierarchy/> [<https://perma.cc/AZS5-9DU8>]; Deborah J. Merritt, *Caste Revisited*, LAW SCH. CAFE (Aug. 13th, 2021), <https://www.lawschool-cafe.org/tag/caste-system/> [<https://perma.cc/2DQ4-XGQ2>] (describing a hierarchy that favors professors who teach doctrinal course over "those who teach legal writing, clinics, and other legal 'skills'" and complaining that "[t]his favoritism includes higher pay, more job security, and greater respect").

legal scholarship is not typically considered a core job requirement of clinical faculty, library professors, professors of practice, or legal writing faculty.<sup>69</sup>

Prior studies of the academic impact of law faculties have distinguished between tenured and pre-tenure faculty. This is reasonable, given that pre-tenure faculty will often have low citation counts due to their relative inexperience, but it raises problems with respect to transparency and replication. Most law schools do not publicly disclose the tenure status of their faculty members.<sup>70</sup> Accordingly, to distinguish between tenured and pre-tenure faculty in a comprehensive ranking of 191 schools would require each of those schools to voluntarily submit that information. Some schools are unlikely to cooperate with such an enterprise and many others would only do so under conditions of confidentiality that would undermine the transparency and replication of this study.<sup>71</sup> Rather than accepting this compromise, the FLAIR rankings simply exclude assistant professors and professors hired at the entry level in the 2017 academic year and thereafter.<sup>72</sup> Faculty hired within the last six years are likely to have low citation numbers due to their relative inexperience, regardless of their tenure status. At most law schools, tenure-track research faculty are hired as assistant professors and remain at that rank for at least three years. Although some schools allow for early tenure, the vast majority of law professors become eligible for tenure in either their fifth or sixth year. This approach is preferable to simply excluding associate professors because associate professor means very different things at different schools. Some law schools start their entry-level faculty at the rank of associate professor; in others the rank is synonymous with being untenured. However, there are many schools where promotion to full professor is not part-and-parcel of achieving tenure, and at these schools, promotion to full professor is reserved for the most consistent and productive faculty.

The FLAIR rankings are “forward-looking” in the sense that they take into account publicly announced faculty moves and retirements

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69. Some schools, such as the University of South Carolina Law School, do not draw any distinction between clinical and doctrinal faculty. Where schools have specifically indicated that this is their policy, their clinical faculty are included as part of the doctrinal faculty for the purposes of the FLAIR Rankings.

70. This observation is based on my review of 191 school faculty websites in September 2022.

71. Professor Sisk informs me in private correspondence that law schools insist that any faculty data they provide to him be kept confidential.

72. Data on entry-level hiring was obtained from the Entry Level Hiring Reports for 2017 to 2022 collected by Sarah Lawsky. *See, e.g.*, Sarah Lawsky, *Lawsky Entry Level Hiring Report 2022*, PRAWFSBLAWG (Sept. 22, 2022), <https://prawfsblawg.blogs.com/prawfsblawg/entry-level-hiring-report/> [<https://perma.cc/PH84-AXEU>]. Additional information on faculty hiring date was added manually by the author.

that will become effective by the beginning of the 2023 academic year. This editorial choice was made to ensure that the FLAIR rankings would be timely and relevant at the date of publication.

#### D. How Should Faculty Data Be Aggregated?

The conceit behind any measure of faculty impact is that a single number derived from the citation data of the faculty meaningfully represents the faculty. Conceivably, that number could be the total, the mean, the median, or even the mode—or it could be a meta-statistic that combines some or all of these features. If our objective here is to convey a sense of the academic impact of the typical faculty member, then the mean and the median are the obvious contenders. As discussed further in Part III, the distribution of citations within most faculties is significantly skewed, with a handful of relative stars accounting for a disproportionate number of citations. In light of this fact, the median, as opposed to the mean, provides a more reliable measure of the central tendency of the faculty as a whole. The median is the best simple measure of the central tendency for a group with a skewed distribution; this is why the U.S. Census Bureau reports median household income and not the mean.<sup>73</sup>

Nonetheless, although the median is a better measure than the mean by itself, a combined statistic based on median and mean is probably even better. Combining the median and mean differentiates between faculties with identical medians, and it also acknowledges the impact of having an academic superstar on the faculty. For example, if we arbitrarily swapped DePaul's Mark Weber with Stanford's Mark Lemley, the medians of Stanford and DePaul would not change. Professor Lemley's HeinOnline five-year citation count is 5,297, and Professor Weber's is 225; both are above the median for Stanford (190.5), and for DePaul (60), but with apologies to Professor Weber, it seems implausible that DePaul's scholarly impact would not be significantly improved by this trade. It makes sense to combine the mean and median to reflect this. Thus, the FLAIR rankings are based on an evenly weighted combination of the median and the mean.<sup>74</sup>

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73. JESSICA SEMEGA & MELISSA KOLLAR, U.S. CENSUS BUREAU, INCOME IN THE UNITED STATES: 2021 (2021), <https://www.census.gov/content/dam/Census/library/publications/2022/demo/p60-276.pdf> [<https://perma.cc/569N-LWBL>].

74. Note that the Sisk rankings are based on a formula that gives more weight to the mean,  $x = \text{median} + \text{mean}^2$ . This difference produces only trivial differences in the ultimate ranking. See *infra* note 115 and accompanying text. The precise intuition behind the Sisk formula is unclear, beyond the assertion that that the "mean is more probative of overall impact than median." Sisk et al., *Scholarly Impact in 2021*, *supra* note 2, at 1061 (quoting Leiter, *Top 25 Law Faculties*, *supra* note 2).

## II. DATA COLLECTION

The FLAIR rankings are derived from citation data from HeinOnline and law school faculty information gleaned from 191 separate faculty websites. Being mindful of the axiom that there is no such thing as “raw data,”<sup>75</sup> this Part describes these data sources and how they were reconciled in considerable detail.

### A. Citation Data

The FLAIR rankings are derived from citation data made available by the research platform HeinOnline.<sup>76</sup> Other more limited studies have also used the HeinOnline data;<sup>77</sup> however, the Sisk rankings rely on data from derived from Westlaw. Responding to an earlier version of this Article that explored a prototype of the FLAIR rankings,<sup>78</sup> Professor Brian Leiter argued that the data underlying the Sisk Rankings is more accurate and more complete than its HeinOnline equivalent.<sup>79</sup> This claim is implausible on a point-by-point comparison. As discussed below, there are at least as many reasons to prefer the HeinOnline data as there are to prefer data extracted from Westlaw. More importantly, the claim reveals a fundamental misunderstanding of the empirical question at hand. Both Westlaw and HeinOnline are imperfect; citation counts from either database might distort an assessment of some individuals. However, as explained in Part I, the relevant question for the purpose of ranking faculties is whether such inaccuracies lead to distortions in the aggregate, at the faculty level. The TLDR of the remainder of this Section is that HeinOnline is marginally preferable to Westlaw, but if we view the faculty as a portfolio and keep our focus on faculty-to-faculty comparisons, most of the supposed advantages of one data source over the other are rhetorical, not real.

The key advantage of the HeinOnline data is that it is generated automatically by matching the citation (e.g., “103 Nw. U. L. Rev. 1607”) of each article in the HeinOnline network to the contents of all

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75. There is no such thing as raw data because all data has been selected, filtered, and processed in some way. See generally “RAW DATA” IS AN OXYMORON (Lisa Gitelman ed., 2013); Nick Barrowman, *Why Data Is Never Raw*, 56 NEW ATLANTIS 129 (2018).

76. The data was downloaded in March 2023. The data is available to HeinOnline subscribers in easily downloadable csv files for each institution. See *Author Profiles by Institution*, HEINONLINE, <https://heinonline.org/HOL/AuthorBySchool> [<https://perma.cc/3EQE-8SED>] (last visited Apr. 10, 2024).

77. See Heald & Sichelman, *supra* note 2.

78. Matthew Sag, *Inclusive Citation Rankings of U.S. Law Schools* (May 16, 2022) (unpublished manuscript), <https://ssrn.com/abstract=3929021> [<https://perma.cc/VPB7-ZTW9>] (proposing an alternative to the Sisk rankings as a proof of concept to highlight the consequences of Sisk’s arbitrary exclusion of some schools from consideration).

79. Brian Leiter, *Sag v. Sisk on Scholarly Impact Rankings*, BRIAN LEITER’S L. SCH. REPS. (Sept. 29, 2021), <https://leiterlawschool.typepad.com/leiter/2021/09/sag-v-sisk-on-scholarly-impact-rankings.html> [<https://perma.cc/X4C4-7GPG>] (arguing in various ways that “Hein has more problems than the Westlaw database”).

of the articles in that network. In contrast, Westlaw is not currently designed to generate this kind of data,<sup>80</sup> so extracting it involves a laborious process of querying the Westlaw database for “Law Reviews and Journals” for the names of each faculty member.<sup>81</sup> Because those results are necessarily over-inclusive, Professor Sisk and his research assistants must then perform additional checks to weed out false positives and disambiguate between authors with common names.<sup>82</sup> Using HeinOnline circumvents the need for this labor-intensive process and thus makes it more feasible to rank all fully accredited law schools, rather than just a subset. The matching method used by HeinOnline is not just more efficient than querying Westlaw thousands of times, it is more reliable because it does not depend on human intervention.

It is important to note at the outset that citation data derived from both Westlaw and HeinOnline is confined to law reviews based in the United States.<sup>83</sup> This means that both sources will fail to count citations in books and citations in periodicals and journals from other disciplines. In theory, this could disadvantage law faculties with an interdisciplinary focus. However, in reality, most law faculty who are highly cited in fields other than law are also highly cited within the legal community, and so excluding their non-legal citations probably has only a marginal effect on the median or mean of the faculty. Furthermore, authorship and citation norms can vary quite significantly across disciplines, raising the question of how one should compare citations in disciplines like economics, physics, chemistry, and psychology to citations in law.<sup>84</sup> There is no doubt that relying on citation data from law reviews understates the academic impact of law faculties,<sup>85</sup> but it captures the heart of the impact of legal scholarship: its

80. Westlaw could easily incorporate such a feature.

81. Sisk et al., *Scholarly Impact in 2021*, *supra* note 2, at 1051. Of course, these queries could be automated using Python or some other programming language, but my impression is that Professor Sisk and his team conduct these searches manually, possibly in deference to Westlaw’s rather vaguely worded terms of service prohibiting the use of “any robot, spider, other automatic software or device, or manual process to monitor or copy our website or the content, information, or services on this website.” See *Terms of Use*, THOMSON REUTERS, <https://legal.thomsonreuters.com/en/legal-notice/terms-of-use> [https://perma.cc/L6VL-4ETV] (last visited Apr. 10, 2024).

82. Several professors have names in common—remarkably, there are three professors named William Hubbard—and several have names that might appear in the text for other reasons, most notably John Roberts.

83. The author’s review of the first 300 journals listed under the Westlaw “JLR” (Journals & Law Reviews) database identified only three journals that appear likely to be based in jurisdictions other than the United States: the *Asian Journal of WTO & International Health Law & Policy*; the *Asian Pacific Law & Policy Journal*; and the *British Journal of American Legal Studies*.

84. Consider the fact that in some lab-focused fields, individuals may receive an author credit without doing any of the research or writing.

85. These omissions can be substantial, and indeed, academics who compare their citation counts on Google Scholar to Westlaw or HeinOnline will notice that the Google Scholar numbers are much higher. This is partly because Google finds citations outside the coverage of Westlaw and HeinOnline, and partly because of double counting in Google Scholar.

influence on other legal scholarship. Also, that understatement is moderated in any faculty-to-faculty comparison. For the undercounting to affect the ultimate ranking, it would have to adversely affect the mean or the median of one faculty more than its nearest neighbor. Moreover, focusing on academic impact in law journals has more intrinsic validity than a broad measure of academic impact that fails to distinguish between publications with obvious impacts on legal scholarship and those with none.<sup>86</sup>

The principal argument in favor of using Westlaw is that this method picks up citations to books and non-law journals within law journal articles, whereas HeinOnline does not.<sup>87</sup> As noted already,<sup>88</sup> this feature of the HeinOnline data disadvantages faculty members who primarily publish in books or in non-law journals, but only a very few productive faculty members are so specialized. Moreover, any such distortion at the individual level is diluted in terms of the faculty mean and is unlikely to affect the faculty median of one school more than its nearest neighbor. Furthermore, this disadvantage must be offset against the several advantages of using HeinOnline.

HeinOnline is preferable to Professor Sisk's method of gleaning citations from Westlaw because this method overlooks many second and third co-authors. These authors do not appear in text searches because for many years they were elided by the *Bluebook's* insistence on using "et al." for articles with three or more authors.<sup>89</sup> Earlier versions of the Sisk Rankings did not give any credit to second, third, etc. authors of multi-author articles. Thanks to data derived from HeinOnline by Ted Sichelman, the Sisk Rankings now include citations to multi-author articles published in a specific five-year window that have at least twenty citations in HeinOnline.<sup>90</sup> This kludge<sup>91</sup> is a clear improvement, but it is still cold comfort to those whose work falls outside that

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86. For example, compare Andrew D. Martin & Kevin M. Quinn, *Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999*, 10 POL. ANALYSIS 134 (2002), with Sean B. Seymore & Seth N. Brown, *Kinetic Effects in Heterometallic Dinitrogen Cleavage*, 45 INORGANIC CHEMISTRY 9540 (2006). The former is cited extensively in law; the latter is not.

87. For more details on the HeinOnline data, see Heald & Sichelman, *supra* note 2.

88. See *supra* notes 64-67 and accompanying text.

89. Sisk et al., *Scholarly Impact in 2021*, *supra* note 2, at 1059. The *Bluebook* rule has changed recently and now permits the citation of more than two authors. THE BLUEBOOK: A UNIFORM SYSTEM OF CITATION R. 15.1(b) (Columbia L. Rev. Ass'n et al. eds., 21st ed. 2020) (stating to "[l]ist all of the authors' names when particularly relevant").

90. Sisk et al., *Scholarly Impact in 2021*, *supra* note 2, at 1060.

91. A kludge, pronounced klooj, is an inelegant but expedient solution to a problem; such solutions are often temporary or fragile. See Adrienne LaFrance, *The Appropriately Messy Etymology of 'Kluge'*, ATLANTIC (Sept. 12, 2016), <https://www.theatlantic.com/technology/archive/2016/09/the-appropriately-complicated-etymology-of-kluge/499433/> [<https://perma.cc/2DTK-7EP4>].

criteria.<sup>92</sup> Thus, HeinOnline clearly provides a more accurate citation count for subsequent authors of multi-author articles, but the advantage is probably minimal in the context of faculty rankings—if most authors agree to be listed in alphabetical order (perhaps an unsafe assumption) and the distribution of last names between law schools is more or less random, under-counting subsequent authors will not significantly affect the faculty-to-faculty comparisons.

HeinOnline is also more accurate for authors who are cited for multiple different articles within a single article. Sisk and his team rely on text searching for the names of authors within law review articles, within each article, and thus they do not differentiate between an author being cited for one article versus an author being cited in relation to several different articles. This significantly understates the impact of an author who has made multiple contributions to a topic.<sup>93</sup> However, this deficiency in the Sisk data is probably broadly felt and thus is unlikely to impact faculty-to-faculty comparisons overly much.

The same portfolio logic applies to other small differences. For example, my view is that including citations to blogs, editorials, and edited books makes the Sisk data less valid, but others may disagree. More importantly, these distortions (if that is what they are) should also be diluted in any faculty-to-faculty comparisons, so long as bloggers and editorial writers are not heavily concentrated in particular faculties. Another reason that Sisk's inclusion of citations to blogs and editorials probably does not matter is that they are almost certainly strongly correlated with citations to more traditional legal scholarship. Doctrinal faculty who write citable editorials and blog posts tend to also write citable law review articles.<sup>94</sup> Likewise, consider the fact that the HeinOnline data does not include citations to working papers. This potential undercounting is almost certainly irrelevant given that any paper that is cited in draft is likely to be cited much more extensively in published form.

### B. Faculty Data

The HeinOnline citation data lists individual authors in association with their respective law schools. This faculty information comes from the law schools themselves and from individual law professors who create HeinOnline profiles. Despite this fact, my preliminary research

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92. One of my coauthors from a previous paper suggested an example: Matthew Sag, Tonja Jacobi & Maxim Sytch, *Ideology and Exceptionalism in Intellectual Property: An Empirical Study*, 97 CALIF. L. REV. 801 (2009).

93. See Heald & Sichelman, *supra* note 2, at 32.

94. For example, in a forthcoming paper, my coauthor and I cite both a law review article and an editorial by the same Michigan Law Professor: Leah Litman, *Muted Justice*, 169 U. PA. L. REV. ONLINE 134 (2020); Leah Litman & Tonja Jacobi, *Does John Roberts Need to Check His Own Biases?*, N.Y. TIMES (Jun. 2, 2020), <https://www.nytimes.com/2020/06/02/opinion/john-roberts-supreme-court.html> [<https://perma.cc/4RQV-6FY9>].

identified significant errors and omissions with the HeinOnline faculty lists. Most of these inaccuracies are due to moves or retirements, but some are also due to misidentification. Conceivably, an alternative way to collect faculty information would be simply to ask the relevant law schools themselves. However, I chose not to rely on cooperation from law schools to identify their doctrinal faculty for three reasons. First, obtaining such cooperation from every single school seemed unlikely. Comparing the FLAIR rankings to the U.S. News rankings indicates that some schools benefit from a more scientific approach and others benefit from the status quo.<sup>95</sup> Second, given the history of strategic manipulation of data to game the U.S. News rankings,<sup>96</sup> I was concerned that schools would have an incentive to submit inaccurate information to gain an advantage. Universities are likely to be far more scrupulous about the accuracy of their public disclosures than they are in relation to private information submitted under conditions of confidentiality.<sup>97</sup> Third, as explained in Part II, relying on publicly available information enables greater transparency and reproducibility.

To overcome the errors and omissions in the HeinOnline faculty lists, I obtained faculty information directly from the public websites of each of the 191 fully ABA-accredited law schools. Naturally, schools do not always present this information in a format designed for reuse, so collecting this data required a combination of manual website scraping and scraping using Python. This initial data haul yielded listings for 10,820 potential faculty members, with varying degrees of over-inclusion depending on the format of the faculty website. Some law schools conveniently list their tenure-track faculty separately from non-tenure track faculty and staff; others do not. Some schools present this information on a single page; others require clicking through each individual staff member to ascertain their title and/or responsibilities. To further refine this long list, I used a combination of algorithmic methods and manual review to identify the doctrinal faculty—i.e., deans, university professors, chairs, full professors, associate professors, and assistant professors—and exclude non-doctrinal faculty and staff. This resulted in 6,358 doctrinal faculty consisting of 4,940 full

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95. For examples of differences between FLAIR rankings and U.S. News rankings, see *infra* Part IV.

96. The U.S. News arms race has inspired law schools to spend lavishly on promotional material aimed at altering their peer assessment scores, exploit perceived loopholes in the rankings' methodology, publish misleading information, and in some cases commit outright fraud. Professor Brian Tamanaha describes a widespread and largely unapologetic atmosphere of gaming the system in which law schools had been "doctoring their employment figures for years, using a variety of fudges to jimmy them up," prior to 2011. BRIAN Z. TAMANAHA, FAILING LAW SCHOOLS 71 (2012). At least two law schools submitted falsely inflated LSAT numbers to the ABA and U.S. News for several years in addition to other false information. *Id.* at 74-76.

97. See *supra* note 71.



professors (this category includes university professors, chairs, and law school deans, unless it is specifically noted that the dean is not a full professor), 873 associate professors, and 545 assistant professors.

The next step in the process was to match the publicly available doctrinal faculty data with the citation data available on HeinOnline. Law school websites record the names of their faculty members in every conceivable format, but most commonly, faculty are presented as “first name” “last name” with no middle name or initial. In HeinOnline, on the other hand, the use of middle initials and middle names is quite common, no doubt because these are commonly included in published articles in order to disambiguate between the Jane L. Smiths and Jane M. Smiths of this world. To match between databases, I reduced every name to its simplest, all-caps version using standard, unaccented characters (i.e., JANE SMITH). Where this created an ambiguity between multiple Jane Smiths, I assigned each Jane Smith an arbitrary number in both datasets to enable one-to-one matching.

A nontrivial number of faculty are identified with different names in the HeinOnline database than on their faculty website. There are many reasons for these discrepancies: some names are shortened inconsistently; some names are anglicized on HeinOnline but not on the faculty website, or vice versa; some names are hyphenated in one context but not the other; some names are spelled using nonstandard characters which were translated differently on HeinOnline than in my faculty data; and some appear to have been misspelled in one context or the other. In addition, some faculty use their initials or middle name in preference to their first name on faculty websites, but not on HeinOnline. Finally, over time, some people change their names to reflect different identities or changes in family status. It is common practice in some fields to simply allow such discrepancies to result in mismatched data, and that data is ultimately dropped from analysis. However, doing so in this context would likely result in a disparate impact based on gender, race, and ethnicity.<sup>98</sup> To mitigate against this possibility, I reviewed each unmatched name from the faculty data to determine whether it could be one of the unmatched names from HeinOnline for a given school. This process also cross-validated the accuracy of the faculty lists.

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98. This problem is well-documented in the election law context, such as Georgia’s 2017 “exact match” law, which disproportionately purged minority voters from the electoral rolls due to the requirement that names on voter registration records must perfectly match their names on approved forms of identification. More than eighty percent of Georgia voters whose registrations were denied by this law were African-American, Latino, or Asian-American. *See* Complaint, Ga. Coal. for the People’s Agenda, Inc. v. Kemp, No. 1:18-MI-99999-UNA (N.D. Ga. Oct. 11, 2018); *see also* Ga. Coal. for the People’s Agenda, Inc. v. Kemp, 347 F. Supp. 3d 1251 (N.D. Ga. 2018) (granting injunctive relief).

To make the FLAIR rankings as timely and relevant as possible, especially in light of the inevitable time lag between data collection and publication, I gave law schools the opportunity to verify the accuracy of faculty lists and make updates based on publicly announced moves and retirements that would become effective at the beginning of the 2023 academic year.<sup>99</sup>

Ultimately, 5,260 of the 6,358 of the doctrinal faculty identified on law school websites were matched to individuals associated with fully accredited U.S. law schools in the HeinOnline data. This left 633 potential faculty members identified on websites without a corresponding HeinOnline entry, and a much larger number of 3,217 entries in HeinOnline that no longer correspond to current law school faculty. The unmatched HeinOnline records include clinical, library, legal writing, retired, and emeritus faculty, as well as doctrinal faculty who were excluded because they were hired within the last six years. The unmatched faculty members derived from law school websites are primarily non-doctrinal faculty, although they may also be doctrinal faculty with no presence on HeinOnline.<sup>100</sup>

### III. PRELIMINARY ANALYSIS

This Part reviews the preliminary analysis of the FLAIR faculty citation data. Note that from this point onwards, for the reasons discussed above, the analysis refers to the matched faculty data, excluding assistant professors.

#### A. *The Problem of Skewed Data*

There is a wide divergence in citation counts across the legal academy, within any given faculty, and in comparisons between faculties. This divergence does not fall into the classic normal distribution; instead, it is radically skewed to the left because a minority of faculty account for the lion's share of citations.<sup>101</sup> The pattern is similar to other academic fields, and to fields of cultural production such as the music industry. Although it seems quite likely that latent individual qualities we associate with success, such as talent, motivation, and application, all follow something like a traditional bell curve or normal

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99. On March 10, 2023, law school deans and associate deans for research were advised of this project via the AALS email list and given an opportunity to review the faculty data. These emails are on file with the author.

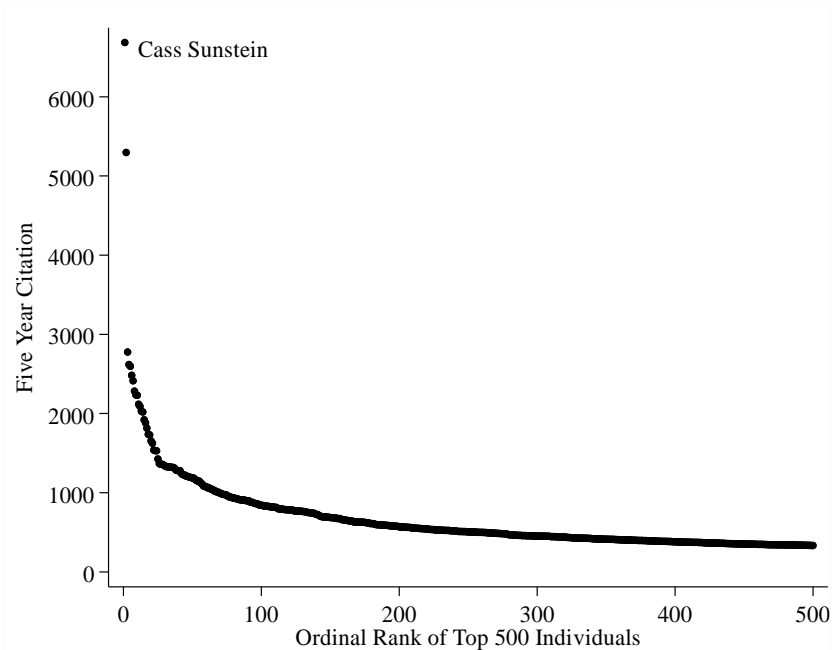
100. Note that because none of the faculty at Massachusetts School of Law matched any of the records in HeinOnline, that school drops out of the analysis for this Article and reduces the number of faculties to 191.

101. Note also that the data is not "normal" in many other senses. A glance at the most common first names among law school doctrinal faculty in the United States is quite telling. In order of frequency, the fifteen most common first names are Michael, David, John, Robert, Richard, James, Mark, Daniel, William, Stephen, Paul, Christopher, Thomas, Andrew, and Susan. It should be immediately apparent that this group is more male and probably a lot whiter than a random sample of the U.S. population would predict.

distribution, the citation data is heavily skewed because in the legal academy, success breeds success. This occurs partly because the more a work is cited in one time period, the more likely it is to be cited in the next time period. It also occurs because a paper that is marginally timelier, marginally more persuasive, or marginally more on point will be cited dramatically more than its nearest competitor, not just marginally more. Finally, anecdotal evidence suggests that high-status individuals in particular subfields garner citations as a matter of tribute even if other scholars have made similar contributions earlier.<sup>102</sup> There may well be other reasons, but the foregoing seems like a sufficient explanation.

To illustrate the skewed nature of the law faculty citation data, Figure 1 arranges the 500 most cited law faculty members in the past five years in order on the horizontal x-axis and indicates their corresponding number of citations on the vertical y-axis. The most cited law faculty member (top left) is Harvard's Cass Sunstein (6,686 citations); the 500th most cited (bottom right) is a three-way tie between Chicago's Brian Leiter, Harvard's Glenn Cohen, and Virginia's Micah Schwartzman (334 citations). Note that these individuals are each above the median of their own faculties and in fact above the median of every faculty, except for the University of Chicago.

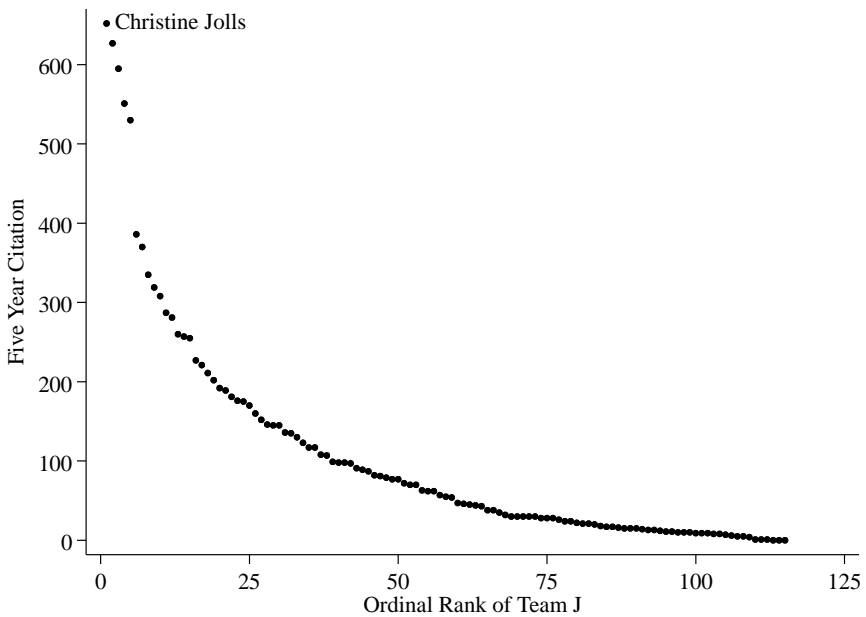
**Figure 1: Five-Year Citation Count for the Top 500 Law Faculty Members**



102. For the sake of diplomacy, I will refrain from giving specific examples.

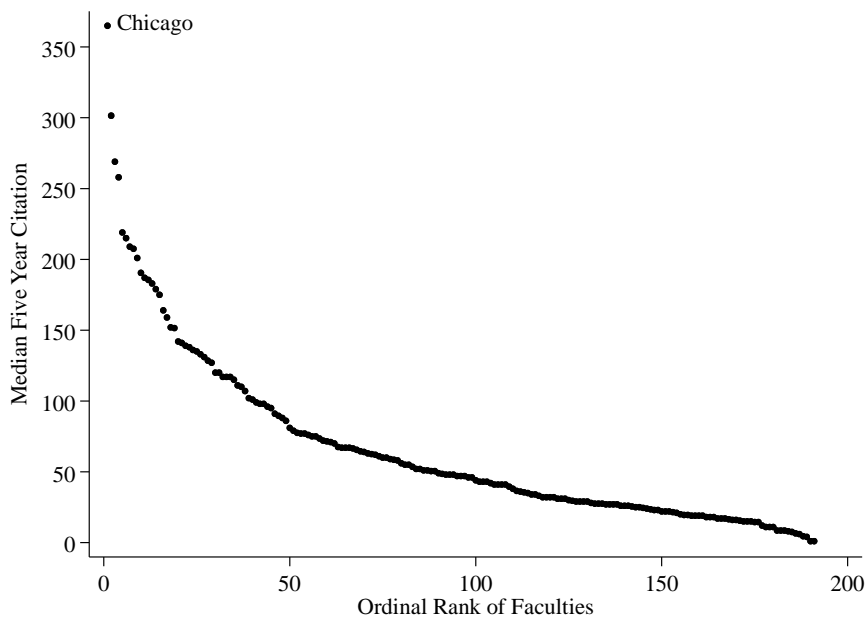
Figure 2 provides a similar illustration for what is effectively a random subset of the data, law school faculty with surnames beginning with the letter J (“Team J”). Team J shows the same skewed distribution on a smaller scale. The 115 faculty in Team J were cited an average of 107.37 times over five years, but the median was only 55. The most highly cited member of Team J, Yale’s Christine Jolls, was cited 652 times, almost 12 times as often as the mean.

**Figure 2: Five-Year Citation Count for “Team J”**



We see a similarly skewed distribution for comparisons between law faculties. Figure 3 indicates the distribution of the median five-year citation count for each faculty. Once again, the data is significantly skewed to the left. The median in the most cited faculty, Chicago, was 365 citations over five years, whereas the median of the median faculty (i.e., the 96th ranked faculty) was 47 citations over five years.

**Figure 3: Median Five-Year Citation Count by Law Faculty Ordinal Rank**



### *B. Implications of the Skewed Distribution*

One thing that should be clear in light of this skewed distribution is that small differences in ordinal rankings can imply large substantive differences at one end of the distribution, but only very small, perhaps even meaningless, differences at the other end of the distribution. To illustrate this point more concretely, let's focus on a school ranking based solely on faculty medians. The average difference in median citations between each rank in the top twenty on such a scale would be 11.5 citations, whereas the average difference between ranks in the 61 to 80 group is 0.775 citations. Or, to put this another way, the difference in median citations between Stanford (ranked 10th) and Chicago-Kent (ranked 20th) is 44 citations, whereas the difference in median citations between Alabama (ranked 70th) and Denver (Strum) (ranked 80th) is only 8 citations.

One response to the skewed nature of the data might be to simply select a point below which differences in ordinal rankings are not considered meaningful and thus only rank the top twenty or top thirty law faculties.<sup>103</sup> However, truncating the rankings in this manner necessarily limits their utility. Indeed, it could suggest that the point of constructing a set of rankings was not to provide useful information, but simply an exercise in self-congratulation. More importantly,

103. See *supra* notes 41-47 and accompanying text.

terminating the rankings at an arbitrary point does not solve the problem of a skewed distribution; it merely moves it to the left. The skewed distribution is a property of the data as a whole and persists in any subset of the data.

A better way to address the skewed distribution is to stop obsessing over minor differences in the ordinal rankings and present the information in a way that encourages the reader to do the same. This can be accomplished by translating the statistics for the faculty median, mean, and total into their corresponding standard deviations. This conversion allows us to draw relatively intuitive lines between different strata or tiers of the data. The figure below provides a side-by-side comparison of the distribution of faculty medians, means, and totals, in terms of their standard deviations. The dotted horizontal lines are drawn to indicate bands of one standard deviation above and below the mean. An additional line at half a standard deviation below the mean is also shown. The data divides fairly neatly into three groups: elite schools at more than one standard deviation above the mean, above-average schools between zero and one standard deviation above the mean, and below-average schools. To make these groups more numerically balanced, I have divided the below-average schools at half a standard deviation below the mean. These tiers are descriptively useful and emphasize that, other than in Tier 1, differences in ordinal ranking within a tier are not that important.

**Figure 4: Standard Distributions of Faculty Citation Data**

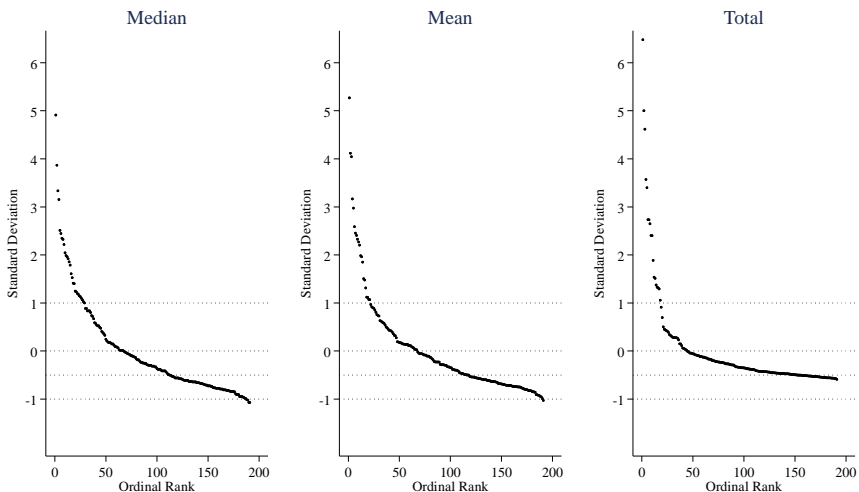


Table 1 sets out the highest and lowest ranked faculties in the top three tiers to illustrate the implications of assigning schools to tiers based on standard deviations. The tiers in Table 1 are based on the FLAIR rankings which are based on the standard deviations of the faculty mean and faculty median. Because these standard deviations are not as intuitive as raw numbers, Table 1 sets forth the faculty median and mean and a “Blended” measure that is an evenly weighted average of the two. A rank order based on the Blended measure would be almost identical to the FLAIR rankings, except that it would produce more tied ranks.

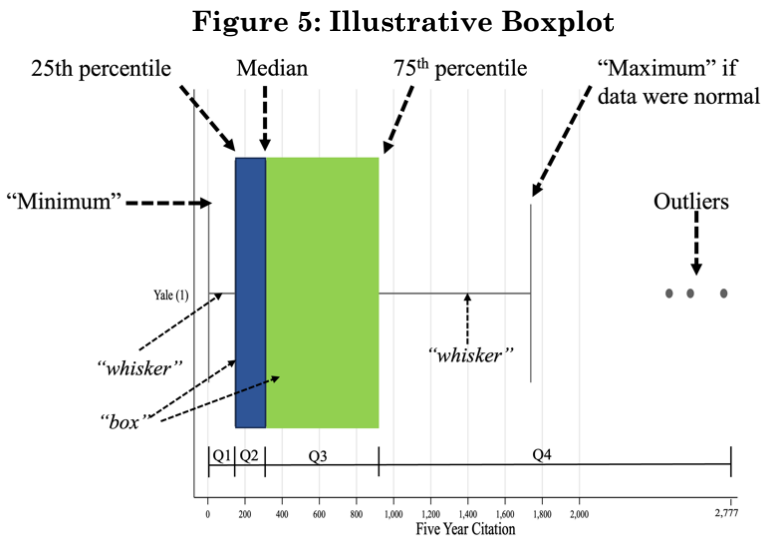
**Table 1: Highest and Lowest Ranked Schools by Tier (Balanced Ranking)**

<b>Faculty</b>	<b>Median</b>	<b>Mean</b>	<b>Blended</b>	<b>Rank (Blended)</b>	<b>Tier</b>
<b>Yale</b>	302	595	448	1	Tier 1 (1 SD above mean) (23 schools)
<b>USC</b>	141	179	160	23	
<b>Wash U. (St. Louis)</b>	138	174	156	24	Tier 2 (0 to 1 SD above mean) (44 schools)
<b>Alabama</b>	64	105	84	67	
<b>Pittsburgh</b>	67	97	82	68	Tier 3 (0 to .5 SD below mean) (48 schools)
<b>Chapman</b>	36	52	44	115	
<b>Oklahoma City</b>	35	52	43	116	Tier 4 (.5 SD below mean) (76 schools)
<b>Appalachian</b>	1	2	1	191	

As seen in Table 1, there is a dramatic difference between the Blended score of the first and last schools in Tier 1: the median and

mean of faculty citations at Yale for the past five years were 302 and 595 (an average of 448), whereas at the University of Southern California (“USC”), the median was 141 and the mean was 179 (an average of 160). In terms of their Blended scores, the difference between Yale and USC is 288. In contrast, the difference in the Blended scores of the top and bottom schools in the remaining tiers is 72 for Tier 2, 38 for Tier 3, and 42 for Tier 4. This tiered approach is a more intrinsically valid way to think about the data because, although small differences in faculty means and medians will have an impact on ordinal rankings, they will not affect which faculties are assigned to each tier, except at the margin.

Another way to understand the implications of assigning schools to separate tiers is to compare the distribution of citation counts for each tier as a whole using boxplots. For the uninitiated, a boxplot is a graphical device used to indicate the “minimum” or lowest 25%, median, highest 25%, and “maximum” points in the selected data. Figure 5 illustrates the basic features of a boxplot using the five-year citation data for the Yale faculty as an example.

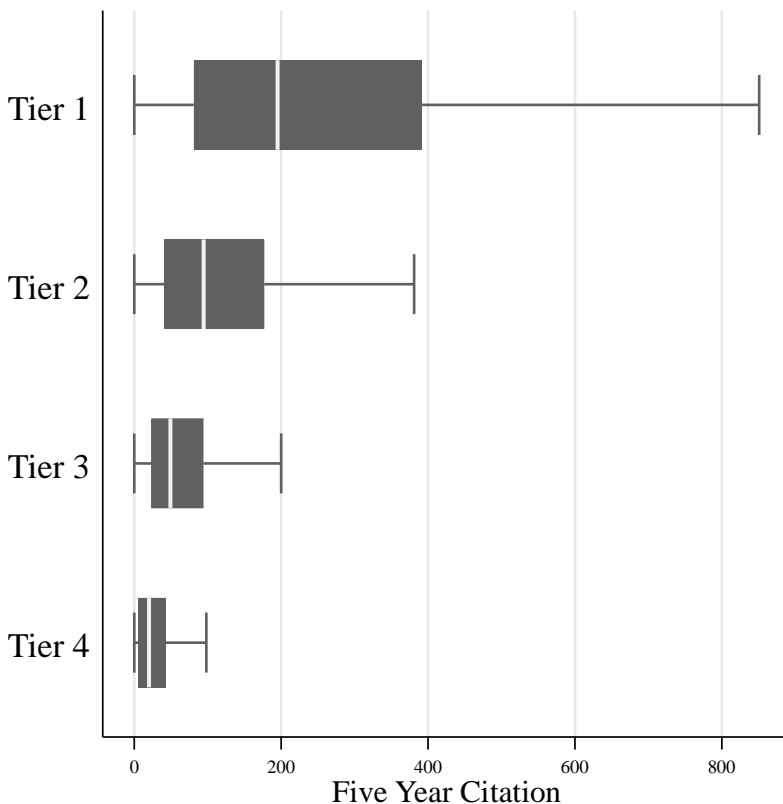


Boxplots are made up of “boxes” and “whiskers” that divide the data into quartiles on the assumption of a normal distribution. You can easily compare the range of the bottom 25% of the faculty in the above figure to the top 25% by looking at where the whiskers begin and end. The “box” at the center of the boxplot is divided in two at the median, and the length of the entire box indicates the inter-quartile range (i.e., the range from 25% to 75%). Looking at the figure above, it is immediately apparent that there is a much wider distribution in the top half of the faculty than in the lower half. The figure also indicates that there are “outliers” in the data that go beyond what we would expect



to see in a normal distribution. An important thing to understand about boxplots is that the minimum and maximum of the boxplot are not the literal highest and lowest values; rather, they are descriptive values calculated based on the inter-quartile range. Any observations beyond these notional minimum and maximum values are considered “outliers.” If the data conformed to a normal distribution, only 0.7% of observations would fall above the maximum or below the minimum.<sup>104</sup> With that tutorial in hand, we can now consider Figure 6, which illustrates the distribution of citation counts for individual faculty members within each tier as a whole.

**Figure 6: Distribution of Citation Counts by Tier**



The tiered approach addresses the interpretive problem caused by the skewed distribution of the underlying citation data. The FLAIR rankings proposed in this Article show that it is possible to address the skewed distribution by adding additional information, rather than simply discarding the majority of the data. Figure 6 illustrates the

104. For the sake of readability, the boxplots in this Article do not indicate outliers above the maximum or below the minimum.

substantial differences between the tiers, but it also underscores that there is nonetheless considerable overlap between tiers. For example, the second quartile of Tier 1 is essentially equivalent to the third quartile of Tier 2—that is, those faculty in the 50% to 75% range of the second tier are identical to those faculty in the 25% to 50% range of the first tier; the pattern repeats between Tier 2 and Tier 3, and comes close to repeating between Tier 3 and Tier 4. In an efficient market, we would expect to see far less overlap between faculties in different tiers. Compare the overlap in law school faculties with teams in the top two leagues of English soccer. In January 2023, the lowest-valued regular starting player with at least two years left on his contract for the leading team in the first division (the English Premier League) was Arsenal FC’s young center-forward Eddie Nketiah, who was valued at €18 million.<sup>105</sup> The most-valued player at the highest-ranked team in the second division (the Championship) was Burnley FC’s central defender Taylor Harwood-Bellis, who was valued at €13 million.<sup>106</sup> Remarkably, there was no overlap at all in player valuations between these two teams, both of which were the leaders in their respective divisions.<sup>107</sup> In contrast, four of Washington University (St. Louis)’s thirty-three doctrinal faculty with more than six years of experience have citation counts at or above the median of Yale. Yale is arguably in a class of its own (which can hardly be said for Arsenal<sup>108</sup>), but almost 25% of Washington University’s doctrinal faculty also have citation counts above the median of the fourth highest-ranked law school, Harvard. That is a significant degree of overlap given that, of course, only half of Harvard’s faculty are above the median.

Why don’t law faculty sort more efficiently? One set of reasons is that faculty hiring is rarely ever designed to optimize abstract academic quality or tangible academic impact alone.<sup>109</sup> Faculty hiring is also based on teaching needs and the need to reflect a diversity of approaches to the study of law, different subject area specializations, a variety of backgrounds and life experiences, and racial, gender, and other diversity initiatives. Another set of reasons relates to inherent

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105. At the time of writing, January 2023, Arsenal was the leading team in the EPL. See *Market Value Analysis Arsenal FC*, TRANSFERMARKT.US, <https://www.transfermarkt.us/fc-arsenal/marktwertanalyse/verein/11> [<https://perma.cc/4R8D-PX2A>] (last visited Apr. 10, 2024).

106. See *Market Value Analysis Burnley FC*, TRANSFERMARKT.US, <https://www.transfermarkt.us/fc-burnley/marktwertanalyse/verein/1132> [<https://perma.cc/Y5FZ-PHEG>] (last visited Apr. 10, 2024).

107. This excludes players with less than two years left on their contracts, or players who are not regular starters.

108. This may reflect my bias as a Tottenham supporter. #COYS

109. Most law faculties must balance academic needs with curricular fit, demographic fit, and priorities to enhance diversity. Faculty diversity initiatives are often derided as performative and inadequate, but they are nonetheless widespread. See, e.g., Anastasia M. Boles, *Pivoting Under Pressure: Cultural Proficiency, Race, and Reforms*, 2022 UTAH L. REV. 871 (criticizing the performative nature of diversity initiatives).

inefficiencies in the market for law professors. Tenure track positions are sticky, in that tenure at law schools is rarely denied and non-performing tenured faculty cannot be traded away to other schools like minor league baseball players. This stickiness is compounded by the fact that even if all those involved were willing in the abstract, potential transfers are often limited by spousal and family obligations, or by geographic preferences. Furthermore, although the faculty who make hiring decisions have to live with the new hire, they have no economic stake in their success as academics or as teachers. This creates a moral hazard where current faculty may use hiring decisions to manifest expressive or ideological commitments, engage in self-replication, or simply to prefer affable comrades who are pleasant to have in meetings.<sup>110</sup> In addition, faculty hiring is also inefficient because credible information on which faculty might be interested in moving is rare, and information on faculty quality is siloed and costly to obtain: several busy people have to read an incredible volume of material to create a short list of candidates for any single position.<sup>111</sup>

#### IV. THE RANKINGS

Now that the methodology and context to understand the FLAIR rankings have been established in the previous Parts, we can turn to the rankings themselves.<sup>112</sup> As seen in Figure 7, Tier 1 of the FLAIR rankings begins with Yale and ends with USC.

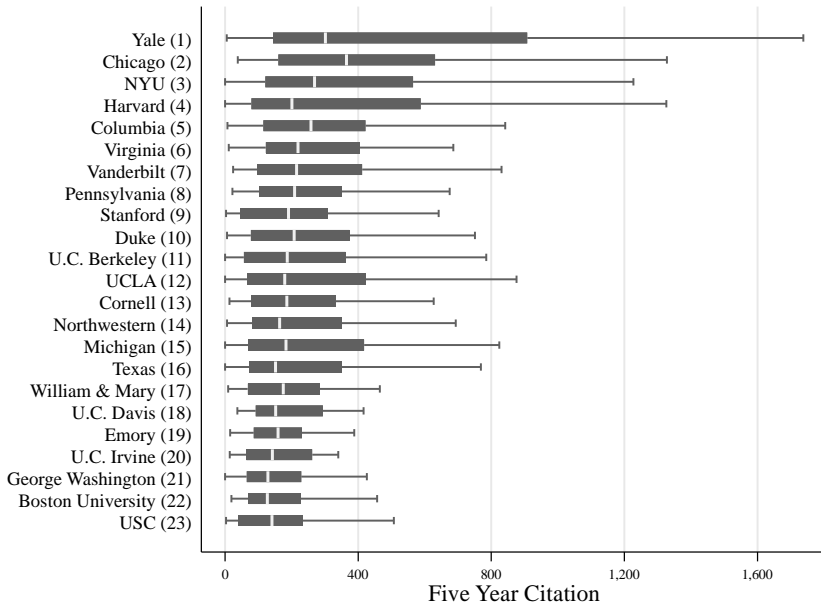
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110. To be fair, schools that entirely neglect the downsides of unpleasant faculty members are at risk of producing a toxic environment that makes their best and brightest look for more collegial environments.

111. A recent study of citation counts and lateral hiring of law professors found only a weak association between citation counts and the law school employment market. See Joshua B. Fischman & Michael A. Livermore, *The Value of Citations in the Labor Market for Legal Academics* (Feb. 19, 2023) (unpublished manuscript), <http://dx.doi.org/10.2139/ssrn.3902866> [<https://perma.cc/XSTW-6LE4>]. The study found that article placement was a stronger predictor of lateral moves (i.e., established law professors moving from one school to another) and drew the implication that that citation rankings are therefore somehow deficient. This conclusion leans heavily on the presumed efficiency of the legal hiring market. This is a convenient assumption for faculty at elite schools because it validates their own status. The authors briefly acknowledge that the lateral market is imperfect, but they do not seriously contend with the pervasive dysfunctions of that market. If citation counts fail to explain the lateral hiring of law professors, it arguably says more about the market for law professors than the validity of citation counts as a measure of academic impact.

112. I may issue a revised set of rankings at a future date if additional law schools take the opportunity to submit corrections to their faculty lists.

**Figure 7: Ranking of Law Faculties by Academic Influence—Tier 1**



Rankings based on academic impact provide an important context for understanding the limits of the U.S. News rankings. Overall, the correlation between the FLAIR rankings and the 2023 U.S. News rankings is .81 on a scale from 0 (no correlation) to 1 (perfect correlation).<sup>113</sup> This suggests that academic impact is closely associated with whatever it is that determines U.S. News rankings, but that there is also a meaningful difference. The correlation for the 2024 U.S. News rankings (released in May 2023) is .77—it would be distracting to recount here all the shortcomings of the 2024 U.S. News rankings.<sup>114</sup> Some points of departure between FLAIR and U.S. News are worth highlighting. Readers who pay close attention to the U.S. News rankings will note that the top tier consists of 23 schools, not the much-vaunted “T14”. The T14 is a meaningless category; it does not reflect any current empirical reality or any substantial differences between the 14th and 15th ranks. Attentive readers will also note that several schools well outside of the 2024 (hopefully now discredited concept of) T14—namely U.C. Irvine, U.C. Davis, Emory, William & Mary, and George Washington—are in the top tier of FLAIR. These schools’ academic impact outpaces their overall U.S. News rankings significantly. U.C. Davis outperformed its 2024 U.S. News ranking by 42 places!

113. This correlation was calculated for the faculties with a U.S. News ranking between 1 and 150 because U.S. News does not publicly disclose rankings below 150. The correlation is statistically significant.

114. Part of the formula for “2024” is based on the bar passage of 2019 graduates! See Morse & Brooks, *supra* note 1.

Looking at the top tier of the FLAIR rankings as visualized in Figure 7 also illustrates how misleading differences in ranking can be. Figure 7 makes it clear that there is very little difference between Virginia, Vanderbilt, and the University of Pennsylvania in terms of academic impact. The medians and the general distribution of each of these faculties are quite similar. Thus, we can conclude that differences between ranks 5 and 8 are unimportant and that it is not news if Virginia “drops” to 7th or Pennsylvania rises to 5th in the FLAIR rankings, or indeed in the U.S. News rankings.

The lesson that we should not sweat small differences in rankings within tiers is generalizable. One of the most interesting takeaways from the faculty citation data is that, within each tier, variation within faculties is generally much greater than the differences between faculties. In order to make the figures fit on a page, the true outliers are not displayed in the figure; nonetheless, the variance in large academic powerhouses such as Yale, Chicago, NYU, and Harvard is quite striking. Although it is clear that the top four are something of a class apart from the rest of Tier 1, that characterization only applies to each faculty as a whole. If we selected a Yale or University of Chicago faculty member at random, almost all of them would look unremarkable in any of the other schools in Tier 1. The obsession with minor differences in ordinal placement promoted by U.S. News and other rankings encourages a vast overestimation of the differences between faculties. Equally, it encourages an overestimation of the implications of those differences. In terms of academic impact, the average faculty member at a school with rank X is deluded if they think that they are superior to the top quartile of school rank X-15.

Finally, it is worth noting that although the rank order of Tier 1 would change slightly if the rankings were based on a formula that gave more weight to the mean, such as  $x = (\text{median} + \text{mean} * 2) / 3$ , as used by Sisk and Leiter,<sup>115</sup> this would not affect the rank order within Tier 1 by more than one place for any school.<sup>116</sup>

These lessons are not confined to Tier 1, as a review of the results for Tier 2 demonstrates. To enhance readability, the rankings for the second tier are divided between Figure 8 and Figure 9, below. Tier 2 begins with Washington University (St. Louis)<sup>117</sup> and ends with Alabama. It is important to note here that the scale for Tier 2 is half of that for Tier 1. As discussed above, Tier 2 also demonstrates that within-faculty variation dominates between-faculty variation within a given tier. Moreover, Tier 2 has even more extreme examples of the

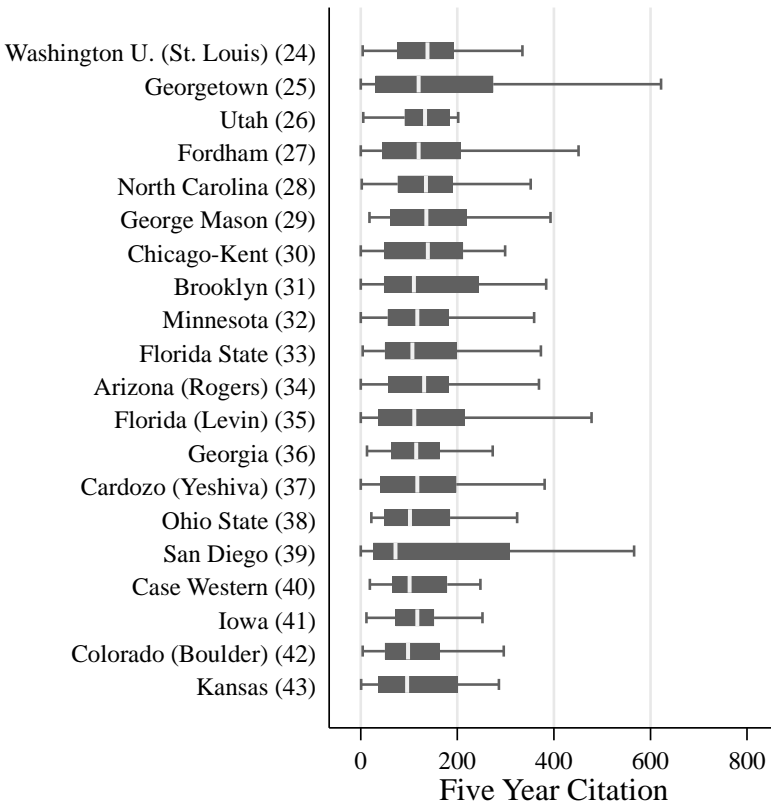
115. See *supra* note 74.

116. Although USC would drop out of Tier 1.

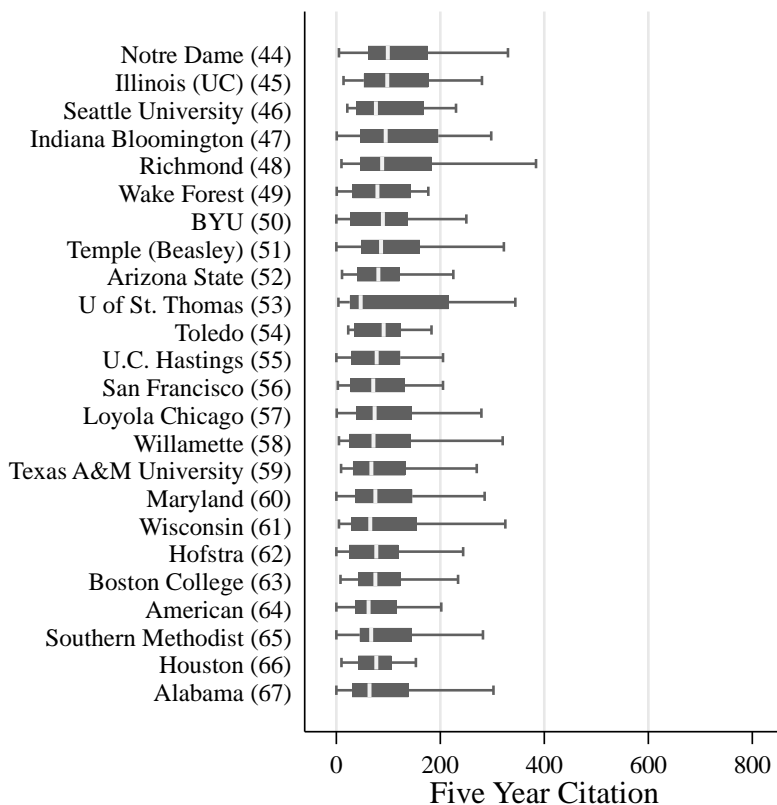
117. In fairness to Washington University, their faculty is on the cusp of Tier 1 and is not substantively different to schools at the lower end of that tier; it is just on the wrong side of the one standard-deviation cutoff that separates the tiers.

discrepancy between U.S. News and the results of the FLAIR citation-based rankings. To highlight just a few examples, Chicago-Kent Law School’s 2024 U.S. News ranking was 99, whereas its FLAIR ranking was 28; Brooklyn has a 2024 U.S. News ranking of 111 and a FLAIR ranking of 31; Seattle University has a 2024 U.S. News ranking of 111 and FLAIR ranking of 46. Those are differences of 71, 80, and 65 places, respectively.

**Figure 8: Balanced Rankings of Law Faculty Academic Influence—Tier 2A**



**Figure 9: Balanced Rankings of Law Faculty  
Academic Influence—Tier 2B**



The data presented in Figure 9 (the second half of Tier 2) also highlights some interesting differences between faculties. Most notably, the boxplot for the University of San Diego Law School is extraordinarily unbalanced. The five-year citation counts for San Diego's faculty have an inter-quartile range of 26 to 309, centered on a median of 72. If the distribution was symmetrical, the median would be in the middle of the interquartile range, i.e., 167.5. In contrast, Case Western, just one rank below, has a much more compact distribution, with an inter-quartile range of 66 to 179, centered on a median of 101, which is almost not far off the middle of that range. There is no definitive answer as to the question of what kind of distribution is more desirable. Based on the HeinOnline data, the faculty at Case Western are more consistently impactful; however, there are more extraordinarily impactful scholars at San Diego.<sup>118</sup> We could draw a similar comparison between the faculties of Georgetown (ranked 25) and Utah (ranked 26), as seen in Figure 8. There is very little difference between these faculties in

118. Note that as discussed in Section I.B.3, citation data from a single source may not tell the whole story for individual faculty members.

terms of mean or median citation impact, but there is a world of difference between attending a very large law school in a major metropolitan area—i.e., Georgetown—and attending a smaller state school in Salt Lake City, Utah.

Figures 8 and 9 also shed light on the impact of arbitrarily selecting which schools deserve to be ranked a priori. The latest version of the Sisk rankings does not include a ranking for the law faculties of Loyola Chicago, Houston, Toledo, Willamette, or Seattle University.<sup>119</sup> And yet, once the schools are fairly assessed, it is clear that each of them is comfortably within Tier 2 and probably would have qualified as being in the top third, if only someone had looked.<sup>120</sup> In general, there is a high level of agreement between the Sisk rankings for 2021 and the 2023 FLAIR rankings. The pairwise correlation between the rankings is .90.<sup>121</sup> However, if we assign all of the schools left unranked by Sisk an optimistic arbitrary ranking of 69, the correlation between the two rankings drops to .71 within Tier 2. This high level of agreement—other than the schools excluded by Sisk—makes perfect sense. As explained earlier in this Article, once the data is aggregated at the faculty level, there is very little difference between using Westlaw and HeinOnline. The major differences between the FLAIR rankings and the Sisk rankings stem from the fact that the former are inclusive and that some faculties have changed quite substantially since Professor Sisk and his team collected their data.

There is no need to reiterate the same points with respect to Tier 3 and Tier 4. From this point on, the numbers and the figures speak for themselves. The FLAIR rankings and distribution data for these tiers are set forth in Figures 10 to 13. Note that, just as the scale was reduced by 50% (from 1600 to 800) in the move from the Tier 1 figures to the Tier 2 figures, the scale for the Tier 3 figures is halved again to 400, and the scale for the Tier 4 figures is halved yet again to 200. An Excel file with the mean, median, and total for each school is available upon request.

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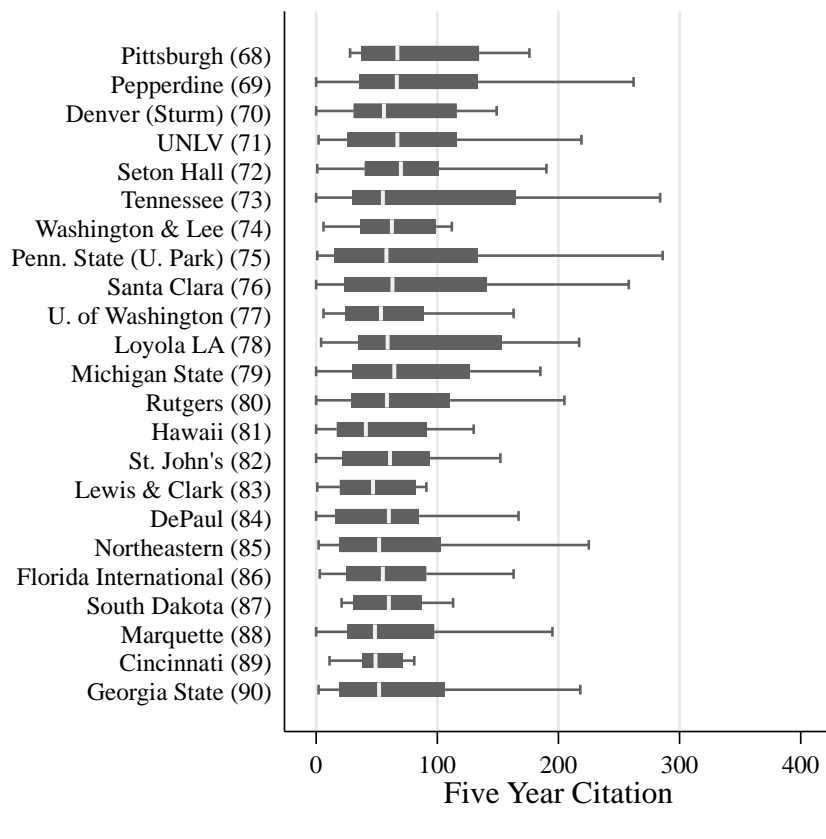
119. See Sisk et al., *Scholarly Impact in 2021*, *supra* note 2 (reporting the Sisk Rankings for 2021).

120. Each of these schools is in the top 68 under the balanced weighting of median and mean used in the FLAIR rankings or the unbalanced version used by Sisk and Leiter. Professor Sisk may have investigated one or more of these schools and not reported their results. He did not review all of them. See *supra* note 42.

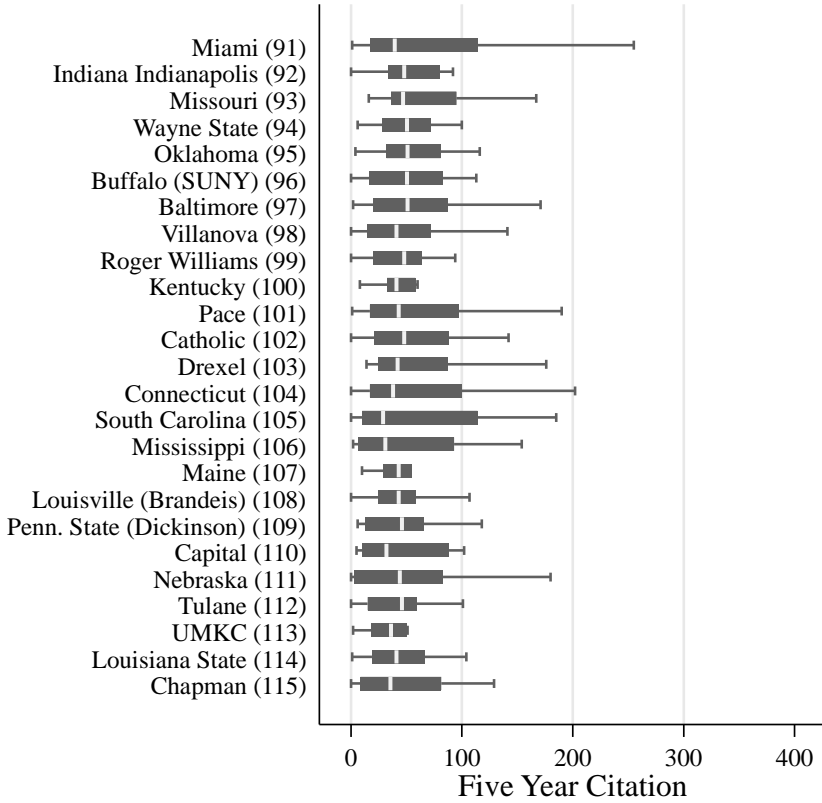
121. The correlation is statistically significant.



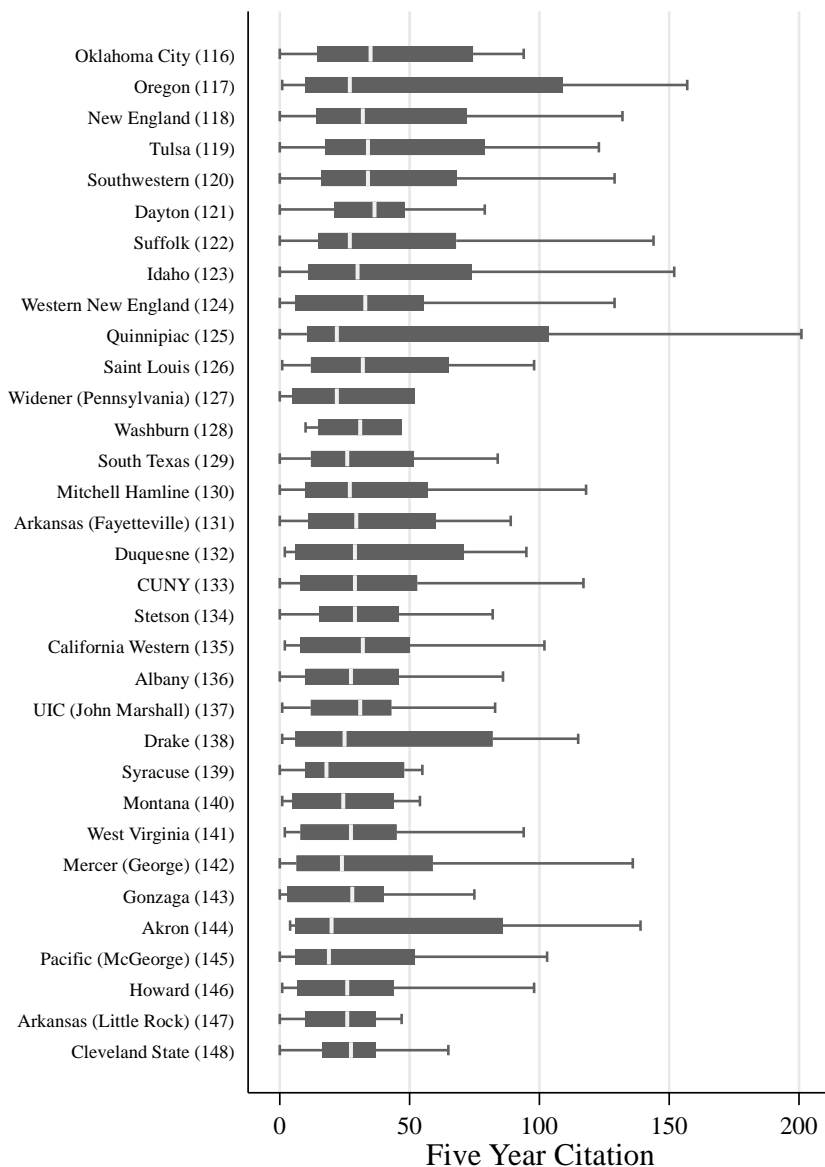
**Figure 10: Balanced Rankings of Law Faculty  
Academic Influence—Tier 3A**



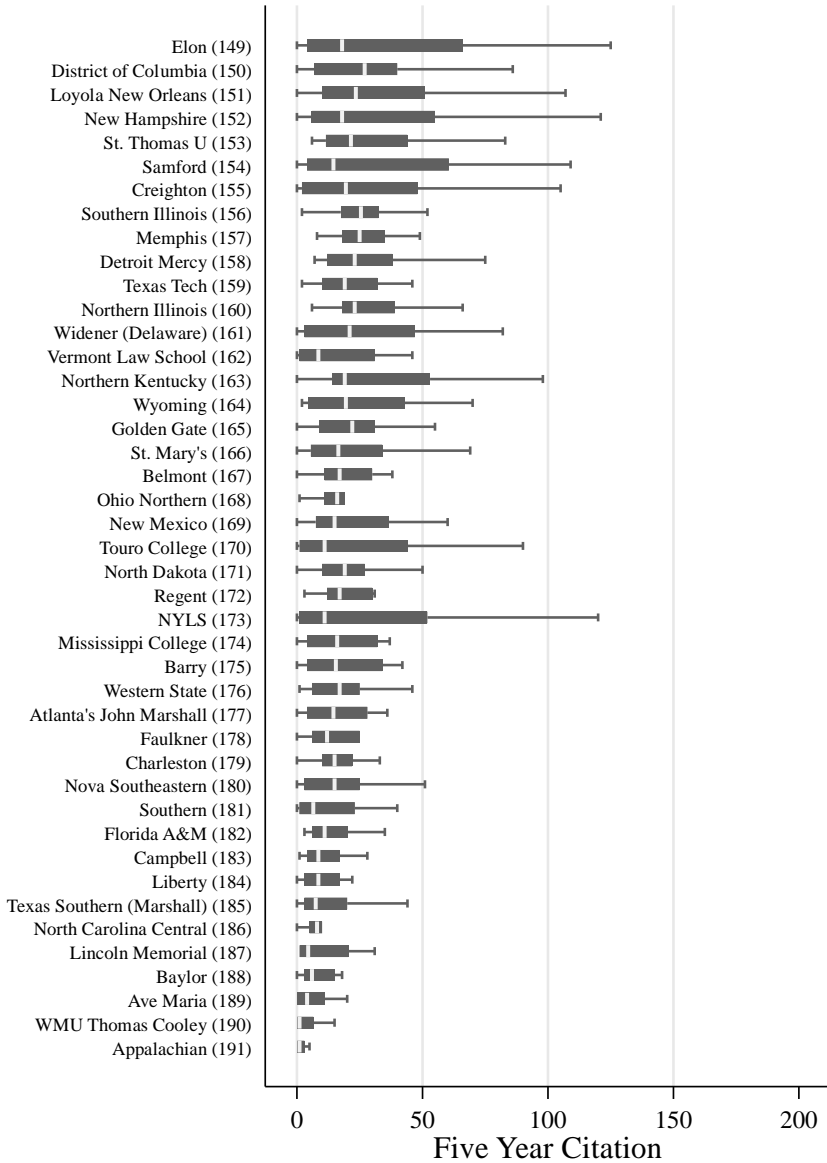
**Figure 11: Balanced Rankings of Law Faculty Academic Influence—Tier 3B**



**Figure 12: Balanced Rankings of Law Faculty Academic Influence—Tier 4A**



**Figure 13: Balanced Rankings of Law Faculty Academic Influence—Tier 4B**



CONCLUSION

Law schools, law students, and potential employers all deserve better than the current U.S. News rankings and the incomplete and sometimes eccentric alternative rankings of academic impact that have been offered to date. The FLAIR rankings introduced in this Article will not resolve the various structural inequalities that permeate the legal academy, but these rankings will provide the legal community

with a much-needed objective, comprehensive, reproducible, transparent, and valid basis to compare the academic impact of one law school faculty to another. This information, combined with other objective data on student quality, bar passage, and employment outcomes, should be the primary metric used to assess and compare the overall quality of law schools.

Beyond simply unveiling the FLAIR rankings, this Article contains three key lessons. One lesson is that, with reasonable effort and some elementary software programming, the limitations of extant ranking methodologies can be easily overcome. There is no justification for ranking law schools based on surveys of the uninformed, nor in choosing to rank some fully accredited law schools but not others. The second lesson is that, although the current rankings landscape is dire, thoughtful and fair rankings can be a force for good. Indeed, instead of reflexively opposing the very idea that academic impact is quantifiable, we should insist on higher standards from those who will inevitably attempt such quantification.

Ironically, the third and arguably most important lesson to emerge from this Article is that we should not take rankings too seriously. This lesson unfolds in two dimensions, one related to differences between schools and the other related to the variation within schools. In the Olympics, third place is a bronze medal, and fourth place is nothing; but there are no medals in the legal academy and there is no difference in academic impact between third and fourth that is worth talking about. As this Article has established, minor differences in placement rarely correspond to differences in substance. Accordingly, rather than emphasizing largely irrelevant ordinal comparisons between schools only a few places apart, what really matters is which tier in the rankings a school belongs to. The only legitimate way to present school rankings is to cluster schools into tiers based on their distance from the mean of all schools and deemphasize ordinal rankings.

The other reason that we should not take rankings too seriously is that, as this Article has comprehensively demonstrated, even when a difference in ranking suggests that there is a genuine difference in the overall academic impact of one faculty versus another, those aggregate differences say very little about the academic impact of individual faculty members.

The FLAIR rankings are designed to help the broader legal community to make rational comparisons between law schools, not between individual faculty members. Any law professor who looks to school rankings to validate their academic contribution, sense of superiority, or self-worth would be well-advised to adopt a puppy instead.<sup>122</sup>

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122. See Allen R. McConnell et al., *Friends with Benefits: On the Positive Consequences of Pet Ownership*, 101 J. PERSONALITY & SOC. PSYCH. 1239 (2011).

