Evaluating Faculty Research Impact in Higher Education: Integrating Social Media Influence with Traditional Metrics

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Abstract

In higher education, faculty research impact is often measured using traditional metrics such as citation counts, h-indexes, and journal rankings. However, as social media becomes an increasingly important platform for disseminating research, these traditional metrics fail to capture the broader societal influence that faculty can have through platforms like Twitter, LinkedIn, and Facebook. This paper explores the application of the Kardashian Index (K-Index)—introduced by Neil Hall in 2014—as a tool for measuring the social media influence of business and management faculty relative to their academic citation counts. By calculating the K-Index for 50 prominent business and management scholars, the study reveals significant discrepancies between social media engagement and traditional academic impact, along with shortcomings in the K-Index as a tool to measure research impact. The paper proposes a new framework, the Research Impact Index (RI-Index), which integrates multiple social media platforms and considers other academic contributions such as preprint downloads and conference presentations. This new index offers a more comprehensive method for evaluating the overall impact of faculty research. The study encourages higher education institutions to adopt a multi-dimensional approach to measuring research influence, incorporating both traditional academic metrics and social media engagement to more accurately reflect the societal contributions of faculty.

Keywords: higher education, faculty evaluation, social media, research impact

1. Introduction

The role of academic research in advancing knowledge, fostering innovation, and contributing to societal progress underscores the importance of its evaluation as a central component in faculty performance assessments within higher education institutions. Traditionally, research impact has been measured through citation-based metrics such as citation counts, h-index, and journal rankings, which assess a scholar's influence within academia. However, as digital communication evolves, platforms such as Twitter (Note 1), LinkedIn, and Facebook are becoming powerful channels for sharing research with a broader audience, extending influence beyond academic circles to policymakers, practitioners, and the public. These developments prompt a reevaluation of the metrics used to assess the true reach and impact of scholarly work.

Despite the potential of social media to expand the visibility and societal relevance of academic research, current evaluation frameworks often overlook these channels. Metrics such as citation counts and h-index focus narrowly on academic citations, excluding broader engagement that can occur through social platforms. This gap raises significant questions about how comprehensively traditional metrics capture research impact, particularly for scholars active on social media. In business and management fields, for instance, the application of research findings frequently extends to industry and public policy, areas where social media can amplify the practical relevance and reach of academic work. Existing tools like the Kardashian Index (K-Index), introduced by Neil Hall in 2014, attempt to capture this social media influence. Yet, the K-Index's reliance on Twitter follower counts and its limited scope present challenges in accurately representing a researcher's full impact, particularly in disciplines where social media use varies widely.

To address these limitations, this paper proposes a comprehensive framework for evaluating research impact that integrates both traditional academic metrics and social media engagement. By calculating the K-Index for 50

prominent business and management scholars, this study examines discrepancies between social media presence and traditional academic impact, revealing the limitations of existing metrics. The paper introduces an alternative model, the Research Impact Index (RI-Index), which expands the assessment to multiple platforms and considers other scholarly contributions in addition to citation counts and journal reputation, including preprint downloads and conference presentations. By incorporating these additional dimensions, the RI-Index captures a more balanced view of a scholar's influence across both academic and public spheres. This new index aims to provide a more holistic perspective on research influence, encouraging higher education institutions to adopt multidimensional evaluations that reflect both academic and societal contributions.

2. Literature Review

2.1 Faculty Research Evaluation in Higher Education

In higher education, the evaluation of faculty research is a cornerstone of tenure, promotion, and merit-based decisions. Traditionally, institutions have relied on a range of quantitative and qualitative measures to assess the scholarly output of their faculty members. One of the most prominent metrics used is citation count, which reflects how frequently a faculty member's work is cited by other scholars. H-index and i10-index scores, which combine productivity (the number of papers published) and impact (the number of citations), are often used alongside citation counts to provide a more nuanced view of a scholar's influence. Other important indicators include publication in high-impact journals, where journals are ranked by their impact factor, a measure of the average number of citations recent articles in a journal receive. These metrics are typically sourced from databases such as Google Scholar, Scopus, and Web of Science (Baas, Schotten, Plume, Côté & Karimi 2021).

In the specific context of business schools accredited by the Association to Advance Collegiate Schools of Business International (AACSB International), intellectual contributions are expected to be peer-reviewed and published in high-quality journals, particularly those recognized as leading within the business disciplines, such as The Academy of Management Journal. Business schools often assess the relevance and impact of faculty research through impact factors of journals, citation counts, and engagement in research that influences business practices or public policy (AACSB International 2020).

2.2 Academic Impact vs. Social Media Impact of Faculty Research

Despite the broadening methodology of research evaluation in higher education, including within AACSB-accredited business schools, social media engagement remains underutilized as a formal metric in faculty evaluations. Given that platforms like Twitter, LinkedIn, and YouTube are becoming powerful tools for disseminating research to a non-academic audience, there is growing interest in how social media influence might complement traditional metrics such as citations. Although AACSB does not currently mandate the inclusion of social media metrics in research evaluation, some institutions have begun to recognize the importance of these platforms in reaching practitioners, influencing policy, and contributing to public debate.

Recent studies have examined the ways in which social media can complement traditional citation-based metrics. Researchers such as Haustein, Bowman & Costas (2016) and Arroyo-Machado & Torres-Salinas (2023) argue that social media activity, particularly on platforms such as Twitter, can be an important indicator of a researcher's societal impact. The authors note that while social media metrics should not replace traditional citation counts, they offer a valuable additional layer of insight into how research is being discussed, shared, and used by the public. Similarly, Thelwall, Haustein, Larivière & Sugimoto (2013) and Gholampour, Lim, Lund, Noruzi, Elahi and Saboury (2024) suggest that altmetrics, including social media mentions, provide a complementary perspective on research impact that is particularly relevant for fields where public engagement is critical.

As digital communication tools have flourished, social media has become an increasingly important platform for researchers to engage with the public, policymakers, and other stakeholders outside academia, including social influencers. According to Sugimoto, Work, Larivière & Haustein (2017), social media platforms such as Twitter offer a unique opportunity for scholars to extend the reach of their work beyond the confines of peer-reviewed journals. The authors argue that social media can democratize access to knowledge, allowing for the dissemination of research findings to a global audience, including non-experts who do not typically read academic journals.

Despite the clear potential of social media to enhance research visibility, the academic community has been slow to embrace these platforms. Arguello-Gutierrez & Moreno-Lopez (2024) found that while many faculty researchers recognize the value of social media for disseminating their work, not all researchers actively maintain a strong social media presence. This hesitancy may be due in part to the lack of formal recognition given to social media metrics in

faculty evaluations. As a result, researchers who do engage on social media may not receive the institutional credit they deserve, despite the societal impact of their work.

2.3 The Kardashian Index (K-Index)

The concept of the Kardashian Index (K-Index), introduced by Neil Hall (2014), highlights the growing importance of social media in measuring research influence. Hall developed the K-Index as a ratio of a researcher's social media following (specifically, Twitter followers) to their citation count. Researchers with a disproportionately high number of Twitter followers relative to their citations are said to have a high K-Index, suggesting that their social media presence outstrips their academic impact.

The K-Index was initially introduced as a humorous critique of the academic community's growing obsession with social media influence; however, it has since been used to explore the role of social media in disseminating research to wider audiences. Following Hall (2014), many researchers have calculated and applied the K-Index across different fields, contributing to the literature on social media influence and academic impact. Here are four examples:

Collins, Shiffman, and Rock (2016) used the Kardashian Index to investigate how scientists from various disciplines use social media. Their study found that scientists with higher K-Indexes tend to use Twitter more for outreach and public engagement than for peer-to-peer scientific communication. They also raised concerns that a high K-Index might indicate more popularity than genuine scientific influence.

Wadhwa, Brandis, Madassery, K., et al (2021) conducted a study on interventional radiologists, finding that the average K-Index for the field was 4.1, with notable gender differences (women had a higher average K-Index of 12.1 compared to men's 3.3, though the difference was not statistically significant). This study highlighted the K-Index as a useful metric to assess social media influence within the medical field, particularly within interventional radiology.

Ioannidis (2021) examined the social media visibility of the Great Barrington and John Snow signatories for COVID-19 strategies. The study compared the social media presence and citation impact of signatories, using the Kardashian Index to demonstrate discrepancies between their public visibility and their academic contributions. Ioannidis highlighted how social media engagement can significantly shape public perception, irrespective of the quality or volume of academic output.

Bajaj, Vilanilam, Garg, T., et al (2021) examined the K-Index within the context of cardiovascular and interventional radiology. Their findings showed wide variability in the K-Index values, with some researchers displaying significantly higher social media profiles than would be expected based on their academic citation counts. This study also underscored the importance of assessing the different forms of engagement, both within academic circles and on broader public platforms.

This growing body of literature suggests that social media metrics have a role to play in expanding the scope of how academic impact is measured. While traditional citation-based metrics will likely continue to be central to academic evaluations, there is a need for more comprehensive frameworks that recognize the importance of social media in reaching broader audiences. The K-Index is an interesting foray into the realm of evaluating the social media impact of research along with its traditional academic impact, but as section 3 will show, there are shortcomings to the K-Index that preclude its use to fairly evaluate the overall impact of faculty research.

3. A Kardashian Index for Business and Management Researchers: Methodology

This section outlines the methods used to calculate the Kardashian Index (K-Index) for 50 distinguished business and management faculty researchers. The goal of the K-Index is to compare each researcher's academic impact, as measured by citation counts, with their social media influence, measured by their Twitter followers. By doing so, this analysis aims to highlight discrepancies between traditional academic influence and the broader societal impact enabled through social media in the management academic field as measured by the index, and also to raise questions about the accuracy of the K-Index to measure both social media influence and academic influence effectively.

3.1 Data Collection

To construct the K-Index, two sets of data were collected for each faculty scholar: their citation counts from Google Scholar and their Twitter follower counts. The 50 researchers analyzed were selected from a list compiled by Harzing (2021), which ranks academics based on a variety of citation-based metrics, including total citations, h-index, and individual h-index. This "top 50" list focuses on faculty in business and management, fields where societal engagement and practical applications of research are emphasized. (For some researchers, Google Scholar did not provide a summative count of citations; for these cases, the citation count was manually estimated.)

The Twitter follower data for each researcher was gathered using Social Blade, a public analytics tool that tracks social media statistics. Each researcher's Twitter handle was identified either through their academic profiles or institutional web pages, and the number of Twitter followers was recorded as of July 2022.

3.2 Calculation of the Kardashian Index

The Kardashian Index was calculated for each researcher using the formula introduced by Hall (2014):

$$K = \frac{T}{43.3C^{.32}} \quad (1)$$

Where:

T is the number of Twitter followers,

C is the number of citations in Google Scholar,

The constants 43.3 and 0.32 are derived from a curve fitted by Hall (2014), relating the number of Twitter followers to citations across a sample of scientists.

This formula estimates the expected number of Twitter followers a researcher should have based on their citation count (given social media conditions that existed when Hall did his research). A high K-Index is meant to indicate that a researcher has more social influence than would be expected based on their level of academic influence, while a low K-Index suggests the opposite. The calculated K-Index for each researcher is shown in Figure 1.

4. Discussion

Our K-Index calculations highlight notable patterns and significant discrepancies between social media presence and academic influence—and also reveal limitations of the K-Index that preclude it from being a fair representation of the overall academic and social impact of faculty research.

4.1 Median and Median K-Index, and Standard Deviation

The analysis of the K-Index values in Figure 1 reveals some insight regarding the relationship between the scholars' social media presence on Twitter and their academic impact (measured by citation count). The mean K-Index for the sample is approximately 3.66, suggesting that, on average, researchers in this field have a relatively balanced social media following relative to their academic citations. However, the mean is skewed by a few outliers with extremely high K-Indexes, such as Scholar 14 from Harvard Business School with a K-Index of 32.10. These outliers significantly inflate the average, indicating that while some researchers have an unusually large social media presence compared to their academic contributions, this is not the norm for most of the sample.

In contrast, the median K-Index is 1.28, which provides a better representation of the central tendency for this group. The lower median compared to the mean suggests that the majority of researchers have K-Indexes below the average, reinforcing the idea that most scholars maintain a modest social media presence on Twitter in relation to their academic impact (measured by citation count). The median value indicates that for half of the researchers in the sample, their social media following is reasonably aligned with their academic citations, with only a few having outsized social media influence.

The standard deviation of 6.66 reflects the wide variability in K-Index values across the sample. A high standard deviation indicates that there is significant dispersion in how business and management researchers balance social media and academic influence. Some scholars have a K-Index close to 0, indicating a minimal presence on social media despite high citation counts, while others have disproportionately large social media followings. This wide dispersion emphasizes that while some researchers leverage Twitter effectively to enhance their public visibility, others remain less engaged on these platforms, relying more on traditional academic metrics like citations to demonstrate their impact. The high standard deviation underscores the diverse strategies researchers employ in managing their academic and social media profiles.

4.2 High K-Index Cases

Scholar 14 from Harvard Business School recorded an exceptionally high K-Index of 32.10, with 47,611 Twitter followers against 62,507 citations. This suggests significant influence on social media that surpasses their academic impact.

Scholar 41 from Babson College with a K-Index of 6.60 and 12,247 Twitter followers, also suggests a strong social media impact relative to their 125,746 citations.

Scholar 50 from McGill University stands out with a K-Index of 8.79, having 19,524 Twitter followers against 220,529 citations, suggesting broad academic and social media reach.

4.3 Low K-Index Cases

Scholar 21 from Mendoza College of Business had a very low K-Index of 0.06, with only 91 Twitter followers despite having 65,841 citations.

Scholar 15 from Lunds University showed limited social media engagement with a K-Index of 0.15 and 253 Twitter followers against 101,930 citations.

Individual	Affiliation	Country	Twitter followers (July 31, 2022)	Google Scholar Citations (July 31, 2022)	Kardashian Index
Scholar 1	UC Berkeley Haas School of Business	USA	421	180190	0.20
Scholar 2	The University of Utah	USA	NP	199584	
Scholar 3	Carlson School of Management	USA	NP	104937	
Scholar 4	Case Western Reserve University	USA	NP	89323	
Scholar 5	HEC Montreal	Canada	NP	95567	
Scholar 6	Indiana University Bloomington	USA	NP	111638	
Scholar 7	Muma College of Business	USA	2,198	100007	1.28
Scholar 8*	Fisher College of Business	USA	NP	129950	
Scholar 9	Miami Herbert Business School	USA	NP	49868	
Scholar 10*	DeGroote School of Business	Canada	437	55776	0.31
Scholar 11	Tepper School of Business	USA	2,779	97192	1.63
Scholar 12	The Naveen Jindal School of Management	USA	NP	56380	
Scholar 13	Pennsylvania State University	USA	NP	98752	
Scholar 14	Harvard Business School	USA	47,611	62507	32.10
Scholar 15	Lunds University	Sweden	253	101930	0.15
Scholar 16	UC Berkeley Haas School of Business	USA	6,315	101537	3.65
Scholar 17	Imperial College Business School	UK	NP	103004	
Scholar 18	Stanford University	USA	NP	220090	
Scholar 19	Foster School of Business	USA	506	177107	0.24
Scholar 20	University of Nebraska-Lincoln	USA	NP	130795	
Scholar 21	Mendoza College of Business	USA	91	65841	0.06
Scholar 22	Texas A&M University	USA	NP	125311	
Scholar 23	Universita Bocconi	Italy	NP	87308	
Scholar 24	University of Florida	USA	NP	162043	
Scholar 25	Arizona State University	USA	NP	94616	
Scholar 26*	University of Michigan	USA	NP	162738	
Scholar 27	Copenhagen Business School	Denmark	4,498	47571	3.31
Scholar 28	Cardiff University	UK	NP	44941	
Scholar 29	Harvard Business School	USA	982	65478	0.65
Scholar 30	London Business School	UK	2,929	55169	2.06
Scholar 31	Universitat Mannheim	Germany	1,329	36141	1.07
Scholar 32	Technische Universiteit Eindhoven	Netherlands	1,550	101360	0.90
Scholar 33	Birmingham Business School	UK	NP	54341	
Scholar 34	University of South Florida, Tampa	USA	2,709	44739	2.03
Scholar 35*	University of Maryland, College Park	USA	NP	78160	
Scholar 36*	Terry College of Business	USA	NP	55003	
Scholar 37*	Jones Graduate School of Business	USA	NP	45370	
Scholar 38	Terry College of Business	USA	448	49939	0.32
Scholar 39	King's Business School	UK	NP	35805	
Scholar 40	Wharton School	USA	1,875	84271	1.15
Scholar 41	Babson College	USA	12,247	125746	6.60
Scholar 42	Columbia Business School	USA	110	87115	0.07
Scholar 43*	London Business School	UK	NP	86695	
Scholar 44	Middlesex University	UK	2,621	23929	2.40
Scholar 45	Leeds University Business School	UK	NP	51680	
Scholar 46	DeGroote School of Business	Canada	5,211	41537	4.00
Scholar 47	INSEAD, Singapore	Singapore	2,070	25419	1.86
Scholar 48	The Naveen Jindal School of Management	USA	NP	23932	
Scholar 49	University of Southampton	UK	NP	28019	
Scholar 50	McGill University	Canada	19,524	220529	8.79

*This scholar's Google Citation count was estimated

NP means "no presence"

Figure 1. Kardashian Index of 50 Top Business and Management Researchers (Note 2)

4.4 Scholars with No Twitter Presence

27 out of 50 scholars (designated by 'NP' for 'no presence') have no recorded Twitter followers, which impacts their ability to influence broader public and professional discussions via this platform:

Scholar 2 from The University of Utah, despite having 199,584 Google Scholar citations, has no presence on Twitter, potentially limiting wider societal engagement.

Scholars from major institutions like Stanford University, Imperial College Business School, and University of Nebraska-Lincoln are among those with high academic citations but no Twitter presence, which may suggest a focus on traditional forms of academic dissemination or a potential oversight in not utilizing social media for broader impact.

This group's absence from Twitter represents a missed opportunity to extend their influence beyond academic circles and into public policy and industry practices where their research could have direct applications. However, it is unclear if these researchers are active on other social media platforms, a clear shortcoming of the K-Index as a measure social media influence.

5. Limitations of the K-Index as a Measure of Social Media and Academic Research Impact

While the K-Index provides a novel approach to assessing the social media presence of academics relative to their citation counts, it is not without significant limitations. Developed primarily as a critique of the growing emphasis on social media influence, the K-Index was intended to highlight potential disparities between popularity and academic merit. However, the simplistic reliance on Twitter followers as the sole indicator of social media impact and citation counts as the exclusive measure of academic influence constrains its effectiveness as a holistic metric. The K-Index fails to account for the diversity of social media platforms, differences in engagement metrics, and other scholarly contributions beyond citations, making it a limited tool for evaluating research impact across fields. This section explores these limitations in detail, examining the challenges and biases inherent in the K-Index and why they necessitate a more comprehensive framework for accurately measuring faculty research influence.

5.1 Limitations of the K-Index Equation

Hall (2014) constructed the K-Index as a limited tongue in cheek endeavor (Griggs, 2014). As a result, the structure of the K-Index equation has limitations. The K-Index assumes a specific relationship between social media presence and citation count. The coefficients were estimated to fit 2014 data for specific researchers in specific science disciplines. Yet the social media and academic landscapes have both changed since 2014. In addition, the relative importance of social media and academic publication varies by academic discipline. For example, researchers in business and management may engage more with industry professionals and practitioners, who may not cite their work in academic journals but still contribute to its societal impact through social media engagement.

5.2 K-Index' Reliance Solely on Citation Count to Measure Academic Influence

A key criticism of the K-Index is its reliance on citation count as the sole measure of academic influence. Citation counts tend to favor older, well-established researchers whose work has had more time to accumulate citations, potentially disadvantaging early-career scholars. Additionally, citation counts do not account for the quality or influence of individual citations—highly cited review papers or consensus documents may not reflect groundbreaking or innovative research (Aksnes, Langfeldt & Wouters 2019). Furthermore, citation practices vary widely across disciplines, with some fields accruing citations at a faster rate than others. By focusing only on citation count, the K-Index overlooks other valuable academic contributions, such as conference presentations, media mentions, policy papers, and the growing significance of downloads and views from preprint repositories such as SSRN or ResearchGate. This narrow focus limits the K-Index's ability to fully capture a researcher's academic impact and contributions to the broader scholarly community.

5.3 K-Index' Reliance Solely on Twitter to Measure Social Media Influence

Another critique of the K-Index is its exclusive reliance on Twitter as the platform for measuring social media presence. This exclusivity does not capture a researcher's influence on other platforms such as LinkedIn, YouTube, or blogs. Additionally, citation counts from Google Scholar can vary significantly from those reported by other databases such as Web of Science or Scopus, potentially affecting the precision of the K-Index.

5.4 Limitations of K-Index Under Elon Musk's Ownership of Twitter

Elon Musk's acquisition of Twitter has led to significant changes in the platform's policies, which could potentially impact the social influence measured by the Kardashian Index. Musk's approach to content moderation has been

described as more lenient compared to previous executives, with a reduction in safeguards against misinformation and a more pronounced right-wing appeal (MacCarthy 2022, PolitiFact 2023). In addition, Twitter now offers "blue check" credibility for a monthly fee, no longer thoroughly vetting the credentials of those who attain blue check status.

Some of these policy changes might alienate users with liberal viewpoints, who have expressed dissatisfaction with the platform, potentially diminishing the social impact of academics and researchers who use Twitter to disseminate their work within these circles. A study by Pew Research Center illustrates this growing polarization, showing that Democratic users have become increasingly critical of Twitter, perceiving it as having a negative impact on democracy—a sentiment that has grown stronger since Musk's takeover (Anderson 2023). This ideological shift could lead to the counterintuitive circumstance in which a scholar who has a large number of followers on Musk's Twitter is shunned by liberals in society, including liberal scholars, who are repulsed by the platform.

Furthermore, Musk's changes have prioritized certain types of content and interactions, which may affect how information is disseminated and received on the platform. The new policies could therefore influence the Kardashian Index by potentially skewing the perceived impact of scholars depending on their audience's political leanings and the nature of their content.

These developments underline the complexity of using social media metrics as reliable indicators of academic influence, especially in a rapidly changing social media landscape. As Twitter continues to evolve under Musk's leadership, the implications for academic engagement and the measurement of its impact must be continuously reassessed, especially as many left-leaning researchers turn to other social media platforms to disseminate their research findings.

6. Proposal: An Improved Index for Measuring Social Media Influence and Academic Influence

Recognizing the limitations of the K-Index, we propose a new metric, the Research Impact Index (RI-Index), designed to offer a broader and more holistic evaluation of academic influence. Unlike the K-Index, the RI-Index expands beyond a single social media platform and citation counts, integrating data from multiple social platforms and a wider array of scholarly contributions. This multi-dimensional approach accounts for the many ways that research reaches various audiences, while adjusting for platform-specific reputations and potential biases—such as Twitter's differing reception across demographic and ideological groups.

The RI-Index builds on two primary categories of metrics: Social Media Metrics and Academic Impact Metrics.

6.1 Social Media Metrics

Multi-platform Coverage: Includes data from platforms like Twitter, Facebook, LinkedIn, Instagram, and others, capturing influence across a broader digital footprint.

Reputational Adjustments: Adjusts influence scores to reflect each platform's credibility and reach among diverse demographics and ideological groups, ensuring a balanced representation of social impact.

6.2 Academic Impact Metrics

Diversified Academic Contributions**:** Expands beyond traditional citations to include downloads from repositories such as SSRN, engagement statistics from platforms like ResearchGate, and presentations at academic conferences.

Engagement and Accessibility**:** Factors in visibility metrics, such as views, downloads, and shares, which capture how research circulates beyond academic circles.

Field-specific Contributions**:** Recognizes unique academic outputs, such as software development and open-source project downloads in fields like computer science, providing a tailored view of scholarly influence within each discipline.

This structure allows the RI-Index to comprehensively capture both the academic and societal dimensions of research impact, offering a more adaptable and holistic tool for evaluating faculty contributions.

6.3 Proposed Formulation of the RI-Index (RI)

We propose this formula for the RI-Index, RI:

$$RI = (\sum_{i=1}^{n} w_i S_i) + \alpha C + \beta D + \gamma P + \delta U \quad (2)$$

Where

S_i is the scholar's social media score for platform i (based on views, likes, etc.)

w_i is the weight assigned to platform i (based on the platform's reach and reputation)

C is the scholar's total Google Scholar citations

D is total downloads from SSRN, MedRXiv, or other repositories relevant to the scholar

P is the number of presentations made by the scholar at academic conferences

U is a variable tailored to measuring academically-related items unique to the scholar's discipline—for example, archeological artifacts in the archeology discipline

a,b,c,d are weights calibrated for the scholar's discipline

n is the number of social media platforms being considered

6.4 Calculating the RI-Index for Scholar X

To illustrate the calculation of the RI-Index, let's consider a hypothetical scholar, "Scholar X," in a sample academic discipline. Calculating the RI-Index involves determining Scholar X's social media influence and academic contributions, each weighted according to the discipline's emphasis on various platforms and activities.

First, we calculate Scholar X's social media score. This requires selecting the relevant social media platforms and assigning a weight to each, based on the discipline's consensus. For each platform, a score could be derived from metrics such as views, likes, or interactions, using a weighted average.

For example, assume the following values for Scholar X's social media metrics:

Social Media Scores**:** Twitter = 200, Facebook = 150, Instagram = 300

Platform Weights**:** Twitter = 0.3, Facebook = 0.2, Instagram = 0.5

Using these values, we can calculate the social media influence component of the RI-Index as follows:

$$\left(\sum_{i=1}^{n} w_i S_i\right) = .3(200) + .2(150) + .5(300) = 240 \quad (3)$$

Next, we calculate Scholar X's academic influence by determining the discipline-relevant academic contributions, such as citations (C), downloads from preprint servers (D), presentations at conferences (P), and unique scholarly items (U). Each of these metrics is assigned a weight based on its importance in the field.

Assume the following values for Scholar X:

Academic Metrics:

Google Scholar Citations (C) = 500

Preprint Downloads (D) = 300

Academic Presentations (P) = 50

Unique Items (U) = 400

Metric Weights:

Citations (α) = 0.4

Downloads (β) = 0.3

Presentations (γ) = 0.2

Unique Items (δ) = 0.1

The academic influence component of the RI-Index is then calculated as:

$$\alpha C + \beta D + \gamma P + \delta U = .4(500) + .3(300) + .2(50) + .1(400) = 340 \quad (4)$$

Combining both the social media and academic influence components, the total RI-Index for Scholar X is:

$$\text{RI-Index} = 240 + 340 = 580 \quad (5)$$

This RI-Index score represents a comprehensive view of Scholar X's influence, incorporating both social media presence and traditional academic contributions, each weighted to reflect their relative importance.

7. Limitations of the RI-Index and Suggestions for Future Studies

7.1 Limitations of the RI-Index

The RI-Index has several limitations that should be considered when interpreting its results. One limitation is its dependence on the quality and availability of social media data, which can be inconsistent due to frequent policy

changes and evolving algorithms on platforms such as Twitter and LinkedIn. These changes can impact visibility and engagement metrics, potentially skewing RI-Index values over time and affecting the reliability of the index.

Additionally, the RI-Index primarily captures social media contributions and may overlook significant offline activities, such as community outreach, policy advising, or public engagement through in-person presentations, which are often critical to societal impact in certain fields. Furthermore, the index relies on a complex weighting system to calibrate the relative importance of various metrics, such as citations, downloads, and social media interactions. The weighting process is inherently subjective and may lead to inaccuracies or bias if not carefully adapted for each discipline.

Finally, the RI-Index may face challenges in application across academic disciplines, as the way faculty engage with public audiences varies significantly across fields. For instance, professors in applied sciences may engage directly with industry professionals, while economists and other social science faculty might prioritize public or policy engagement. These diverse approaches mean that the RI-Index might require substantial adaptation to fairly evaluate impact across fields with different norms and methods for interaction with those outside of academia. These limitations underscore the need for ongoing refinement of the RI-Index to ensure it can serve as a reliable measure of impact across a wide range of disciplines and faculty activities.

7.2 Suggestions for Future Studies

Future studies should broaden the approach to evaluating societal impact by examining a wider range of public engagement activities beyond social media interactions, exploring additional metrics that capture offline impact, such as involvement in community outreach, policy advising, and participation in public forums. Expanding the scope to include these types of engagement would offer a more holistic view of societal impact, especially for disciplines where direct interaction with the public, policymakers, or industry stakeholders plays a crucial role.

In addition, future studies could incorporate a cross-disciplinary perspective, recognizing that societal impact is often achieved through a variety of channels tailored to each field's unique audience. Moreover, future research could investigate the potential for qualitative metrics, such as the depth of interactions and the outcomes of public engagement efforts, to complement traditional and digital metrics. By encompassing both online and offline forms of engagement, future studies can contribute to the development of more comprehensive evaluation frameworks that reflect the diverse ways researchers make a difference outside academia.

Finally, future studies might consider developing a nonlinear index to better capture the relationship between social media engagement and societal impact, acknowledging the diminishing returns of increased engagement. A nonlinear index could incorporate a diminishing returns model, such as a logarithmic scale, to more accurately reflect the plateau effect often seen with social engagement.

8. Conclusion

This study highlights the growing importance of social media in shaping the influence of faculty researchers, including in the fields of business and management. By applying Neil Hall's Kardashian Index to 50 prominent faculty scholars, we identify significant discrepancies between traditional academic metrics, such as citation counts, and social media presence, particularly on Twitter. While some researchers demonstrate high K-Index values, indicating an outsized social media influence relative to their academic output, others maintain substantial academic credentials with limited engagement on social media.

Our findings underscore the limitations of both traditional citation-based metrics and the K-Index in fully capturing a researcher's societal impact. Social media platforms provide unique opportunities to extend a researcher's influence beyond academia, reaching policymakers, industry leaders, social influencers, and the general public. However, these platforms also come with challenges, including the potential for misinterpretation and the effects of platform-specific biases.

To address these limitations, this paper proposes a new, more comprehensive metric: the Research Impact Index (RI-Index). The RI-Index integrates multiple social media platforms, adjusts for platform-specific biases, and includes additional academic contributions, such as preprint downloads and conference presentations. By offering a more holistic approach to measuring faulty research influence, the R-Index encourages the higher education community to adopt a multi-dimensional view of scholarly impact, balancing traditional metrics with the evolving role of digital platforms.

We recommend that higher education institutions incorporate both social media engagement and traditional academic metrics into evaluations of faculty research influence in a manner more comprehensive than the popular K-Index. As

the landscape of scholarly communication continues to evolve, broader-based frameworks such as our proposed RI-Index can help better capture the true scope of a scholar's impact in both academic and societal spheres. Embracing such multidimensional approaches ensures that faculty contributions are recognized not just for their academic significance but also for their ability to engage with and influence the world beyond academia.

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Notes

Note 1. Twitter was rebranded as X in July 2023. Because "X" is a vague name that can be confusing to a reader, we use the prior name Twitter in most of this paper.

Note 2. In a prior version of this research, table 1 included the names of the researchers. It was suggested that we suppress the names, after criticism of Ioannidis (2021) for publishing names in his article calculating K-indices for signatories of the Great Barrington and John Snow declarations.