

An Image of Impact: Critiquing Conceptualizations of Influence in the Ranking of Educational Researchers

Jacob S. Bennett
Vanderbilt University

Abstract

As Flyvbjerg et al. (2012) explained, critique is a core mechanism within democracy to keep institutions “effective and improving” (p. 294). People must be critical of the structures they live in because the policies and practices designed and implemented within those structures represent their/our values. If outcomes related to those policies misalign with the values of those who live and work by them, something should change. In this article, I analyze the alignment between values and practices as they relate to conceptualizing the “influence” of educational researchers. Do conceptualizations of influence that can be connected to how social media influencers are labeled as such align with the values educational researchers believe are important to embody to be considered influential? Moreover, do the actions incentivized by this conceptualization of influence align with outcomes educational researchers believe are influential? If the answer to either of these questions is no, I argue for a re-conceptualization of influence to better align the values and practices of educational researchers with the goals and outcomes they seek to obtain.

Jacob S. Bennett is a faculty lecturer at Peabody College, Vanderbilt University, Nashville Tennessee. His research is centered on understanding how inequities perpetuate within specific school/community contexts and working with classroom teachers therein toward their amelioration. Email address: jacob.s.bennett@vanderbilt.edu

Introduction

Why do educational researchers undertake their scholarship? While answers to this question are multiple and nuanced, analyzing specific incentives educational researchers have to undertake their work could provide some. As Silverman et al. (2016) explained, incentives are the reasons people take actions—they are the outcomes we hope our actions achieve. But incentives, like all goals, are numerous and specific to each person. Some incentives that work to motivate one person will not for another. For instance, in the field of educational research, particular researchers might be motivated by professional incentives such as tenure promotions that influence their choices as researchers and provide measures of success accordingly. Other researchers might not be incentivized at all by tenure and measure their success based on other means, such as a school administration adopting and implementing their professional learning program. Others might think both are important measures of success that cannot be disassociated. Even with differences, all incentives can be understood as external (i.e., extrinsic) factors that tap into internal (i.e., intrinsic) motivations. In thinking through the relationship between extrinsic and intrinsic motivations, the initial question that led to me begin this analysis was what sort of external motivations incentivize educational researchers based on measures of success in the field. One particular measure revealed itself as a possible analytical direction: ranking systems.

Academic Measuring

Ranking systems are used to quantify the impact of educational researchers based on specific metrics used to situate researchers' influence amongst their peers. According to Godin (2006), the ranking of individual researchers began with the editor of the journal *Science*, James McKeen Cattell, from 1895-1944. Godin (2007) explained Cattell quantified scientists' value based on their performance related to two common measures still relevant today: quantity of articles published, and the quality of those articles deemed as such by their peers. Godin explained, "Quantity, or productivity as [Cattell] called it, was simple counting of the number of scientists a nation produces. Quality, or performance, was defined as contributions to the advancement of science and was measured by averaging peer rankings of colleagues" (p. 110). By defining quality in this sort of social way, Cattell began the practice of ranking scholars based on productivity in a process Godin defined as "bibliometrics," or, "counting papers (and citations)" (p. 110). As it relates to my initial question around extrinsic motivations

in educational research, I wondered what sorts of actions ranking systems might incentivize for those who are motivated by this measure of success. I found an initial answer through the work of Espeland et al. (2016) and their book, *Engines of Anxiety*.

Espeland et al. (2016) discuss how ranking systems are used in the United States (U.S.) to comply with a growing public demand of holding people and organizations “accountable” for their actions. The authors explained,

We live in an era when individuals, organizations, and governments face pressing demands to be accountable. Not only do we expect actions to be transparent, we also expect them to be demonstrably transparent: the general public has the right to see disinterested evidence of performance, competence, and relative achievement. (p. 1)

These authors described quantitative measures as seeming to offer, “. . . the best means to achieve” goals related to accountability. Moreover, quantitative measures, “. . . have the patina of objectivity: stripped of rhetoric and emotion, they show what is ‘really going on’” (p. 1). Such a patina of objectivity, however, is often just that—thin. Espeland et al. (2016) provided numerous examples of people within organizations who manipulate their practices to obtain positive outcomes on quantifiable accountability measures.

For instance, Espeland et al. (2016) provided examples of how ranking systems such as the *US News and World Report* directly influence decisions of policy within law schools in the U.S. As they wrote,

It is clear that rankings have changed legal education. We have shown how rankings shape the entities they measure. They have become the backdrop against which members understand themselves and others: they define law schools as certain kinds of organizations, populated by individuals with particular identities, embedded in a field of a very specific nature. (p. 173)

In other words, the quantification of influence based on measurable criteria to rank law schools in the U.S. directly influences (i.e., incentivizes) the way(s) people within those schools choose to act. Specifically, Espeland et al. (2016) explained one outcome of a ranking incentive system is that some law school deans work to develop the “brands” of the schools where they work. After reading this a new path of questioning was revealed for me: if rankings systems for law schools create incentives that push deans to create unique brands, how might similar ranking systems incentive educational researchers? This question led me to the field of Altmetrics.

Crane and Glozer (2022) argued that the idea of a “quantified scholar” is becoming more prevalent through new metrics used to

measure the individual-impact of researchers. Extending the field of bibliometrics defined by Godin (2006; 2007), Crane and Glozer (2022) described the field of Altmetrics as, “. . . quantitative scores of online attention to scholarly works based on tweets and mentions in media, blogs, and policy documents, among other sources” (p. 805). Moreover, these authors described Altmetrics as becoming the default method for measuring the influence of scholars beyond their academic community. In other words, alternative metrics that define the field of Altmetrics extend into the public domain and provide a new measure of impact. Spurred by these new measures and the work of Espeland et al. (2016) described above, I was interested in understanding possible similarities in outcomes for those who are deemed influential in the field of social media (i.e., social media influencers (SMIs)) and those deemed influential by way of Altmetrics in educational research. The central research questions guiding this inquiry became:

RQ1: How do educational researcher ranking systems that use Altmetrics conceptualize and operationalize “influence” to rank scholars?

RQ2: What sort of choices might be incentivized for educational researchers to adopt to be listed as influential using Altemetric ranking systems?

To analyze Altmetrics in the field of educational research, I chose the Edu-Scholar Public Influence Rankings scale based on its public descriptions of the specific metrics its designer, Rick Hess, uses to rank scholars and deem them influential.

Join the Club

Every year since 2010, the writer Rick Hess has published the “Rick Hess Straight Up (RHSU) Edu-Scholar Public Influence Rankings” on the educational news website EducationWeek (EdWeek). Hess works with a “selection committee” that includes many of the scholars on the list itself. Once a scholar makes the rankings list, they automatically qualify for a spot on the next year’s list as long as they have, “. . . accumulated at least 10 ‘active points’ in last year’s scoring. (This is a gauge of current activity and so includes all categories except Google Scholar and Book Points, which are measures of careerlong achievement)” (Hess, 2022b). As Hess (2022a) explained, the exercise of putting the list together is, “. . . an imprecise, highly imperfect [one] . . . Yet, for all their imperfections, such efforts convey real information and help spark useful discussion.” My goal in this article is to enter that discussion by analyzing the RHSU rankings through the incentives it creates, which

might influence educational researchers to make certain professional choices to be considered “influential” in the field. While the RHSU list is not the sole way public influence of educational researchers might be measured, the public reach of EdWeek is significant.

The EdWeek website touts a readership of more than 1.6 million (EducationWeek, n.d.) and the site’s Twitter page has over 900,000 subscribers. Rick Hess has close to 20,000 followers himself. For perspective, the American Educational Research Association (AERA), the largest organization bringing together educational researchers across the world, has approximately 25,000 members (American Educational Research Association, n.d.). With the reach of EdWeek, the way the site defines and measures “influence” should be considered significant. While I am conceptualizing EdWeek as significant using metrics related to followers and subscribers, the general question I would like to consider in this article is if similar metrics should be used to define educational researchers as such.

In what follows, I compare the incentives created using Altmetrics such as the RHSU list to measure influence in the field of educational research with measures of influence used in the field of social media. As an early career educational researcher, understanding the ways my work might be measured as influential is important for me and others to think through. If those measures do not align with my goals as a researcher, I will be confronted with a choice: change my goals to align my actions with measures of influence and/or success used in the field, or work to push other educational scholars to re-conceptualize influence and success for the field.

Conceptual Frame: Understanding Influence

Social Media Influencers (SMIs)

To be considered an “influencer” on social media sites such as Facebook, Twitter, YouTube, or TikTok, Gräve (2019) explains a person must have acquired large audiences that reach to the hundreds of thousands or millions. Geyser (2022) defines an influencer as someone who has, “the power to affect the purchasing decisions of others because of his or her authority, knowledge, position, or relationship with his or her audience.” Moreover, SMIs are people who,

... have built a reputation for their knowledge and expertise on a specific topic. They make regular posts about that topic on their preferred social media channels and generate large followings of enthusiastic, engaged people who pay close attention to their views. (Geyser, 2022)

In short, to measure the impact of SMIs their name/handle or media image is the central factor of importance as it relates to followers and people who re-tweet/re-post their ideas. Moreover, Khmais et al. (2017) explained that in the world of social media, the way influencers are measured creates a system in which the influencer themselves become products companies want to engage with. Similar to outcomes described above by Espeland and Sauder’s (2016) regarding deans of law schools developing a “brand” for their school, SMIs also become a “brand” based on their ranked level of influence. This practice, known in social media as “self-branding,” is defined as, “a distinctive public image for commercial gain and/or cultural capital” (Khmais et al., 2017, p. 1). Such an outcome is linked with how SMIs interact with other SMIs.

Within social media, because the person becomes the brand, collaboration with other brands (i.e., people) can be limited or require a high level of overlap related to brand image (Chen et al., 2020). Khmais et al. (2017) described this as incentivizing SMIs to become “singularly charismatic.” In other words, working together to expand influence can be detrimental to the brand a SMI is trying to create and therefore incentivizes SMIs to find their “niche.”

According to Wallach (2021), the top ten influencers on social media are sports, music, television, and film celebrities who have amassed from just under 320 million social media followers (Kim Kardashian) to 517 million (Cristiano Ronaldo). While many celebrities top the list of SMIs based on the measure of followers, other people have become brands solely by their social media presence. The magazine Forbes ranks the top 50 “creators” (i.e., influencers) on social media based on three key metrics (see Table 1).

Table 1
Measures of Creator Influence as Defined by Forbes (2022)

<i>Category</i>	<i>Description</i>
Earnings	“Based on documents and interviews with creators and other experts across social media, retail and advertising.” Accounting for 50% of ranking (Forbes, 2022)
Clout	“. . . creator’s follower count and engagement rate – total engagement (likes, comments, shares) divided by total followers.” Summed across social media platforms (Forbes, 2022)
Entrepreneurship	“. . . ranked . . . on a one-to-three scale ranging from people who make most of their money from traditional advertising to folks building their own companies, brands and services” (Forbes, 2022)

The top three creators on the Forbes (2022) list who have become influencers solely based on their social media presence are: (1) Jimmy Donaldson (MrBeast) with earnings of \$54 million, 162 million total followers, an average engagement (i.e., clout) of 5.99%, and an entrepreneur score of 3; (2) Charli D’Amelio with earnings of \$17.5 million, 203.7 million total followers, an average engagement of 2.16%, and an entrepreneur score of 3; and (3) Alexandra Cooper with earnings of \$20 million, 3.6 million total followers, an average engagement of 15.98%, and an entrepreneur score of 3.

The top three creators on the Forbes list exemplify that measuring social media influence is based solely on the number of times a person’s name/handle is used by the public (i.e., clout) and the amount of money that name (i.e., brand) accrues as a result. If an educational researcher is defined as influential based on Altmetrics, what does that reveal about how influence is conceptualized in the field (RQ1)? In what follows, I analyze the RHSU rankings to critique the ways influence is conceptualized within the list. I will then discuss possible incentives ranking educational researchers using Altmetrics can create (RQ2).

Analysis: Educational Researcher Influencers

If influence and value are connected as they are on social media (i.e., the more influence a person has the more they are valued monetarily), then the measures used to compile the EdWeek rankings could also be interpreted as the valuing of educational researchers. Comparing conceptualizations of influence used to rank scholars with Altmetrics with conceptualizations of influence used to define SMIs, Table 2 below reveals that both measures centralize a researcher’s name. In short, Altmetrics measure influence in the field of educational research through frequency counts of a researcher’s name. Therefore, within Altmetrics, a researcher’s name alone is given value.

As shown here, all the measures used by Hess (2022b) are based on a conceptualization of influence that quantify a researcher’s impact based on frequency counts of that researcher’s name. Such Altmetrics are conceptually the same used to rank SMIs based on the number of followers they acquire. Because of this, educational researchers may be incentivized to act in ways that spread their name without placing much emphasis on understanding how the ideas connected with their name could be impacting educational communities. Such a conceptualization of impact also aligns with the ways SMIs and law school deans have been incentivized to create their own “brand”.

For instance, Google’s “h-index” is used to report a specific sort of

Table 2
EdWeek Ranking Categories

<i>Category</i>	<i>Description</i>
Google Scholar Score	“. . . involves tallying a scholar’s works in descending order of how often each is cited and then identifying the point at which the number of oft-cited works exceeds the cite count for the least-frequently cited” (Hess, 2022b). Hess added that the h-index, “recognizes that bodies of scholarship matter greatly for influencing how important questions are understood and discussed.” (Hess, 2022b)
Book Points	Tallied number of book publications on Amazon—including books both authored, co-authored, or edited. Authors receive two points for single-authored books, one point for co-authored books in which they were lead author, and half-a-point for both co-authored books they were not lead author on and edited volumes. E-books were not counted because, “few scholars on this list have penned books that are published solely as e-books.” (Hess, 2022b)
Highest Amazon Ranking	Book(s) ranked within the top 400,000 best sellers on Amazon. Hess (2022b) explained that the Amazon algorithm makes this ranking volatile, but it still, “conveys real information about whether a scholar has penned a book that is influencing contemporary discussion of education policy and practice.” (Hess, 2022b)
Syllabus Mentions	Opensyllabusproject.org used to measure a scholar’s, “long term impact on what is being read by today’s college and university students.” (Hess, 2022b)
Newspaper Mentions	Number of times scholars were quoted or mentioned in U.S newspapers over the course of 2021. Any mentions in what Hess (2022b) described as the “education press” were not included as they were considered in the subsequent category. Duplicate articles found within different news outlets were also not counted. Search included, “a scholar’s name and affiliation; diminutives and middle initials, if applicable.” (Hess, 2022b)
Education Press Mentions	Number of times a scholar is mentioned or quoted in educational news outlets such as the <i>Chronicle of Higher Education</i> , <i>Inside Education</i> , or <i>EdWeek</i> .
Web Mentions	“Number of times a scholar was referenced, quoted, or otherwise mentioned online in 2021” (Hess, 2022b). While the EdWeek team explained web mentions are a “highly volatile metric,” they were still described as providing useful information regarding a scholar’s “presence and impact” on the public.
Congressional Record Mentions	A “simple name search in the Congressional Record for 2021” [emphasis added by author] to determine if a scholar was referenced by a member of Congress. (Hess, 2022b)
Twitter Score	Followerwonk, a website that measures SMI impact based on a user’s re-tweet rate and other variables such as follower-count. (Wilson, 2014)

impact that scholars have by showing how many times other scholars are using their published work in the form of named references and citations. If a scholar has 10 articles, each cited at least 100 times, and the eleventh article is cited only 99, that author receives a h-index of 10. While a citation is connected to a specific research project or otherwise scholarly article/manuscript, the h-index is solely connected to frequency of use regarding the author's name. The index does not account for the ways concepts within the article cited have been used by those who cite it. This is the same way websites such as Followerwonk (presented in Table 1) rank SMIs: frequency counts of SMIs Tweets being shared. Citing a scholar's work is indeed important in terms of connecting research across the field of educational research, however, solely using the number of times a scholar's work is cited might not give a full picture of the influence that scholar is having on the field. A similar connection can be made between SMIs and measuring influential educational researchers based on book publications.

By using frequency counts of books published, EdWeek is ranking a scholar similarly to how SMIs are ranked by tallying their number of "followers" on numerous social media platforms. Such a ranking shows the influence SMIs have in accruing more eyes for their content, however, does not reveal much more than that. Similarly, merely publishing a book does not provide evidence of influence related to if the publication was ever used or even disseminated. Even though Hess (2022b) explained the Amazon metric provides, "real information about whether a scholar has penned a book that is influencing contemporary discussion of education policy and practice," this conceptualization of influence is based merely on frequency counts of a scholar's name/title. However, as hooks (2001) explained, there is no guarantee a book sale equates to influencing a person's life: "I have bought tons of self-help books. Only a very few have made a difference in my life" (hooks, 2001, p. 12). While the Amazon metric is limited in conveying impact, the metric of syllabus mentions goes a bit beyond.

If a scholar's work shows up on publicly available databases such as the open syllabus project, it might well be evidence of that scholar's work being applied in some way. The limitations, however, of sites such as open syllabus is that they are solely based on universities and colleges in specific countries (e.g., North America, Britain, and Australia). This inherently limits the understanding of impact of this metric. Moreover, the measure is based again on SMI-like frequency counts of an ERIs name by using the number of times a scholar's work is listed on a syllabus to conceptualize impact. This conceptualization does not reveal anything in relation to actual outcomes that a

scholar's work might be having within the classrooms where it might be discussed. Similarly, mentions in the educational press, popular news media, online websites, and tallying twitter followers do not go beyond the use of an educational researcher's name to conceptualize the influence of their work. Similar to syllabus mentions, using the congressional record could also move the conceptualization of influence beyond the use of an ERI's name based on the context where those names are used.

For instance, if a policy maker cites the work of an educational researcher during a congressional hearing, it could be argued that that scholar's work is indeed impacting some sort of outcome related to policy. However, because the metric as used by EdWeek merely counts the number of times an educational researcher was referenced in the congressional record, the conceptualization of influence the metric reveals again does not go beyond frequency of name usage. In the subsequent discussion section, I will delve deeper into connections between policy and influence by discussing how measuring impact based solely on a researcher's name marginalizes the perspectives of teacher-practitioners and the communities where they live and teach. I end by presenting a possible new direction educational researchers might take in conceptualizing influence guided by the work of Cho and Trent (2006).

Discussion: Developing an Image of Impact

In a seminal article, Guba (1984) specified three "policy types" that direct all policy analyses: policy-in-intention; policy-in-action; and policy-in-experience (see Table 3). Using the number of times a researcher's name was referenced in the Congressional Record as a metric to define influence falls under the "policy-in-intention" level of Guba's list. Within this level, proximity to where the policy will be enacted is distant and outcomes within specific schools/classrooms beyond where

Table 3
Guba's (1984) Policy Types

<i>Policy-in-Intention</i>	<i>Policy-in-Action</i>	<i>Policy-in-Experience</i>
Policy at the state/federal governmental level. Distant proximity to where policy will be implemented. Exemplified with rules, guidelines, or tactics.	Policy at the "street-level" through administrators. Close to where policy will be implemented. Exemplified by expectations, norms, and possible effects.	Policy at the personal level. Internal proximity to where policy will be implemented. Exemplified by encounters with policy.

the writing/passing of the policy took place are unknown. While policy enactment at this level is ambiguous, the work of Crain-Dorough and Elder (2021) provides a perspective around why educational researchers might seek influence at this level.

Crain-Dorough and Elder (2021) found that educational researchers and teacher practitioner communities differ in how they define and use knowledge. Presenting the work of Mandinach and Gummer (2016), Crain-Dorough and Elder (2021) described seven forms of knowledge often utilized by teacher practitioners: content knowledge; general pedagogical knowledge; curriculum knowledge; pedagogical content knowledge; knowledge of learners and their characteristics; knowledge of contexts; and knowledge of educational ends, purposes, and values. Such forms of knowledge are localized, based on application and outcome, and often not replicable at scale. Thinking through such knowledge as it relates to Guba's (1984) policy types, these forms fall closer to the experiential level of policy enactment. Conversely, educational researchers consider outcomes from their own and other researchers in their field's work as valuable knowledge (Crain-Dorough & Elder, 2021). Therefore, seeing a colleague's name cited in a congressional record could indeed be conceptualized as influential in that educational researchers value this sort of knowledge dissemination. What I am arguing is that the reason educational researchers might value this sort of knowledge is because they are incentivized to do so based on the ways ranking systems such as the EdWeek list define influence using frequency counts of a researcher's name. Such incentives also can be interpreted as influencing the sort of research educational researchers undertake.

While some educational researchers appreciate and seek out practitioner-based knowledge in schools/communities, Ming and Goldenberg (2021) described a "historical privileging" of specific research methods, goals, and therefore knowledge generated by many educational researchers. Such privileging results in marginalizing practitioner-based knowledge sources as valid forms of evidence (Asen et al., 2011):

. . . debates have historically privileged academic over practical concerns, internal over external validity, experimental over descriptive methods, and quantitative over qualitative methods . . . By constraining what is studied, learned, trusted, and used . . . educational research[ers] . . . overlook important phenomena, settings, and populations, and . . . exclude the experiences of the multiply marginalized. (Ming & Goldenberg, 2021, p. 139)

This privileging can again be interpreted as a product of misalignment between incentives, values, and conceptualizations of influence within

the field of educational research. While the goal of using Altmetrics such as the EdWeek list is to extend the conceptualization of influence beyond traditional bibliometrics and possibly past the policy-in-intention level described by Guba (1984), solely using an educational researcher's name to measure that scholar's influence paradoxically limits the very influence such measures seek to quantify because of the incentives such rankings create.

Altmetrics, SMIs, and ERIs

Because measure of influence is limited to frequency counts of names, Altmetrics create an incentive system for educational researchers who hope to be deemed influential to develop themselves into brands in similar ways SMIs are incentivized to do so. Based on this similarity, the Geysler (2022) quote at the beginning of this article defining SMIs could be slightly tweaked related to Hess's (2022) ranking system. The quote would read: *Educational researcher influencers (ERIs)* are people,

who have built a reputation for their knowledge and expertise on a specific topic. They *are cited regularly* about that topic on their preferred social media channels *and other media outlets* and generate large followings of enthusiastic, engaged people who pay close attention to their views.

What the slight tweaking of this quote reveals is that in the relationship between SMIs and ERIs both are considered experts based on their reputations, which is defined by the number of times their names are used by the public and/or their colleagues. This in turn means that if educational researchers hope to be listed as influential on the EdWeek list, there is no incentive to try going beyond being cited in another scholar's work or having their name/handle re-tweeted/used on social media. Thinking through this outcome as it relates to another component of measuring influence among SMIs, earnings, reveals another possible incentive created by using Altmetrics to measure the influence of educational researchers.

As in economics, simple supply and demand theory predicts that when supply outpaces demand the price (i.e., a conceptualization of value) of that product drops (Power, 2005). If the inverse is true (i.e., demand outpaces supply) prices rise. This same dynamic can be applied to the sharing of educational researchers' ideas (i.e., their value) in their effort of becoming a sought-after item. For instance, if the ideas/presentation materials from public talks are shared beyond the audiences where they were presented (either virtually or in person), supply could outpace demand resulting in the lowered value of that

researcher's ideas. Rather than share widely, educational researchers (much like the SMIs described by Chen et al., (2020)) are incentivized to keep their talks behind pay walls or not have the talks recorded at all. This in turn keeps their ideas in short supply and their value elevated. Such incentives might also lead educational researchers to act in another way similar to SMIs: the intentional curation of a public image.

If an educational researcher's name is the only way their influence is measured, scholars could become more interested in making public statements or having their work reported in specific ways to create an *image of impact* rather than working to understand the outcomes (or impact) of their work/research. For example, measures such as "newspaper mentions," "educational press mentions," and "web mentions" could incentivize an educational researcher who hopes to be listed on the EdWeek rankings to engage with popular and educational media outlets (via their university) to curate a public image aligned with how they want to be perceived. Because the researcher's name is the measure of influence rather than the actual intervention or event that researcher developed, educational researchers could work to document (e.g., take pictures) and engage with the university or other media teams to write articles about the event that "show" work being done. Observable outcomes of the program or event, however, may never be deeply interrogated. Perceptions of a researcher's professional value should also be considered as they relate to the incentives Altmetrics create to be listed as influential.

Using a researcher's name to measure their influence has the potential to simultaneously influence that researcher's conceptualization of the importance of their name over that of their work/research. In other words, scholars who buy into (or more accurately profit from) this system of value may become self-aggrandized. For instance, some researchers might begin to believe being the first author on a research article proves their value more than collaborating with other "lead" authors/researchers. This aligns with the work of Khmais, et al., (2017) as well as Chen et al., (2020) in how SMIs are incentivized to become uniquely charismatic. With such charisma, there is no incentive to work with SMIs who might have curated similar brands because each might "dilute" the other's curated image. Similarly, educational researchers who seek to develop their brand are incentivized to compete, rather than collaborate, with colleagues whose work might be similar to their own.¹

While Altmetrics can incentivize some educational researchers to equate their name with their value, numerous educational scholars

push back against Altmetrics and ranking systems in general. For instance, Fortin et al., (2021) argue Altmetrics exacerbate gender inequities while Crane and Glozer (2022) argue Altmetrics favor scholars who work at historically privileged universities. In the following concluding section, I extend these critiques by asking educational researchers to consider the incentives shifting away from using Altmetrics to measure influence might create.

Conclusions: Iterations of Impact

To push back on Altmetrics, Crane and Glozer (2022) described a goal of moving beyond conceptualizations of influence based on the *quantified* scholar and toward a conceptualization of influence based on *qualified* scholars. Toward this aim, rather than conceptualizing influence through Altmetrics, conversations with members of the communities where educational researchers' scholarship is utilized could be more revealing regarding their public and professional influence. Crane and Glozer explained,

Real impact on the ground is not easily quantifiable and goes far beyond impact in the media or social media . . . most metrics based on social media data can relatively easily be gamed by those who have a basic understanding of how an algorithm works. (p. 805)

To move beyond conceptualizations of influence based on the *quantified* scholar and create the framework for this shift, the concept of transformational validity as described by Cho and Trent (2006) could provide a useful guide.

Transformative Impact

Transformational validity is, “. . . a progressive, emancipatory process leading toward social change that is to be achieved by the research endeavor itself (Cho & Trent, 2006, pp. 321-322). Using transformational validity to conceptualize influence, a shift away from ranking systems that incentivize educational researchers to value their names could begin. Rather, transformational validity would incentivize researchers to place importance on the judgements of those who engage with their work. In other words, educational researchers could become incentivized to be more concerned with how their work is influencing the action and experience levels of policy enactment defined by Guba (1984).

Cho and Trent (2006) provided numerous examples (e.g., Beverly, 2000; Kvale, 1995; Richardson, 1997) of what they termed “transformational approaches” to validity, or what I conceptualize here as influen-

tial approaches to educational research. Within each of these cited works, the emphasis of measuring influence is centered on outcomes related to supporting remedies to ameliorate social problems for, “oppressed people (e.g., poverty, marginality, exploitation)” (Cho & Trent, 2006, p. 325). The core of transformational approaches to research, as Cho and Trent (2006) described through quoting Richardson (1997, p. 167), is to “change the researcher’s relationships with the researched, and . . . attempt [to] ‘chang[e] one’s relationship to one’s work’ (Cho & Trent, 2006, p.325).

For instance, if transformational approaches were used to conceptualize the influence of educational researchers, some researchers might become incentivized to develop deeper relationships with historically marginalized and resilient (Echo-Hawk, 2019) communities. This in turn would change the relationship educational researchers have with their own scholarship as well through the essential use of reflexivity and researcher positionality statements (Milner, 2007). As Flyvbjerg (2001) explained, reflexivity is the strength of social science. Such a practice should be used to guide reflections of power dynamics between researchers and those who are providing experiential data within the research (i.e., participants). Rather than a researcher being incentivized to reflect on the number of times their name is cited by their colleagues and/or used on social media, incentives created through transformational validity would place emphasis on personal reflection.

Within such reflections, “. . . question[s] of [influence] in itself is convergent with the way the researcher self-reflects, both explicitly and implicitly, upon the multiple dimensions in which the inquiry is conducted (Cho & Trent, 2006, p. 325). Because self-reflection is essential to transformational approaches, researchers may also become more incentivized to reflect on the ground-level impact their work is having on communities (both positive and negative as defined by that community) rather than measuring influence based on if that community uses their name in some way. Moreover, action-based and participatory research designs using transformational validity to conceptualize impact could provide communities with the tools to define their own definition(s) and application(s) of influence.

Participatory Impact

Participatory research is inherently influential because it provides participants tools to both better understand and modify their contexts based on personal needs. Walter (2009) explained that participatory action research (PAR) includes positive change as an element embedded within its approach. PAR is collaborative by design, with research questions and

topics emerging from those in the community where the research is being developed. Moreover, Walter explained that the “diffusion, or even relocation of power, from the researcher to the community of interest is a central element to the research method [PAR]” (p. 2). Collaboration is incentivized through PAR because, “besides the mere participation of co-researchers in the inquiry, participatory research involved the joint process of knowledge production that leads to new insights on the part of both scientists and practitioners” (Bergold & Thomas, 2012, p. 195). While some might argue such a conceptualization of influence would be just as ambiguous as those currently used to influence policy because measures of impact would be nebulous, such a definition is still more impactful because outcomes are centered on the experiential rather than intentional level of policy enactment (Guba, 1984).

For instance, even if a state or federal policymaker was influenced by reading the work of an educational researcher and has intentions for their policy to influence outcomes at the school level based on that work, the actual impact of the policy is where the ambiguity lies. By using transformational validity to guide conceptualizations of influence, specific examples of impact would be possible to discern and measure within communities undertaking educational research. The ambiguity is therefore not in the impact, but in the transferability of that definition of impact across communities. Conceptualizing influence at the experiential level would in turn make ranking systems obsolete because the goal of impactful research would not be to scale outcomes beyond specific contexts but rather to explicitly connect goals and outcomes therein.

In conclusion, using transformational validity to re-conceptualize influence in the field of educational research could in turn transform how educational researchers are incentivized to engage with their research and participants. Ranking lists would become obsolete because measures of influence would be localized and based on the relationship between participant need(s) and outcomes. In this new system, the privileging of research methods that lead to goals of scale (Ming & Goldenberg, 2021) could be replaced with participatory methods to measure transformational influence within a context. A researcher’s name would not be any more important a measure of influence than the names of the people who collaborate on the research project. By conceptualizing influence through a transformative lens, the research generated by educational researchers could become a whole different type of impactful.

Note

¹ There are numerous researchers who seek out collaborations with like-minded colleagues in their field to further their work and extend their impact, however, these researchers are pushing back against the incentives generated through Altmetrics and should be commended!

References

- American Educational Research Association. (n.d.). *AERA by the Numbers*. <https://www.aera.net/About-AERA/Who-We-Are/AERA-By-The-Numbers#:~:text=General%20Facts%20About%20AERA,AERA%20has%2012%20Divisions>
- Asen, R., Gurke, D., Solomon, R., Conners, P., & Gumm, E. (2011). “The research says:” Definitions and uses of a key policy term in federal law and local school board deliberations. *Argumentation and Advocacy*, 47(4), 195–213. <https://doi.org/10.1080/00028533.2011.11821747>
- Bergold, J., & Thomas, S. (2012). Participatory research methods: A methodological approach in motion. *Historical Social Research*, 36(4), 191-222.
- Beverley, J. (2000). Testimonio, subalternity, and narrative authority. In N.K. Denzin & Y.S. Lincoln (eds.) *Handbook of Qualitative Research*, 2nd Edition, pp. 555–65. Sage.
- Chen, Yu-Yuan; Lai, Po-Lin; Chen, Shih-Yu; Lo, Liang-Wei; Chen, Chih-Yun; and Wei, Chih-Ping. (2020). Partner up: A deep learning method for predicting the success of social media influencer collaboration”. *PACIS 2020 Proceedings*. 39. <https://aisel.aisnet.org/pacis2020/39>
- Cho, J., & Trent, A. (2006). Validity in qualitative research revisited. *Qualitative research*, 6(3), 319-340.
- Crane, A., & Glozer, S. (2022). What’s next for the quantified scholar? Impact, metrics, and (social) media. *Business & Society*, 61(4), 807-812.
- Crain-Dorough, M., & Elder, A. C. (2021). Absorptive capacity as a means of understanding and addressing the disconnects between research and practice. *Review of Research in Education*, 45(1), 67-100.
- Echo-Hawk, A. [@echohawkd3]. (2019, September 7). *We are not a “historically” underserved population. #indigenous* [Tweet]. <https://twitter.com/echohawkd3/status/1170371608894046208?lang=en>.
- EducationWeek. (n.d.). *About Us*. <https://www.edweek.org/about/>
- Espeland, W. N., Sauder, M., & Espeland, W. (2016). *Engines of anxiety: Academic rankings, reputation, and accountability*. Russell Sage Foundation.
- Flyvbjerg, B. (2001). *Making social science matter: Why social inquiry fails and how it can succeed again*. Cambridge University Press.
- Flyvbjerg, Landman, & Schram. (2012). Important next steps in phronetic social science. In B. Flyvbjerg, T. Landman & S. F. Schram (Eds.) *Real social science: Applied phronesis*. (285-297). Cambridge University Press.
- Forbes. (2022). *Top creators 2022: These 49 social media savants—and one dog—are redefining celebrity for our connected age*. Forbes. <https://www.forbes.com/sites/alexandrasternlicht/2022/09/06/top-creators-2022/?sh=6f61e6fe67a1>
- Fortin, J., Bartlett, B., Kantar, M., Tseng, M., & Mehrabi, Z. (2021). Digital

- technology helps remove gender bias in academia. *Scientometrics*, 126(5), 4073-4081.
- Geysler, W. (2022, January 27). What is an influencer? Social media influencers defined. *Influencer Marketing Hub*. <https://influencermarketinghub.com/what-is-an-influencer/#:~:text=Influencers%20in%20social%20media%20are,close%20attention%20to%20their%20views>.
- Godin, B. (2006). On the origins of bibliometrics. *Scientometrics*, 68(1), 109-133.
- Godin, B. (2007). From eugenics to scientometrics: Galton, Cattell, and men of science. *Social Studies of Science*, 37(5), 691-728.
- Gräve, J. F. (2019). What KPIs are key? Evaluating performance metrics for SMIs. *Social Media + Society*, 5(3), 2056305119865475.
- Guba, E. G. (1984). The effect of definitions of “policy” on the nature and outcomes of policy analysis. *Educational Leadership*, 42(2), 63-70.
- Hess, R. (2022a, January 5). *The 2022 RHSU Edu-Scholar Public Influence Rankings*. *EdWeek*. <https://www.edweek.org/policy-politics/opinion-the-2022-rhsu-edu-scholar-public-influence-rankings/2022/01>
- Hess, R. (2022b, January 4.) *The 2022 RHSU edu-scholar public influence scoring rubric*. *EdWeek*. <https://www.edweek.org/policy-politics/opinion-the-2022-rhsu-edu-scholar-public-influence-scoring-rubric/2022/01>
- hooks, b. (2001). *all about love: new visions*. Harper Collins.
- Khamis, S., Ang, L., & Welling, R. (2017). Self-branding, ‘micro-celebrity’ and the rise of social media influencers. *Celebrity Studies*, 8(2), 191-208.
- Kvale, S. (1995). The social construction of validity. *Qualitative Inquiry* 1(1): 19–40.
- Mandinach, E. B., & Gummer, E. S. (2016). What does it mean for teachers to be data literate: Laying out the skills, knowledge, and dispositions. *Teaching and Teacher Education*, 60, 366-376.
- Milner IV, H. R. (2007). Race, culture, and researcher positionality: Working through dangers seen, unseen, and unforeseen. *Educational Researcher*, 36(7), 388-400.
- Ming, N. C., & Goldenberg, L. B. (2021). Research worth using:(Re) framing research evidence quality for educational policymaking and practice. *Review of Research in Education*, 45(1), 129-169.
- Power, T. M. (2005). The supply and demand for natural amenities: An overview of theory and concepts. *Amenities and rural development: Theory, methods and public policy*, 63-77.
- Richardson, L. (1997). *Fields of play: Constructing an academic life*. Rutgers University Press
- Silverman, K., Jarvis, B. P., Jessel, J., & Lopez, A. A. (2016). Incentives and motivation. *Translational Issues in Psychological Science*, 2(2), 97-100.
- Wallach, O. (2021, May 14). *The world's top 50 influencers across social media platforms*. Visual Capitalist. <https://www.visualcapitalist.com/worlds-top-50-influencers-across-social-media-platforms/>
- Walter, M. (2009). Participatory action research. In A. Bryman (Ed.), *Social research methods* (pp. 151-158). Falmer Press.
- Wilson, C. (2014, April 12). *FollowerWonk Review 4/11/2014*. Trust Radius. <https://www.trustradius.com/products/followerwonk/reviews#pricing>