

## **Beyond prestige: Seven criteria to assess global university rankings and their influence on higher education institutions**

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### Abstract

Global rankings have become a world wide phenomenon in the past years. They allow for accountability and help various stakeholders make decisions regarding universities. This literature review explores 24 articles and follows an analytical framework composed of 7 criteria of assessment to determine the quality different global university rankings. This framework was developed by using the 5 indicators theorized by Dill & Soo (2005): validity, comprehensiveness, relevance, comprehensibility, and functionality; as well as two new criteria (fairness and sustainability) conceptualized by the author, by drawing inspiration from the work of Carayannis & Campbell (2021). This comprehensive review not only identifies existing gaps in the literature but also proposes a future research agenda that will allow for a more nuanced understanding of the complex relationship between universities and global rankings, and hopefully inform future policies and practices in the higher education sector on a global scale. The conclusion of this paper is that global rankings carry several flaws in their design, they do not account for the contextual difficulties and needs of many countries and regions. Thus, rankings should be reconsidered by society and eventually intervened by experts, so as to allow the global higher education landscape to become more fair, diverse, and sustainable.

**Keywords:** higher education, tertiary education, global rankings, league tables, literature review, universities.

### Introduction

If I were to ask you what is the best university in the world what would you say? Most people answer Harvard, Cambridge or some other famous institution. However, people rarely stop to consider what it means to be “the best” university. How do we measure the quality of one? Well, the answer for most rankings lies in questionable indicators like the number of publications, patents, citations, etc. The quality of other equally important aspects of education, like teaching, tends to be neglected. The purpose of this paper is, therefore, to do a literature review of the relationship between universities and rankings in a wide range of countries. Understanding this relationship is the first step towards

determining the urgency of the matter, as well as hypothesizing possible ways to improve the system with which we value higher education institutions.

There are two types of articles that I am going to review in this paper: those that focus on how rankings affect specific countries and others that look at rankings as a whole. However, there is a need for research that analyses and compares all these different views on the matter to specific criteria used to assess university rankings, which is precisely what this literature review aims to do.

The countries that are researched on the papers used in this article are: Hong Kong and Singapore (Soh & Ho, 2014), India (Yeravdekar & Tiwari, 2014), Iran (Rajabloo, M. et al., 2019), South Africa (Pouris & Pouris, 2010; Pillary & Pillary, 2020; and Lee & Sehoole, 2015), China (Lu, P., 2018), Central and Eastern Europe (Boyadjieva, P., 2017), Cambodia (Nhem, 2021), Nigeria (IseOlorunkanmi et al., 2015), The Education Collaborative (Africa, 2019), Kazakhstan (Anafinova, 2020), Serbia (Ivančević & Luković, 2018) and even the Kurdistan region (Sherwani, K.H., 2018).

On the other hand (Derakhshan et al., 2021; Petruta Pavel, 2015; Vidal & Ferreira, 2020; Muñoz-Suárez et al., 2020; Hubbard et al., 2020; Brasher et al., 2019; Shin & Lee, 2022; Vernon et al., 2018; Jabnoun, 2015; Soysal et al., 2022; Fauzi et al., 2020; Teichler, 2011; and Kauppi, 2018) are the authors that analyse rankings as a whole.

In this study, a comprehensive analysis was conducted based on a review of academic articles addressing the topic of university rankings. A total of 28 articles were scrutinized, each contributing unique insights into the various dimensions and implications of global university rankings. The review spanned from 2004 to 2022 reflecting almost two decades of scholarly discourse on the subject. This timeframe allowed for the identification of evolving trends, emerging critiques, and persistent issues within the field of university rankings. The selection of articles and the chosen timespan aimed to provide a nuanced and comprehensive understanding of the multifaceted dimensions surrounding the assessment of global university rankings.

This paper will provide insightful knowledge for many stakeholders inside higher

education systems worldwide. Students, prospective students, teachers, researchers, institutional managers and policy makers will all be aware of the externalities (both positive and negative) that may arise within their higher education institutions as they get too close to rankings. The information contained in this article can be used by anyone inside higher education communities to steer their institutions towards a more holistic path.

The primary research question driving this investigation is: How do global academic rankings impact the behavior of higher education institutions worldwide? Additionally, the study aims to explore the nuances and consequences associated with the design and influence of these rankings on universities. The research question is highly pertinent in the current academic landscape, considering the growing prominence of global rankings and their impact on universities.

The structure of the present paper is as follows. I will begin by explaining the general aspects regarding the existence and functioning of university rankings. Then, we will take a look at their most common criticisms and opinions towards them, from the points of view of different researchers of the aforementioned countries' higher education systems. I will conduct this analysis through the lenses of the 7 criteria to assess university rankings, resulting from Dill & Soo's original 5 criteria and the 2 new ones conceptualized by me with inspiration from the quintuple model of innovation of Carayannis & Campbell (2021). Finally, I will give some conclusions regarding university rankings for future investigations on the matter.

### **Methodology**

This article adopts a distinctive theoretical-methodological approach to comprehensively assess university rankings through a set of predefined criteria. While not strictly a systematic literature review, this study draws inspiration from similar methodologies, particularly employing a narrative literature review.

The primary data collection involved a comprehensive search for scholarly articles related to international university rankings. The search was conducted on the Scopus database, chosen for its extensive coverage of academic literature across various disciplines.

The search strategy involved employing specific keywords related to university rankings, including variations such as "international ranking\*" and "universit\*," to ensure a broad yet relevant pool of literature. The objective of the literature search initially aimed to identify patterns among the collected articles, with an emphasis on synthesizing diverse perspectives on university rankings. However, during the initial screening process, an influential paper by Dill & Soo on the five criteria for evaluating university rankings was discovered, providing a foundational framework for analysis.

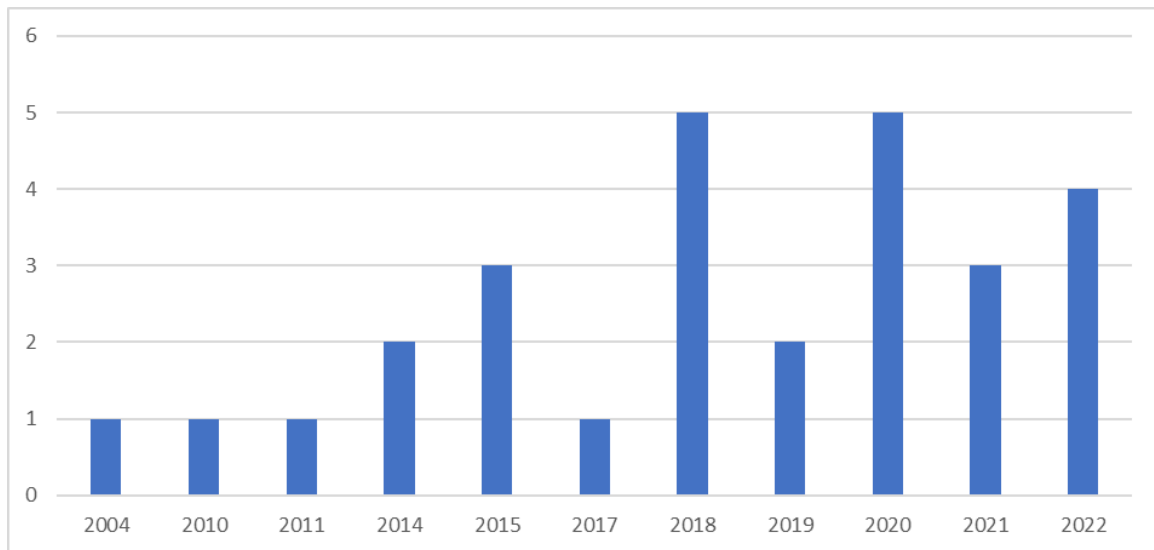
While Dill & Soo's criteria served as a valuable starting point, the review process revealed a need for an expansion of the assessment criteria. In response, the work of Carayannis & Campbell (2021) on knowledge democracy and ecology was used to conceptualize two extra criteria to the analytical framework. Thus, each article will be scrutinized through the lenses of the seven predefined criteria of Dill & Soo's original five criteria of: relevance, validity, comprehensibility, functionality, and comprehensiveness, as well as the two new criteria of fairness and sustainability.

This method allows for a focused exploration of how each article aligns with or challenges the selected criteria, providing a systematic and transparent framework for assessing the strengths and limitations of the diverse scholarly discourse on university rankings. The iterative nature of this process ensures that the assessment criteria evolve organically as insights emerge from the literature, fostering a dynamic and responsive approach to capturing the multifaceted dimensions of university rankings.

### **Descriptive analysis**

Before continuing with the first section of the analysis, it is important to summarize the key statistical findings of the 28 articles found on the literature search, which represent the database for this paper's analysis. For this purpose, I will conduct a brief descriptive analysis of the publications by year, and the geographical loci of analysis of the database.

Figure 1: Publications by year from the 28 collected articles for analysis



For Figure 1, the scale unit represents the count of articles (Y axis) published each year (X axis), spanning from 2004 to 2022. The figure conveys the temporal distribution of literature included in this review. As can be seen, there has been a gradual increase in scholarly interest in the topic of rankings and their influence on higher education institutions, particularly from 2014 onwards. There is an increase in awareness and concern within the academic community regarding the consequences and implications of ranking systems on higher education. This rise in publications over the years suggests a growing acknowledgment of the need to critically evaluate and understand the influence of global rankings on universities both regionally and worldwide.

Figure 2: Geographical loci of analysis from the 28 collected articles for analysis

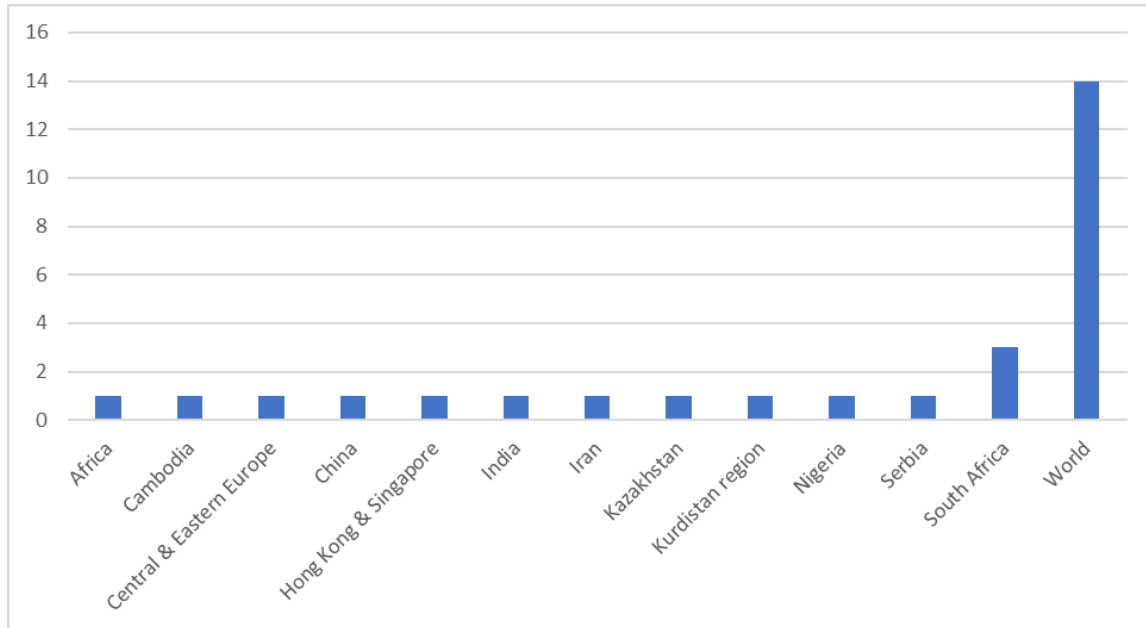


Figure 2 provides insights into the geographical locus of analysis of each article. The regions or countries under scrutiny are identified, indicating whether the article examines global rankings from a general perspective (i.e., in the “world”) or delves into the specific dynamics of a particular region or country. The count (Y axis) for each region signifies how many articles concentrate on that particular geographical area (X axis).

A significant portion of the literature (14 out of 28 articles) takes a comprehensive approach, analyzing global academic rankings without specific regional constraints. This indicates a prevalent interest in understanding the broader implications and trends that transcend individual countries or regions.

Surprisingly, no articles were found that specifically analyze the impact of rankings in Latin America or North America. One could argue that the reason that the United States of America are underrepresented in this type of critical assessment of rankings is because higher education institutions in this country tend to benefit from the current global ranking system, as institutions most institutions in the top of such rankings tend to come from the USA. However, this does not explain the lack of research publications on this topic in Latin America, a region which is highly underrepresented in global rankings.

Nonetheless, this gap in representation of the Americas highlights a potential area for future research.

The predominant focus on regions such as Africa, Cambodia, Central & Eastern Europe, Iran, Kazakhstan, Kurdistan, Nigeria, and Serbia is noteworthy. Many of these regions are often underrepresented or neglected in global rankings. Scholars are actively exploring the impact of rankings on institutions that may not traditionally feature prominently in global rankings. Understanding the dynamics in these regions is important for fostering inclusivity and ensuring that the challenges and opportunities faced by diverse higher education systems are considered in the broader conversation about rankings.

### **Rankings: How do they work?**

Global university rankings have been around since 2003 with the Academic Ranking of World Universities (ARWU) or Shanghai Jiao Tong Ranking. Since then, several others have been created, like the Times Higher Education (THE) or the Quacquarelli Symonds (QS) Ranking, and within the past few years more and more continue to emerge, e.g., the European U-Multirank or the Russian Moscow International University Ranking (MOSIUR). Each one of these rankings (or League Tables) use different methods and indicators to evaluate the quality of higher education institutions worldwide, but they all have the same purpose of summarizing “the ‘quality’ of the institution with one metric easy to understand by various stakeholders” (Derakhshan et al., 2020, p.88).

But why did society suddenly start wanting to determine the “quality” of our universities? First of all, the idea of a set of objective criteria to determine the quality of an institution is vague at best. Meredith points out that “academic quality is a difficult if not impossible concept to quantify” (2004, p.445). Despite this, institutions insist on attempting to measure quality. Some argue the purpose is to provide public accountability and to help students make informed choices about their education (Dill & Soo, 2005).

However, the concept of ranking higher education institutions to inform stakeholders is not new. Before the 2000s this information was provided by newspapers, magazines, NGOs, and government agencies in specific countries. For instance, The Good



Universities Guide in Australia, The Times Good University Guide in the UK, and The US News World Report, America's Best Colleges in the United States. It was the "world-wide expansion of access to higher education [what lead to] an increasing national and global demand for consumer information on academic quality" (Dill & Soo, 2005, p.495). This new global market of universities meant the demand for information on global academic quality, which has inevitably led to the creation (perhaps unintended) of a global idea of quality education, which surely brings some positive results for the global market of higher education.

However, many argue that this idea of quality as a universally agreed upon characteristic is inherently flawed. As Teichler (2011) explains "most ranking studies are 'monotheistic' in the belief that there is a single 'god' of quality. There are hardly any ranking studies that deal with diverse concepts of 'quality' or even 'qualities'" (p.64). As we shall see, quality in higher education extends beyond a singular, universally accepted criterion. Thus, recognizing this complexity is crucial for developing more inclusive and representative evaluation frameworks that better serve the diverse landscape of global higher education.

Nonetheless, the impact of rankings extends beyond informing students and fostering a competitive environment among universities. Notably, university rankings have become instrumental in influencing public policy, both at the national and international levels.

One significant aspect of this influence is observed in the way rankings are employed as indicators for policy-making (Vidal & Ferreira, 2020). Governments worldwide use rankings not merely as measurements but as goals themselves. For instance, there is a growing trend where nations aim to secure a specific percentage of their universities within the top 100 of certain rankings. This raises critical questions about the overarching objectives of rankings, beyond being simply evaluative tools (Vidal & Ferreira, 2020).

The interplay between rankings and political power is a complex dynamic, as organizations, including higher education institutions, battle for legitimacy and political influence (DiMaggio & Powell, 1983). The intense competition for higher positions within global rankings is indicative of the broader struggle for institutional legitimacy

and recognition. This phenomenon underscores that rankings are not merely quantitative assessments but strategic tools that institutions employ to bolster their political standing and stakeholder perception. The Kazakhstani government, for instance, places significant emphasis on the global rankings, using them as a promotional tool for their national higher education institutions (Anafinova, 2020).

In conclusion, the relationship between rankings and higher education is intricate, and it is necessary to view rankings not in isolation but as influential instruments that shape not only universities but also national and international policies.

### **How to rank rankings?**

I believe that the question “which is the best university” is pointless. Instead, we should be asking “which is the best university for me?” or “in what is this university better at and what is it lacking of?”. Likewise, the issue is not whether global rankings are good or bad but what are they good at measuring and what not? What are the positive and negative effects of them? And who benefits or is affected by them? In order to answer all these questions we must first find a set of indicators to measure the quality (ironic as it may seem) of these rankings, just as they do with universities.

Dill & Soo (2005) have explained five key criteria used to evaluate the design and effectivity of rankings. The first criterion is validity, which contemplates if “valued societal outcomes [like] knowledge, skills, and abilities [are being measured]” (p.505). Comprehensiveness is related to the “range of indicators that capture the critical dimensions of academic quality” (p.511). Relevance asks if the “information [provided is] appropriate to the specific choices students must make” (p.513). Comprehensibility means if “the amount and form of information [...] and the media by which it is transmitted meet the needs of student consumers” (p.514). And finally, with functionality we observe if “the report card [is] designed in a way that encourages the ranked universities to engage in the improvement of teaching and student learning” (p.516). This last criterion is one of the most used by researchers to criticize academic rankings because the wrong functionality may lead to the creation of “incentives for dysfunctional university behavior such as data misrepresentation or student recruitment designed to inflate ranking scores” (p.516).

The Triple Helix model of innovation is a framework that describes the dynamic relationship between universities (knowledge production), industries (knowledge exploitation), and governments (knowledge transfer and regulation) (Leydesdorff & Etzkowitz, 1998). In recent years, this model has been widely used to analyze the interconnectedness of these three entities, emphasizing collaborative efforts for innovation, economic development, and societal progress. I argue that current university rankings allow for some degree of evaluation of the relationship between academia and the other two parts of the helix. For instance, one can gauge connection between universities and the industry sector by counting the number of patents, which is one popular indicator of rankings. On the other hand, university-government relations can be assessed by rankings through the relevance criterion. By examining how universities contribute to policy-making, societal impact, and government partnerships, we gain insights into the effectiveness of these relationships and their significance in shaping the direction of academic research and innovation. This criterion not only highlights the practical applications of academic work but also underscores the societal relevance and responsiveness of universities to governmental needs and priorities.

However, in this article I will make the case for two extra criteria to include when assessing the value of university rankings: 1) fairness, and 2) sustainability. I posit that current ranking models, for the most part, do not foster democracy of knowledge nor environmental protection. I base this assertion on the Quintuple Helix model of innovation, proposed by Carayannis & Campbell (2021) as continuation of the Triple Helix model. The authors refer to these two elements in the following manner:

1. Without a democracy or knowledge democracy, the further advancement of knowledge and innovation are seriously constrained. In this sense, knowledge and innovation evolution depend on democracy and knowledge democracy.
2. Ecology and environmental protection represent a necessity and challenge for humanity, but they also act as drivers for further knowledge and innovation (this should lead to a win-win situation for ecology and innovation) (Carayannis & Campbell, 2021, p.2071)

Thus, fairness in university rankings can be linked to the concept of knowledge democracy, echoing the principles of the Quintuple Helix model. In a democratic knowledge ecosystem, diverse perspectives and contributions are valued, ensuring a fair representation of universities. The fairness criterion in university rankings goes beyond mere diversity and inclusion—it delves into providing an equitable landscape for all institutions, irrespective of their historical prestige or resource constraints. Current ranking systems often favor elite universities, perpetuating a cycle where the best stay at the top, leaving others in a seemingly insurmountable position. This inequity extends to the phenomenon of "brain drain," as talented minds from less developed countries migrate to prestigious institutions, perpetuating the divide. A fair ranking system should assess not just outputs but also the relative improvement of each institution considering its available resources, akin to a formative assessment in teaching. This approach ensures a democratic knowledge environment, fostering equal opportunities for growth and recognition.

Sustainability sees environmental protection as a driver for knowledge and innovation (Carayannis & Campbell, 2021). Ranking systems should consider a university's commitment to sustainable practices and environmental responsibility. Including sustainability in rankings encourages universities to prioritize eco-friendly initiatives, contributing to a positive impact on the environment. However, the sustainability criterion in university rankings extends beyond mere ecological considerations, also embracing a comprehensive perspective that advocates for the sustained well-being of societies and individuals alongside institutional stability. It calls for a global approach where developed countries cultivate sustainability without impeding the progress of others (for example, through the aforementioned phenomenon of "brain drain"). Instead, the focus should be on fostering collaboration and knowledge exchange that empower all nations to contribute to sustainable development. Going beyond environmental concerns, sustainability encompasses the working conditions of faculty and the holistic health and psychological well-being of academic stakeholders. By encouraging a symbiotic relationship, university rankings can play a pivotal role in steering institutions towards practices that not only benefit themselves but also contribute to the collective global well-being.

## **Discussion**

I will now analyse the set of articles to understand how the different researchers value rankings in relation to their specific countries' higher education system. I am going to utilize the five criteria explained by Dill & Soo, plus the two criteria I propose, to determine the quality of different rankings, relating to the data of each analysed country.

## **Validity**

Most of the criticism rankings receive regarding their validity revolves around their focus on measuring and valuing research output while neglecting other important indicators like the quality of teaching the students receive. Ivančević & Luković point out that the “increasing prestige associated with some rankings of elite institutions has been a motivating factor for many universities to invest more into their research activities [...] with the hope of attaining a better global rank” (2018, p.1517). And Yeravdekar & Tiwari add that “the other indicators are judged only in so far as they support research” (2014, p.67). While acknowledging the societal value of research, it is imperative to recognize that the educational process extends beyond research endeavors. Fauzi et al. (2020) posit that universities poorly ranked overall may excel in teaching and other qualities vital for society.

Thus, there are several other indicators that must be valued in the educational process of our students, not just research. For instance, one of the main reasons for going to a university is to get a degree that allows you to find a job and contribute to the economy of the region where the institution is located. Therefore, it is important to measure the employability of graduated students or the impact they have in the local industry. Likewise, educational factors are key indicators that we should value as a society, like the “cohesiveness of students' curricular experiences, their course taking patterns, the extent to which faculty members involve students actively in the learning process, non-classroom interaction with faculty members, and the amount of peer group interaction” (Dill & Soo, 2005, p.505).

## **Comprehensiveness**

Ivančević & Luković propose a table that summarizes three performance dimensions (research, teaching, and web) in which several rankings operate (2018, p.1520). All of

them considered research related indicators, only four considered teaching, and two looked at web indicators. Only MOSIUR (Russia) was fully comprehensive within those three dimensions. Nonetheless, comprehensiveness depends on the amount of dimensions one considers. For instance, the European U-Multirank Project ranks institutions according to “five dimensions of university activity: (1) teaching and learning, (2) research, (3) knowledge transfer, (4) international orientation and (5) regional engagement” (Taken from the U-Multirank webpage, 2023). This means that, in order to assess the comprehensiveness of a ranking, we first need to define a baseline of dimensions to be considered. Only then can we individually value the validity of each indicator of each dimension. On the other hand, Sherwani talks about three dimensions: teaching, research, and service (2018), while Pouris & Pouris apply “a university ranking based on a single indicator – citations” (2010, p.516). In conclusion, there is no single idea of what a “comprehensive” ranking is, although we can still argue that incomprehensiveness is normalized due to the consistent focus on measuring and valuing mainly research related indicators in many rankings.

### ***Relevance***

Another critique league tables receive is that they insist on ranking institutions as a whole instead of individual programs. When a student who wants to study psychology compares the quality of several universities, most would want to know which psychology program is the best for them. University “A” might have way less ranking than “B” but excel in the field of psychology. Key Cheng & Kwok Keung say that “overall ranking hides important differences and it is necessary to look at details for better insights” (2014, p.782).

What society should be working towards is the development of institutions that differentiate from one another instead of reproducing the same type of universities with the same goal of publishing as much as possible so that they can climb the academic hierarchy. Rajabloo et al. explain this problem as the “cultural dominance” that rankings are having on the global higher education market. They refer to the work of Ordorika & Liloyd by saying that putting “stress on indicators of commercialization, privatization, globalization, and so forth have brought about sacrificing the national and unique identity of universities in this procedure” (2019, p.98). Furthermore, Yeravdekar & Tiwari posit

that “India needs an improved university system, and not just a few universities to the standard of world class” (2014, p.66).

In a final sobering note, Soysal et al. (2022) show us that "Rankings fail to deliver their meritocratic promise; if anything, they help to further legitimate reputation as a symbolic good" (p.8). This insight underscores the paradoxical nature of rankings, revealing that rather than promoting a fair and merit-based evaluation, they may inadvertently contribute to the reinforcement of existing hierarchies and symbolic values associated with reputation. As we delve deeper into the nuances of ranking systems, it becomes increasingly apparent that the quest for an equitable and objective assessment of universities remains an ongoing challenge.

### ***Comprehensibility***

Rankings also need to be understandable by their consumers: students, parents, and other stakeholders of the higher education system. They need to convey valuable information that can lead to well thought consumer decisions regarding universities. The problem with this is that in the end it is the rankings that decide which data to favor and show, and they can actually transmit said information in a comprehensible manner, regardless of the validity, comprehensiveness, or relevance of it. For example, Lu explains, by referring to an article from Clarke (2007), that “perceived academic quality, reputation of the institution in general, particular academic programs, and commercially produced ranking publications are the four most important factors that influence students’ decision making in university selection” (2018, p.33). This finding aligns with a study in Cambodia where 63% of 427 student respondents viewed university rankings as indicative of higher education quality (Nhem, 2021).

U-Multirank and MOSIUR are two examples of rankings that successfully make their data comprehensible for new generations of students. The former lets you compare universities based on the indicators (e.g., teaching and learning, regional engagement) and subindicators (e.g., percentage of expenditure on teaching, new entrants from the region) that you choose, thus, allowing you to find “what type of university is best for you” (Taken from U-Multirank’s website, 2023). MOSIUR, on the other hand, has an interesting indicator of “contribution to society indicators” that, among other things,

shows you the number of a university's Wikipedia pages or followers on Twitter. (Ivančević & Luković, 2018). We must, however, remain critical of the information rankings give us, regardless of how well organized or user-friendly they may be.

### ***Functionality***

This is arguably the most important indicator to keep in mind. Given that global competitiveness arose between universities due to the different consumer choices students can make, it should be expected that this competition would motivate institutions to become better, so as to attract more students in the future. This is indeed the case but for the wrong reasons. If the aforementioned indicators are not taken care of, as is the case, especially regarding the validity, comprehensiveness and relevance, then the functionality aspect becomes ill-centered, or tainted. As explained by Ryan & Deci in their psychological cognitive evaluation theory “it is a very different matter to reward a behavior than to reward an outcome” (2017, p.142). While this theory is focused on the motivations of individuals, given that institutions are composed by individuals, I believe their findings can apply to the decisions made by universities too. And so, the authors argue that the “consequence of rewarding an outcome is that it can reinforce any antecedent behaviors that might produce the outcome” (p.142). Boyadjieva found the following trends on rankings:

[they] employ indicators for measuring research activity [...] and in some cases is the only indicator used [, they] have no indicators based on the opinion of students involved in the teaching process [and] use no indicators that directly reflect the quality of education results. (2017, p.539)

I would argue, then, that the issue is not whether rankings make universities better their weaknesses but what are the alleged weaknesses that rankings make universities change. As we have seen by several of the articles mentioned here, most institutions are indeed so obsessed with getting a better ranking that they actively seek to become “better” universities, which means that rankings are effectively functional. However, since most of these rankings value the research dimension above all else, the efforts of administrators and teachers to “fix” their institution ends up boiling down to producing more research



output, even if that means ignoring the other important dimensions like teaching and learning. Yeravdekar & Tiwari quote Birnbaum (2012) by saying that:

the iconic popularity of rankings emanates from their symbolic significance with respect to economic and political factors and not from educational relevance [and they] encourage prestige wars and appear to have many of the characteristics of an academic fad [, which leads] to little substantive improvement. (2014, p.65)

### ***Fairness***

The criterion of fairness in university rankings emerges as a crucial dimension, closely tied to the principles of knowledge democracy and equity. As universities increasingly navigate the landscape of global rankings, several concerns arise. Pillay & Pillary (2020) shed light on the detrimental effects of the marketization trend, emphasizing its impact on African countries. They pinpoint university rankings as a potential accelerant of competition but caution that these rankings might be unrealistic for African universities. The undue strain on institutions, striving to meet various ranking criteria, poses challenges to their core objectives and missions.

Anafinova (2020) provides a case study on Kazakhstan, revealing how the government's use of global rankings as a policy instrument contributes to coercive isomorphism in higher education. The pressure on institutions to conform to ranking criteria can divert focus from diverse educational models and hinder the pursuit of unique institutional identities.

Hubbard et al. (2020) introduce a league table that recognizes universities for their widening participation (WP) activities, fostering a fairer way to rank institutions. This approach aligns with the goal of ensuring equal access to quality education, echoing Sustainable Development Goal 4. It emphasizes the importance of reflecting a variety of "excellence" types in institutional prestige.

Online education is often overlooked by rankings, which fail to account for the diverse options available to individuals with varying qualifications. Brasher et al. (2019) critique the limited value of current ranking systems for potential undergraduate students of online

universities. The authors warn that rankings should consider modalities other than face-to-face education to accurately reflect the diverse landscape of educational options for individuals with varying qualifications.

The current model of promoting internationalization of faculty, as critiqued by Shin and Lee (2022), may not be desirable for some institutions or countries. As pointed out by the authors, the approach to internationalization varies across higher education systems. This approach, as implemented by current ranking systems, can exacerbate the problem of "brain drain." High-valued faculty from less favored institutions or countries may prefer to move to better-ranked institutions, perpetuating the unequal distribution of talent and resources in the academic landscape.

This notion of "brain drain" is intertwined with the impact of rankings on student migration. Lee and Schoole (2015) and IseOlorunkanmi et al. (2015) discuss how South African universities, often ranked higher, attract students from other African countries due to perceived quality and training facilities. The consequences of this migration are particularly significant, as noted by Jabnoun (2015), who found that countries with top-ranked universities tend to have higher Gross Domestic Product per Capita (GDPPC), higher Corruption Perceptions Index (CPI), and higher Democracy Index (DI).

As a final critique to the fairness of global university rankings, Vernon et al. (2018) highlight the biases in bibliometric sources and peer reputation surveys used in rankings. The focus on English-language journals and indicators like Nobel Prize winners favor larger, well-known institutions, perpetuating inequalities and limiting the motivation for other universities.

In conclusion, the fairness criterion in university rankings encompasses diverse dimensions, from recognizing different excellence types to the unintended consequences on internationalization and student migration. The critique of rankings as contributors to existing inequalities underscores the need for a more equitable and inclusive approach in evaluating and recognizing the diverse contributions of higher education institutions.

### ***Sustainability***

In the pursuit of global recognition and standing in global university rankings (GURs), institutions often find themselves entangled in a web that prioritizes certain metrics over holistic objectives. Muñoz-Suárez et al. (2020) explain that universities, pressured by the need to ascend in rankings, may inadvertently neglect broader societal objectives and sustainability commitments. The intense focus on increasing publications for GURs might overshadow other crucial missions, creating a conflict between serving rankings and fulfilling the diverse responsibilities of higher education institutions.

Amid the trend of internationalization in higher education, Pillay & Pillary (2020) argue that interventions to curricula should extend beyond simply incorporating international elements or goals. Instead, they emphasize the necessity to enhance local relevance and address the specific human capacity needs of regions, thereby underscoring the importance of aligning education with the unique challenges and opportunities of a particular context.

The introduction of initiatives like THE's Impact Ranking, which evaluates universities' success in delivering the United Nations' Sustainable Development Goals (SDGs), signifies a shift toward recognizing the broader societal impact of institutions (The Education Collaborative, 2019). This approach diverges from conventional ranking systems that predominantly measure research and (sometimes) teaching performance. Assessing policies related to academic freedom, employment contracts, and gender inclusivity acknowledges the multifaceted role of universities in fostering positive societal change.

However, as The Education Collaborative (2019) warns, a cautious approach is essential. The fear looms that institutions, particularly in Africa, might succumb to strategic decisions driven solely by meeting ranking indicators, potentially overlooking the essential needs of students and the continent as a whole. There's an urgent call to contextualize Africa's challenges and developmental prospects before determining ranking systems and benchmarks. It is worth noting that this need for contextualization is not exclusive to Africa's higher education system; it extends to regions such as Latin America, Asia, and the rest of the world. A thoughtful consideration of the unique

challenges and opportunities in each context is imperative to foster fair and effective ranking systems worldwide.

In conclusion, the sustainability criterion in university rankings should extend beyond traditional measures and encompass an institution's impact on society, aligning with local needs, and contributing to broader global goals. As institutions navigate the complex landscape of rankings, striking a balance between global recognition and fulfilling their societal responsibilities becomes paramount for sustainable and meaningful higher education.

### **Future agenda**

The examination of existing literature on the relationship between universities and global rankings has provided valuable insights into the multifaceted dynamics, challenges, and impacts of these rankings on higher education systems worldwide. However, as we delve into the complexities of this relationship, several gaps emerge, suggesting directions for future research and the development of a robust agenda for advancing our understanding of this critical intersection.

### ***Contextualization and Diversity***

The majority of existing studies focus on specific countries or regions, offering a contextualized analysis of the impact of rankings. Future research should extend this approach to encompass a more diverse set of nations, including those from Latin America, Southeast Asia, and other regions, to capture a comprehensive global perspective. This shift toward a more inclusive lens will shed light on how rankings influence diverse institutional and national contexts.

### ***Impact on Underrepresented Groups***

The current literature often overlooks the differential impact of rankings on underrepresented groups within higher education, including minority-serving institutions and those in developing countries. Research should explore how rankings contribute to or mitigate existing disparities, both within and between countries, and whether they inadvertently reinforce or challenge existing power structures.

### ***Long-Term Institutional Changes***

While there is evidence of universities adapting to the demands of rankings, there is a need for longitudinal studies to assess the sustainability and long-term impact of these adaptations. Understanding how institutional changes influenced by rankings evolve over time will provide a more nuanced perspective on the transformative potential or drawbacks associated with these global rankings.

### ***Stakeholder Perspectives***

The literature has touched on the viewpoints of administrators, policymakers, and researchers, but future research should delve deeper into the perspectives of various stakeholders, including students, faculty, and employers. Exploring how different stakeholders perceive and respond to rankings will enhance our understanding of the broader societal implications and the effectiveness of rankings in meeting diverse needs.

### ***Policy Implications***

While some studies touch on the policy implications of rankings, there is a need for more in-depth investigations into how rankings influence higher education policies at national and institutional levels. Understanding the intricate relationship between rankings and policy-making will contribute to the development of more informed and responsive higher education governance.

### ***Integration of New Criteria***

The proposed criteria of fairness and sustainability are unexplored in the existing literature. Future research should investigate how these criteria can be effectively integrated into ranking systems and assess their impact on promoting equity, environmental responsibility, and the overall societal contribution of higher education institutions. Likewise, further criteria can be developed for a more accurate evaluation of university rankings.

### ***Conclusion***

Despite the growing scholarly interest in examining the influence of global rankings in the behaviour of higher education institutions (See Figure 1), it is necessary to conduct further research that delves not only into the nuanced dynamics of this relationship, but

also considers the experiences of many more countries and regions, and while there currently exists research on some (See Figure 2), many more remain oblivious to the effects rankings may have on their institutions. Ideally, there should be at least one such paper for each country, as well as for whole regions like South America, North America, Europe, Asia, Southeast Asia, Africa, etc. The stakeholders of every higher education system ought to be informed about the diverse impacts and challenges posed by global rankings in different contexts, in order to better inform their policies, decisions, and attitudes towards rankings.

Many authors are sceptical of rankings, not of their existence but their current consequences. The main criticism is directed at how their design steers institutions almost exclusively towards research output. Boyadjieva says that “global rankings legitimize higher education simply with respect to its contribution to the production of new knowledge [thus, ignoring their role] as a source of critical sensitivity in democratic society” (2017, p.540). This focus on research also ends up affecting the configuration of the curriculum in universities, making it more oriented towards research (Rajabloo et al., 2019).

Furthermore, many global rankings were created in the countries that have the biggest presence in said rankings (the US, the UK, the European Union). This effectively means that this system perpetuates the dominance of a few institutions over the world-wide university market. Rankings further “elitism in higher education and symbolic efforts to attain selectiveness” (Yeravdekar & Tiwari, 2014, p.65). This dominance also leads to what is known as “brain drain” (Boyadjieva, 2017, p.537). The better prestige and conditions offered by leading universities results in quality academic staff and researchers leaving their local educational systems to work in these top institutions, which in turn further hinders the capability of the small universities to move up the hierarchy.

We can conclude that the issue with global rankings must not be simplified in good or bad terms. “Taking any strategy like sheer imitation, total boycott, or being indifferent ensure consequences” (Rajabloo, 2019, p.99). Instead, we must reevaluate the current system and come up with better ways to determine the value of our universities, keeping in mind that the goal should not be to define the “best” university but which is the best

for each student. For instance, we cannot ignore the different realities that each country faces. Thus, for “global rankings to be authentically global, it is important to revise the methodologies such that the indicators and weights are incorporative of socio economic realities of the developing world” (Yeravdekar & Tiwari, 2014, p.72). Other criteria we may use to value universities are “improved access of students from traditionally underrepresented groups, increased affordability of high-quality post-secondary education, contributions to community development or social justice” (Boyadjieva, 2017, p.540). In the end, I cannot say which decisions have to be made, only that decisions need to be made to bring about a change in our global higher education system.

It becomes clear that decisions need to be made to usher in a positive transformation in our global higher education system. The hope is that research endeavors, such as the ones presented in this paper, serve as catalysts for innovative thinking and inspire future investigations into the relationship between rankings and individual countries or institutions. It is imperative to embark on numerous inquiries aimed at identifying objective indicators that go beyond research, acknowledging the subjectivity inherent in both teaching and research assessments. In doing so, we pave the way for a more nuanced, inclusive, and globally relevant definition of quality education—one that accommodates the diverse challenges and opportunities inherent in each country or society.

### **Limitations**

This study acknowledges the limitation of not following the thoroughness of a systematic literature review, which impacts the comprehensiveness of the findings. The search process may have overlooked potentially relevant articles (for example, but not limited to, the Americas). As a result, findings should be viewed from the lenses of the analyzed literature, with consideration of potential undiscovered research that could provide additional insights.

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