Exploring Collaboration and Productivity in the Higher Education Scientific Community

Elia Pizzolitto(✉) and Stefano Za

Department of Business Economics, University G. D'Annunzio – Chieti-Pescara – Viale Pindaro, 42 - 65122 Pescara, (PE), Italy
{elia.pizzolitto,stefano.za}@unich.it

Abstract. In this study, we analyze research collaborations and their characteristics in the higher education (HE) scientific community in recent years. Specifically, we focus on the most influential journals in the field according to the Academic Journal Guide 2021— the Academy of Management Learning & Education, the British Educational Research Journal, Management Learning, and Studies in Higher Education—to create our dataset composed of 1,322 articles. Using a bibliometric analysis technique, we design a comprehensive map of scientific production and impact in recent years (2016–2021). We study authorship and co-authorship in the HE field, highlighting the most productive authors and countries and the collaborations that emerge through network analysis. We also perform a citation analysis to examine the impact of the field. Finally, we conclude our discussion with a call for an in-depth study of the most debated and emerging topics in the field.

Keywords: Higher education · Bibliometric analysis · Scientific community · Most productive authors · Citations per country · Topic trend

1 Introduction

Higher education (HE) has always been considered a "major institution of modern society" [2, p. 3]. It is a multidisciplinary field, so achieving a comprehensive picture of its structure is a complex challenge. Nevertheless, the scientific community around HE is increasing, and interest in the field should be monitored to better understand future research opportunities and trends.

Attempts to describe the general situation of HE have been made over the last years by independent institutions, such as the EDUCAUSE Horizon Report in its Teaching and Learning Edition [10], which highlights the developments in the social, technological, economic, and political trends related to HE. In particular, it underlines the critical changes in trends related to HE, such as increased student diversity, the need for changing degree pathways to accommodate new perceptions of employability, and opportunities related to online education. All these dynamic elements have brought about fundamental changes in HE research and, consequently, in the research community.

R. Cuel et al. (Eds.): ItAIS 2021, LNISO 57, pp. 168–180, 2022.
https://doi.org/10.1007/978-3-031-10902-7_12

Scientific literature made remarkable attempts to map the field of HE education research. In their recent work, Daenekindt and Huisman [8] analyzed 17,000 articles published between 1991 and 2018 to extract all relevant topics discussed in the field. Their article, based on 28 journals focused on HE, showed 31 different topics, highlighting the fragmentation of the field and the constant struggles among topics and themes. Moreover, they found relative stability of the cluster structure and a decreasing level of topic diversity.

In 2015, Kuzhabekova et al. [18] mapped the international higher education research. In particular, they used bibliometric and social network analysis for mapping the publications on the topic from 2002 to 2011. The articles showed that international collaboration among the authors of the fields was still rare. In particular, the research showed that international collaborations were more common in developing countries, which were becoming more relevant in the HE debate (e.g., China and South Africa).

Other publications tried to map the HE research in specific world zones. For example, Zavale and Schneijderberg [29] studied the case of African HE research, considering a significant period, i.e., 1980–2019. They recognized that the discussion on this specific field is quite new and emerging in the Continent. Other research considered specific aspects of HE research, such as international students [15], territory [23], graduate employability, and career development [11].

HE research has grown exponentially in the last two decades, and this trend continues. A quick check in the SCOPUS database shows an increasing number of studies dealing with HE and related subjects. Therefore, the need for a better comprehension of HE research and the related scientific community needs to be considered a relevant issue.

This study aims to examine the most recent developments in the scientific community around HE by considering the most productive authors, the impacts of their articles, the most productive countries, and the collaborations between countries. After a description of the methodology, this article presents the results of our analysis, which focuses on the years between 2016 and 2021. Finally, we call for an in-depth examination of the most relevant and emerging topics identified.

2 Methodology

Given that our objective was to understand the evolution of the HE scientific community in recent years, we used bibliometric methods to extract and analyze data. In particular, we utilized Scopus to extract articles concerning HE and related discourses. We used the Bibliometrix package of R to complete the data analysis [1]. Our research followed three main steps: (1) extraction of publications, (2) refining of the dataset (e.g., selection of relevant publications and keyword refinement), and (3) descriptive analysis of several aspects related to the publications [28].

First, we selected the four most influential academic journals for HE from Academic Journal Guide (AJG) 2021. We focused on the following journals for our research: the Academy of Management Learning & Education (AMLE), the British Educational Research Journal (BERJ), Management Learning (ML), and Studies in Higher Education (SHE).

Second, we used SCOPUS to gather the contributions and create the initial dataset. We utilized the keyword (higher AND education) and other related concepts, such as

universit*, academ*, and degree*. Given that we aimed to understand the most recent changes in the HE scientific community, we limited our results to the last five years (from 2016 to the first two months of 2021). After that, we limited our results to the four mentioned journals. We eliminated false positives using the methodology suggested by Keupp et al. [16] and Denyer and Neely [9]. At the end of this phase, a total of 1,322 articles were considered relevant for the analysis.

Finally, we extracted those keywords with more than one occurrence, and we homogenized all concepts that had the same meaning. In this process, we worked on 840 keywords, obtaining and refining them and then reducing the sample to around 750. The table with the conversion results is available upon request. Finally, the dataset was ready for analysis.

3 Dataset Analysis

Table 1 shows the primary information of the dataset we analyzed. The extraction resulted in 1,322 articles from four journals. The time span of the articles was from 2016 to the first two months of 2021. The average number of years since publication was 2.52, and the documents had an average number of citations of 7.6. The average number of citations per year per document was 1.838.

Table 1. Main information of the dataset

Data	Value
Time span	2016–2021
Journals	AMLE; BERJ; ML; SHE
Number of papers	1,322
Average number of years since publication	2.52
Average number of citations per document	7.6
Average number of citations per year per document	1.838
References	67,692
Author's keywords	3,787
Authors	3,186
Author appearances	3,567
Authors of single-authored documents	269
Authors of multi-authored documents	2,917
Single-authored documents	290
Documents per author	0.415
Authors per document	2.41
Co-authors per document	2.7
Collaboration index	2.83

The articles had more than 67,000 references, 3,787 keywords, and 3,186 authors. In particular, there were 269 authors of single-authored documents, 290 single-authored documents and 2,917 authors of multi-authored documents.

The average number of documents per author was 0.415, and the average number of authors per document was 2.41. The average number of co-authors per document was 2.7, and the collaboration index (i.e., the ratio between the number of authors of multi-authored documents and the number of multi-authored documents) was 2.83.

In the following sub-sections, we analyze publication activities in terms of author and then country. Next, we describe the impact of the contributions based on the citation analysis.

3.1 Most Productive Authors

The total number of authors was 3,185. All authors contributed to HE research, with one to seven publications for each author. In particular, one author published seven contributions, three authors published six contributions, four authors published five contributions, 14 authors published four contributions, 41 authors published three contributions, 221 authors published two contributions, and 2,901 authors published one contribution. In Fig. 1, we show the most prolific authors for the field during the period studied.

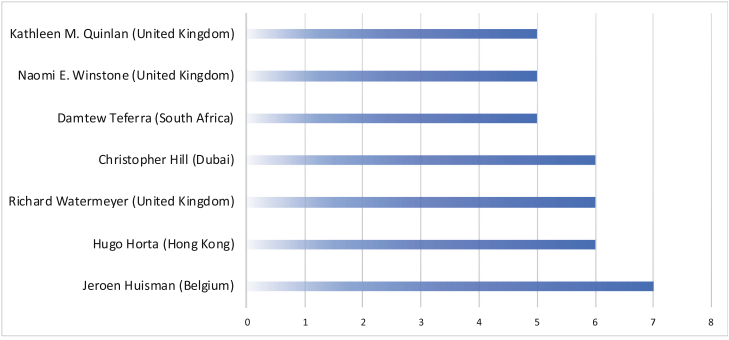

Fig. 1. Most prolific authors in the HE field (2016–2021)

Jeroen Huisman, from Belgium, is the most prolific author. He published seven multi-authored contributions during the period examined. Specifically, he contributed three studies in 2016 and four studies in 2019. The most cited paper among the first group of publications had 31 citations and focused on international branch campuses in Malaysia and Singapore [21]. The most cited paper in the second group of publications had 15 citations and focused on issues related to performance management and burnout [3], as well as on UK universities' mission statements [20].

Three authors published six contributions. Hugo Horta, from Hong Kong, published one multi-authored article per year except for 2019, when he published two multi-authored contributions. He studied the HE community by exploring research agendas [14], career performance [13], and collaborations outside academia [4]. His most cited

paper was Kim et al. [17], which focused on cohesion and integration in the HE research community in Hong Kong, Japan, China, and Malaysia, with a total of 17 citations.

Richard Watermeyer, from the UK, published six contributions in SHE, two single authored and four multi-authored. His research interests are marketization [7], evaluation of research (e.g., [24]), and new public management (e.g., [26]). Watermeyer [25] was his most cited paper, with 75 citations.

Christopher Hill, from Dubai, also published his six multi-authored contributions in SHE. His research interests are employability (e.g., [6]) and internationalization [12]. His most cited paper was Cheong et al. [5], which focused on the employability of Malaysian graduates, with 23 citations.

Finally, three authors published five contributions during the period analyzed. Damtew Teferra, from South Africa, published two single-authored and three multi-authored contributions. His research area was the study of early academic careers. His most cited paper was Teferra [22], with six citations, which focused on the teaching praxis of early academics in Africa. Naomi E. Winstone, from the UK, contributed to the field with five multi-authored documents. Her main area of study is assessment and feedback seeking, as well as recipience. One of her articles that focused on these themes had 89 citations [27]. Kathleen M. Quinlan, from the UK, published two single-authored and three multi-authored documents. Her most cited paper focused on developing student character through disciplinary curricula, with 11 citations [19].

In the next section, we explore scientific production at the country level.

3.2 Most Productive Countries

Figure 2 shows the most productive countries, arranged according to the number of papers they published during the period considered. In particular, the graph depicts the countries that contribute to the field with at least 20 publications. The graph shows, in blue, the number of contributions in which all authors share the same affiliation (single country paper [SCP]), and, in red, the number of papers in which the corresponding author's affiliation is the country considered, whereas the affiliation of the other authors is a different country (multiple country paper [MCP]).

The UK was the most productive country, with 319 papers divided into 265 SCPs and 54 MCPs. Australia followed the UK, with 125 papers divided into 108 SCPs and 17 MCPs. Therefore, the difference between the first and second countries in the dataset was 194 papers—157 SCPs, and 37 MCPs. The UK overcame Australia by 155.52%.

The US published 72 SCPs and 15 MCPs for a total of 87 contributions. Spain published 34 SCPs and 7 MCPs, for a total of 41 publications. Finland published 24 SCPs but no MCP. China published 24 SCPs and 20 MCPs. South Africa published 22 SCPs and 2 MCPs. Sweden and Germany contributed 21 SCPs each, but Sweden published 4 MCPs, and Germany published 9 MCPs. The Netherlands published 23 papers divided into 18 SCPs and 5 MCPs. Portugal contributed 22 publications—12 SCPs and 10 MCPs. Canada and Italy published 21 papers each. In particular, Italy contributed 16 SCPs and 5 MCPs, whereas Canada contributed 20 SCPs and 1 MCP. Finally, Ireland and Hong Kong published 20 contributions each. Ireland contributed 12 SCPs and 8 MCPs, whereas Hong Kong contributed 15 SCPs and 5 MCPs.

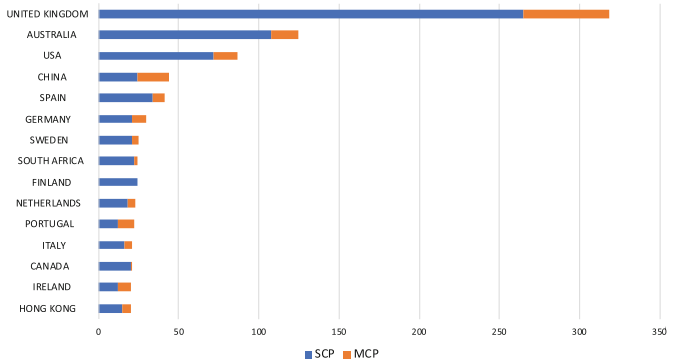

Fig. 2. Most productive countries. SCP: single country paper. MCP: multiple country paper.

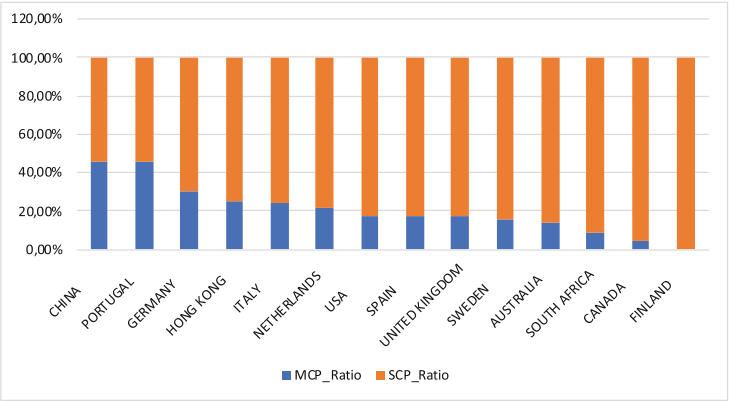

Fig. 3. Most collaborative countries. MCP_Ratio: multiple country papers divided by the sum of papers published by the country. SCP_Ratio: single country papers divided by the sum of papers published by the country.

Figure 3 shows the most productive countries arranged by the MCP ratio, which is the sum of MCPs divided by the sum of papers published by the country. The most collaborative countries were China and Portugal, with a 45.45% MCP ratio. Germany followed at 30%. Hong Kong, Italy, and the Netherlands all had ratios greater than 20% (i.e., 25%, 23.81%, and 21.74%, respectively). Between 10% and 20%, we find the US (17.24%), Spain (17.07%), the UK (16.93%), Sweden (16%), and Australia (13.60%). Finally, South Africa registered a ratio of 8.33%, while Canada registered 4.76%. Finland did not show any collaboration.

Figure 4 shows the country collaboration map built through the connections between the countries of affiliation of the papers' corresponding authors. The map shows that Anglo-Saxon countries guided scientific production in HE. In particular, the most significant number of collaborations was between the UK's corresponding authors and those in Australia (23), followed by the UK's corresponding authors and those in other countries. In particular, we identified 10 connections between the UK and the US and eight

connections between the UK and France, Germany, Ireland, Italy, and Spain. Moreover, the UK's corresponding authors showed seven collaborations with those in China, six with Norway, and five with the Netherlands, New Zealand, and Sweden. Finally, the UK's authors collaborated with those in 33 other countries. Australian corresponding authors collaborated with those in the US (7), Germany and New Zealand (3), Denmark, France, and Turkey (2), and nine other countries. The most significant number of US collaborations was with France (6), followed by collaborations with Germany and New Zealand (4), Chile and Korea (2), and 16 other countries.

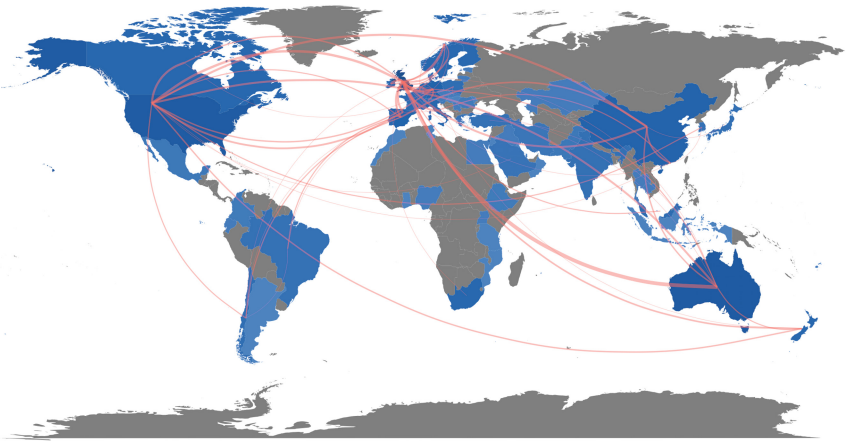

Fig. 4. Country collaboration map

We also identified other relevant collaborations of China, the Netherlands, Spain, Canada, and Germany. China's corresponding authors showed collaborations with those in the US (8), Hong Kong and Spain (5), Australia (4), Japan (2), and 10 other countries. Dutch corresponding authors collaborated mainly with those from Germany (8), followed by those from Belgium (5), Norway (3), and four other countries. Spanish corresponding authors had collaborations with those in Portugal (4), Chile and the US (3), Brazil (2), and seven other countries. Canadian corresponding authors had collaborations with US authors (8), German authors (2), and authors from five other countries. Finally, German corresponding authors collaborated with those from Belgian, Irish, New Zealand, and Norway (2), as well as with authors from seven other countries.

In the following section, we explore the impact of HE scientific production in terms of the total and average number of citations.

3.3 Citation Analysis

In Table 2, we show the total number of articles per year and the average total number of citations per article and per year. The most productive year was 2020, with 390 articles. In 2019, there were 308 contributions. In previous years, the number of publications was less than 200 per year. Articles published in 2017 had the highest average total number of

citations per article and per year at 15.53 and 3.88, respectively. The year 2016 followed, with an average total number of citations per article of 15.01, followed by the year 2018 at 3.34.

Table 2. Total number of citations per article and per year

Year	Number of articles	Average total number of citations per article	Average total number of citations per year
2016	189	15.01	3.00
2017	198	15.53	3.88
2018	196	10.03	3.34
2019	308	4.83	2.42
2020	390	1.68	1.68
2021	41	0.68	–

The trend of article publication per year was relatively stable in 2016, 2017, and 2018, during which the data registered the values of 189, 198, and 196, respectively. After that, the number of published articles increased over time. In 2019 and 2020, 308 and 390 articles, respectively, were published in the HE field, which is in line with our initial discussion of the increased productivity and interest in HE scientific research. Observing the publication trends in the following years will be interesting to understand the future of the field.

The average number of citations per article decreased over time. This trend was due to the increase in the number of years that passed from publication to the time of data extraction. Nevertheless, the trend was stable in 2017 and 2018. This observation led us to conclude that observing the number of citations per article in the following years could be beneficial in understanding the future impact of the field. While the number of articles may be increasing, the stability of citations can be an indicator of the stability of the general impact of the field. An increasing number of authors interested in the field does not necessarily mean an increase in scientific communities' interest in HE.

The average total number of citations per year did not show a stable trend. In particular, it started at 3.00 in 2016, registered a peak in 2017 (3.88), and then decreased over time. Nevertheless, the total number of articles in the dataset was 1,322. Therefore, a difference of 0.88 between 2016 and 2017 seemed particularly significant. In this sense, observing the trend of these data in the following years should lead to stronger conclusions about the general impact of scientific research in the field of HE.

The UK, which had the most significant number of published papers, had the greatest total number of citations (Fig. 5). This finding was not unexpected, given the difference in the total number of published articles between the UK and the other countries. Nevertheless, there was a considerable difference between the second country, Australia, and the following countries in terms of the total number of citations (e.g., US, Portugal, and Spain).

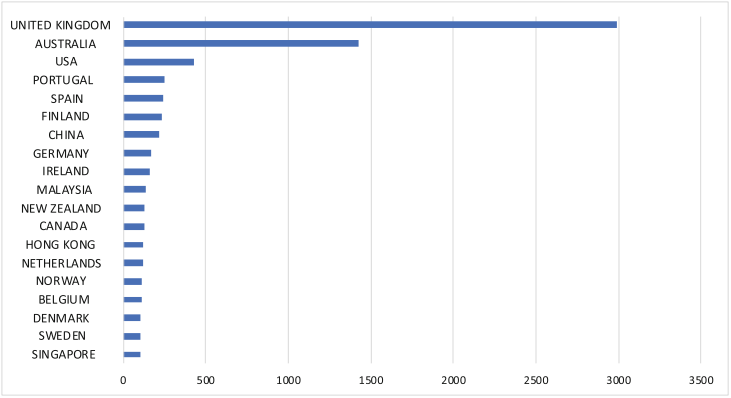

Fig. 5. Total number of citations per country

Comparing the total number of published articles and the total number of citations per country was interesting. The UK, Australia, and the US were in the top ranks in terms of the number of published articles and citations. China was ranked third in the number of published articles, but it was ranked seventh in citations per country. Portugal had a peculiar condition. It ranked 11th in the total number of published papers, but it ranked fourth in the number of citations per country. Therefore, Portugal's impact on HE should be observed in the following years. Finland had a similar condition. It was ranked ninth in the number of publications, but it was at the same time ranked sixth in the number of citations.

There were different situations for other countries, such as Sweden and Italy. Sweden was ranked seventh in the number of publications, but it was ranked 18th in the number of citations. Italy was ranked 12th in the number of publications, but it was not on the list of countries with more than 100 citations. A similar condition was observed for South Africa and Hong Kong.

Figure 6 shows the countries' average number of article citations. The graph displays a consistent picture of the average number of citations in the HE field. Singapore had the most significant average number of article citations (25.75), but it had only 103 total number of citations. Malaysia and Denmark had similar conditions. Malaysia had 136 total number of citations, while it ranked second in the average number of article citations at 12.36. Denmark had 108 total number of citations, while it ranked third in the average number of article citations at 12.00. Portugal had a high impact, with 249 total number of citations and an average at 11.32. Moreover, Portugal had the same average number of article citations as Australia, one of the most productive countries in the HE field.

4 Discussion and Implications for Future Research

In this article, we used bibliometric analysis to understand developments in the HE research community in recent years (2016–2021). In particular, we analyzed the scientific papers published in the most influential journals of education listed in AJG 2021. We

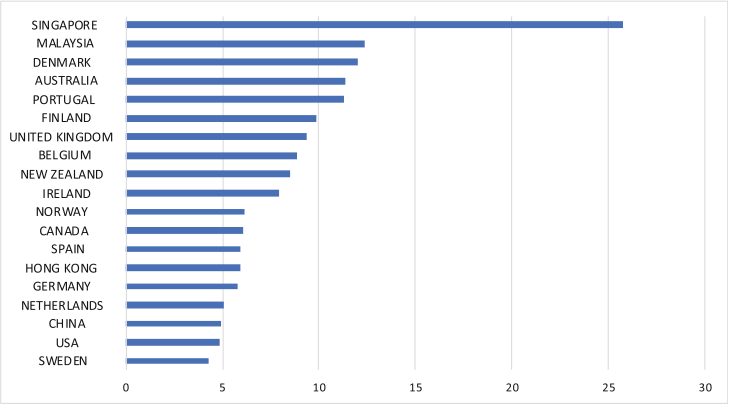

Fig. 6. Average number of article citations

performed an analysis of the most productive authors and countries. Furthermore, we analyzed the impact of HE research through citation analysis.

The most productive authors have common research interests. Their papers focus on academic careers, performance management in academia, research evaluation, new public management, and internationalization. Moreover, interest in students' employability has increased over time. The most productive countries in terms of publications are the UK, Australia, and the US, but they are not the most collaborative countries. China, Portugal, and Germany top the list in terms of collaboration.

Citation analysis shows a stable interest in the field. Considering an in-depth analysis of the indicators of citation in the future is an excellent opportunity to improve research on HE status.

Figure 7 shows the trend of significant topics, which was computed using the most recurrent keywords in the database. From 2016 to 2018, we observed a stable interest in academic achievement, both in terms of results and collaboration. From 2017 to 2019, the data show an increasing interest in internationalization, both in general terms and among international students. From 2018 to 2020, the graph shows a stable interest in management education and related content, such as business schools and entrepreneurship education. Finally, topics such as socioeconomic status, identity, gender differences, and cultural capital also consistently drew attention.

A relevant implication of our work is underlining how collaboration plays a critical role in defining the dynamics of the scientific community. There is an apparent discrepancy between the exponential growth in the number of articles in the field and their impact on citations, which seems relatively stable. Collaboration could provide an incentive for the development of HE impacts. For this reason, this study highlights the need to guarantee a more significant number of collaborations between different countries in order to increase the scientific impact of the discipline.

Furthermore, the highly multidisciplinary nature of HE implies the need to integrate a focus on article content. Although many attempts were developed to map the field from the side of topics and themes development (e.g., [8]), more space should be devoted to the recent evolution of the scientific debate. Therefore, we recommend that future

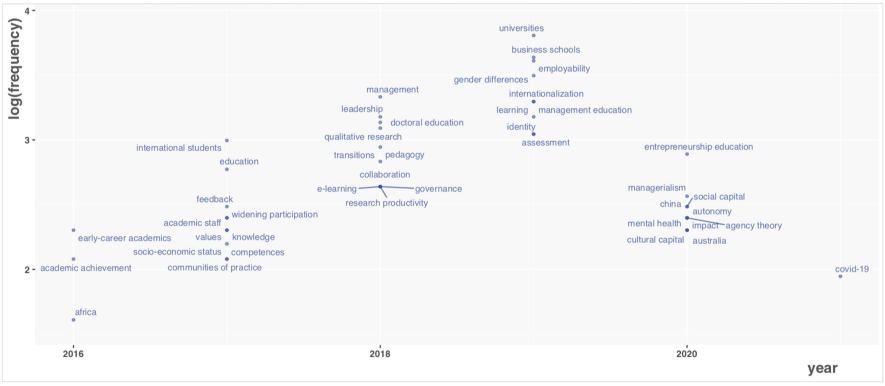

Fig. 7. Trend of major topics

research be performed using mixed methods, enriching the quantitative aspects of the conclusions.

The HE research community reveals increasing dynamism over time. Its multidisciplinary characteristics have led the field to attract an increasing number of researchers. Moreover, the numerous topics debated have allowed the field to achieve an in-depth exploration of a wide range of subjects. The changing external environment contributes to the field's development, but researchers' essential topics do not seem to follow major external trends, such as technology. The replication of our study could guarantee an increasingly clear view of the status of HE research. Finally, further in-depth analyses of emerging or declining themes in the field could integrate our research.

References

1. Aria, M., Cuccurullo, C.: Bibliometrix: an R-tool for comprehensive science mapping analysis. J. Informet. **11**(4), 959–975 (2017). https://doi.org/10.1016/j.joi.2017.08.007
2. Barnett, R.: The Idea of Higher Education. SRHE Open University Press, Buckingham (1990)
3. Bauwens, R., Audenaert, M., Huisman, J., Decramer, A.: Performance management fairness and burnout: implications for organizational citizenship behaviors. Stud. High. Educ. **44**(3), 584–598 (2019). https://doi.org/10.1080/03075079.2017.1389878
4. Cattaneo, M., Horta, H., Meoli, M.: Dual appointments and research collaborations outside academia: evidence from the European academic population. Stud. High. Educ. **44**(11), 2066–2080 (2019). https://doi.org/10.1080/03075079.2018.1492534
5. Cheong, K.C., Hill, C., Fernandez-Chung, R., Leong, Y.C.: Employing the 'unemployable': employer perceptions of Malaysian graduates. Stud. High. Educ. **41**(12), 2253–2270 (2016). https://doi.org/10.1080/03075079.2015.1034260
6. Cheong, K.C., Hill, C., Leong, Y.C., Zhang, C.: Employment as a journey or a destination? Interpreting graduates' and employers' perceptions – a Malaysia case study. Stud. High. Educ. **43**(4), 702–718 (2018). https://doi.org/10.1080/03075079.2016.1196351
7. Chubb, J., Watermeyer, R.: Artifice or integrity in the marketization of research impact? investigating the moral economy of (pathways to) impact statements within research funding proposals in the UK and Australia. Stud. High. Educ. **42**(12), 2360–2372 (2017). https://doi.org/10.1080/03075079.2016.1144182

8. Daenekindt, S., Huisman, J.: Mapping the scattered field of research on higher education. A correlated topic model of 17,000 articles, 1991–2018. High. Educ. **80**(3), 571–587 (2020). https://doi.org/10.1007/s10734-020-00500-x
9. Denyer, D., Neely, A.: Introduction to special issue: innovation and productivity performance in the UK. Int. J. Manag. Rev. **5–6**(3–4), 131–135 (2004). https://doi.org/10.1111/j.1460-8545.2004.00100.x
10. EDUCAUSE: 2020 EDUCAUSE Horizon Report Teaching and Learning Edition (2020)
11. Healy, M., Hammer, S., McIlveen, P.: Mapping graduate employability and career development in higher education research: a citation network analysis. Stud. High. Educ. **47**, 799–811 (2020). https://doi.org/10.1080/03075079.2020.1804851
12. Hill, C., Hell, S., van Cauter, K.: Internationalising higher education in Cambodia, Lao PDR, Myanmar, and Viet Nam: challenges and approaches. Stud. High. Educ. **46**(7), 1477–1491 (2019). https://doi.org/10.1080/03075079.2019.1680966
13. Horta, H., Cattaneo, M., Meoli, M.: PhD funding as a determinant of PhD and career research performance. Stud. High. Educ. **43**(3), 542–570 (2018). https://doi.org/10.1080/03075079.2016.1185406
14. Horta, H., Santos, J.M.: Organisational factors and academic research agendas: an analysis of academics in the social sciences. Stud. High. Educ. **45**(12), 2382–2397 (2020). https://doi.org/10.1080/03075079.2019.1612351
15. Jing, X., Ghosh, R., Sun, Z., Liu, Q.: Mapping global research related to international students: a scientometric review. High. Educ. **80**(3), 415–433 (2020). https://doi.org/10.1007/s10734-019-00489-y
16. Keupp, M.M., Palmié, M., Gassmann, O.: The strategic management of innovation: a systematic review and paths for future research. Int. J. Manag. Rev. **14**(4), 367–390 (2011). https://doi.org/10.1111/j.1468-2370.2011.00321.x
17. Kim, Y., Horta, H., Jung, J.: Higher education research in Hong Kong, Japan, China, and Malaysia: exploring research community cohesion and the integration of thematic approaches. Stud. High. Educ. **42**(1), 149–168 (2017). https://doi.org/10.1080/03075079.2015.1036850
18. Kuzhabekova, A., Hendel, D.D., Chapman, D.W.: Mapping global research on international higher education. Res. High. Educ. **56**(8), 861–882 (2015). https://doi.org/10.1007/s11162-015-9371-1
19. Quinlan, K.M.: Developing student character through disciplinary curricula: an analysis of UK QAA subject benchmark statements. Stud. High. Educ. **41**(6), 1041–1054 (2016). https://doi.org/10.1080/03075079.2014.966069
20. Seeber, M., Barberio, V., Huisman, J., Mampaey, J.: Factors affecting the content of universities' mission statements: an analysis of the United Kingdom higher education system. Stud. High. Educ. **44**(2), 230–244 (2019). https://doi.org/10.1080/03075079.2017.1349743
21. Shams, F., Huisman, J.: The role of institutional dual embeddedness in the strategic local adaptation of international branch campuses: evidence from Malaysia and Singapore. Stud. High. Educ. **41**(6), 955–970 (2016). https://doi.org/10.1080/03075079.2014.966669
22. Teferra, D.: Early career academics in Africa – induction into the teaching praxis. Stud. High. Educ. **41**(10), 1735–1740 (2016). https://doi.org/10.1080/03075079.2016.1221651
23. Tight, M.: Higher education research as tribe, territory and/or community: a co-citation analysis. High. Educ. **55**(5), 593–605 (2007). https://doi.org/10.1007/s10734-007-9077-1
24. Watermeyer, R., Chubb, J.: Evaluating 'impact' in the UK's Research Excellence Framework (REF): liminality, looseness and new modalities of scholarly distinction. Stud. High. Educ. **44**(9), 1554–1566 (2019). https://doi.org/10.1080/03075079.2018.1455082
25. Watermeyer, R.: Impact in the REF: issues and obstacles. Stud. High. Educ. **41**(2), 199–214 (2016). https://doi.org/10.1080/03075079.2014.915303

26. Watermeyer, R.: Public intellectuals vs new public management: the defeat of public engagement in higher education. Stud. High. Educ. **41**(12), 2271–2285 (2016). https://doi.org/10.1080/03075079.2015.1034261
27. Winstone, N.E., Nash, R.A., Rowntree, J., Parker, M.: 'It'd be useful, but I wouldn't use it': barriers to university students' feedback seeking and recipience. Stud. High. Educ. **42**(11), 2026–2041 (2017). https://doi.org/10.1080/03075079.2015.1130032
28. Za, S., Braccini, A.M.: Tracing the roots of the organizational benefits of IT services. In: Za, S., Drăgoicea, M., Cavallari, M. (eds.) IESS 2017. LNBIP, vol. 279, pp. 3–11. Springer, Cham (2017). https://doi.org/10.1007/978-3-319-56925-3_1
29. Zavale, N.C., Schneijderberg, C.: Mapping the field of research on African higher education: a review of 6483 publications from 1980 to 2019. High. Educ. **83**(1), 199–233 (2020). https://doi.org/10.1007/s10734-020-00649-5