



Transforming Marketing and Branding in Higher Education: Insights from Ten Years of Research

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ABSTRACT

The changing dynamics of higher education require novel strategies for marketing and branding to sustain competitiveness and relevance. This study offers a bibliometric analysis of research concerning marketing and branding in higher education over the last decade, focusing on publishing trends, key contributors, and topic areas within this field. Data analyzed from the Scopus database and assessed with Scopus Analyzer and VOSviewer software led to the evaluation of 1,609 relevant papers. After 2018, publications showed a significant increase indicating academic interest in emphasizing the importance of marketing strategies and developing branding structures in higher education institutions. Analysis of co-occurrence and citation networks revealed key research issues, including institutional reputation management, student engagement strategies, and advances in digital marketing, as well as prominent contributors and influential collaborations. The results underscore the critical importance of marketing and branding strategies in shaping institutional identity and addressing the challenges of student recruitment and retention in the competitive global education market. This work contributes to the literature by providing a comprehensive review of research trends, identifying gaps, and suggesting directions for future investigation. These insights are useful for academic administrators, researchers, and policymakers aiming to enhance institutional visibility and competitiveness.

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1.0 INTRODUCTION

The current situation requires providers for higher education to differentiate their image and distinctiveness from others in order to compete in the market and cause significant transformations in the higher education landscape. A more strategic approach to increasing efforts in the marketing and branding sector is urgently needed due to changes in the student economy and also the shift in government assistance such as tuition funding [1], [2], [3]. Universities are increasingly required to implement business-oriented strategies to attract and retain student enrollment, which requires the development of a strong and recognizable brand to attract more potential students and alumni [4], [5], [6]. This shift has resulted in an increasing amount of research aimed at understanding the unique dynamics of branding and marketing strategies in higher education institutions.

To become a well-known higher education institution, many factors need to be maintained and refined, not only including an attractive visual identity and slogan, but also requires integrated planning in providing academic experiences to students and social activities [7], [8], [9]. Researchers have also shown that academic experiences during studies and students' social activities have a significant impact on brand development. Through this factor, loyalty and support for the institution are also stronger among alumni [10], [11], [12]. In fact, higher education institutions that pursue student academic rankings are more successful in cultivating a strong brand [13], [14], [15]. This is because success in pursuing rankings produces a higher sense of loyalty and self-belonging among alumni.

To build a superior institutional brand, aspects such as student academic experiences and social activities are important. In the future, marketing strategies and branding structures for higher education institutions are expected to be influenced by technological, social and economic developments. In the meantime, a clear online presence is a very important element in branding strategies due to the reliance on digital marketing [2], [16], [17]. In addition, strategic planning and marketing require ongoing commitment as this integrated effort is essential to develop a strong brand strategy that can adapt to the changing landscape of higher education [18], [19], [20]. Therefore, higher education providers need to adapt to continuous change, and the insights from recent researchers will be important data and requirements in developing strong and visible brands that are able to withstand the challenges posed by a competitive and rapidly evolving market [21], [22], [23].

Referring to the latest technology, the use and incorporation of technology in marketing strategies is changing the way communication is carried out between existing and potential students for admission to higher education institutions. There is no doubt that artificial intelligence (AI) has become an effective tool for increasing student engagement, analyzing student behavior and organizing marketing strategies. The incorporation of technology in higher education marketing has transformed the way institutions interact with prospective and current students. Artificial Intelligence (AI) has become an effective instrument for increasing student engagement, analyzing student behavior and adjusting marketing strategies. Using AI-driven analytics allows universities to gain insights into student preferences, facilitating the adaptation of marketing messages and offers to specific target audiences [24], [25], [26].

Social media has emerged as an important platform for institutions to engage with students and increase brand awareness [27], [28], [29]. Social media marketing allows universities to establish a strong online presence, increase community engagement and foster positive word of mouth. A strong brand identity is essential to differentiate a university from its competitors. Institutions can attract students who share their values and mission by creating a distinct brand positioning [30], [31], [32]. In conclusion, through the previous findings, it can be proven that to get the right brand narrative development, it is necessary to align with the target audience, the institution's strengths that stand out and most importantly, the unique selling proposition. The ranking of a higher education providers greatly influences by its reputation and influence to attract high-quality students. Universities can strengthen their position in higher education rankings by emphasizing student engagement, employability, technological infrastructure, teaching quality and ethical values [33], [34], [35], [36].

Before proceeding to the topic of bibliometric analysis, it is important to understand the quantitative methodology required to analyze the past, current, and prospective research history of higher education branding and marketing to generate statistical insights for scholarly investigations. Bibliometric analysis is an effective approach that uses quantitative and statistical techniques to describe the historical development and quantitative trends of research publications in a given subject area [37], [38], [39]. This method facilitates the systematic exploration, organization, and analysis of a wide range of information, including publications, countries, institutions, authors, journals, categories, and keywords, within a structured quantitative framework. The results obtained from bibliometric analysis facilitate the assessment of the current state and development path of a given research domain, as well as the identification of contributions from various countries, institutions, and scholars [40], [41], [42].

Its application has gained prominence across various disciplines, including medicine, biomass energy, environmental sciences, sustainable city development, arts and humanities, economics, lean and cleaner production in manufacturing, and engineering [43], [44], [45]. Despite the publication of several review papers on higher education branding and marketing, there appears to be a noticeable gap in statistical research-trend information in this area using bibliometric analysis. Given the increasing research interest and substantial potential for diverse applications, a quantitative bibliometric study focused on higher education branding and marketing could advance understanding and provide meaningful guidance for current and future research endeavours.

The formulation of the research question, together with the objectives of the review, the expected outcomes, and the specified audience, significantly influences the processes of data identification, collection, and presentation [46], [47], [48]. This paper seeks to address several key research inquiries:

1. What are the research trends in higher education branding and marketing based on publication year?
2. Who is the most prolific author of published articles?
3. What are the predominant subject areas for all publications?
4. Who are the ten foremost authors ranked by research citations?
5. Which country exhibits the greatest degree of co-authorship engagement in the domain of higher education marketing and branding?
6. What are the prevalent terms associated with the study, and how have they changed over the past decade?

2.0 METHODOLOGY

2.1 Bibliometric Analysis

Bibliometrics involves scientific activities such as collecting, managing, and analyzing bibliographic data obtained from scholarly publications [49], [50]. In their research, Helmer et al., (2023) indicated that analytical approaches extended beyond standard descriptive data, such as journal of publication, year of release, and principal author classifications, and also incorporated sophisticated methodologies, notably document co-citation analysis. According to Amaechi et al., (2022), the production of a sound literature review necessitates a repetitive procedure. This includes the identification of pertinent keywords, the execution of a thorough search of available publications, and the undertaking of a detailed analysis. This process is essential for the construction of a comprehensive list of references, and for the achievement of dependable research outcomes. The study focuses on the first paper, as it offers important insights for developing a theoretical framework that serves as a catalyst for the research domain. To support bibliometric analysis, the SCOPUS database was chosen to collect data because it is more reliable in terms of data reliability [53], [54], [55]. Furthermore, as shown by Mammola et al. (2021), to ensure reliable data and high-quality publications, the research only included works that had completed rigorous peer review in academic

journals. Books and lecture notes were also excluded from the process. The study used Elsevier's Scopus database, known for its extensive and reliable indexing, to collect papers from 2014 to 2024 for subsequent analysis.

2.2 Data Search Strategy

The next section states that the research used a systematic filtering approach to identify appropriate search parameters for article retrieval. A query was initially done in the Scopus database using the online TITLE-ABS-KEY search term "higher education*". The preliminary search produced a total of 247,840 items. The query string was subsequently revised to focus on the terms ("higher education*" OR "tertiary education*") AND (marketing OR branding) specifically on marketing and branding. As shown in Table 1, the final search string TITLE-ABS-KEY (("higher education*" OR "tertiary education*") AND (marketing OR branding)) AND PUBYEAR > 2013 AND PUBYEAR < 2025 AND (LIMIT-TO (SRCTYPE,"j")) AND (LIMIT-TO (PUBSTAGE,"final")) AND (LIMIT-TO (DOCTYPE,"ar") OR LIMIT-TO (DOCTYPE,"re")) AND (LIMIT-TO (LANGUAGE,"English")) refinement included 1,609 articles used for bibliometric analysis.

Table 1: The search string employed in the bibliometric analysis process

Database	Keywords used
Scopus	TITLE-ABS-KEY (("higher education*" OR "tertiary education*") AND (marketing OR branding)) AND PUBYEAR > 2013 AND PUBYEAR < 2025 AND (LIMIT-TO (SRCTYPE,"j")) AND (LIMIT-TO (PUBSTAGE,"final")) AND (LIMIT-TO (DOCTYPE,"ar") OR LIMIT-TO (DOCTYPE,"re")) AND (LIMIT-TO (LANGUAGE,"English"))

2.3 Data Analysis

VOSviewer is an easy-to-use bibliometric analysis software, developed by researchers from Leiden University in the Netherlands, namely Nees Jan van Eck and Ludo Waltman [55], [57]. The software is extensively applied in scientific literature analysis due to its ability to create network visualizations, cluster related elements, and generate density maps. These functions include author collaboration studies, citation co-analysis, keywords, co-occurrence networks providing a comprehensive understanding of developing study trends. Ongoing software updates and an interactive interface improve usability for effectively managing large datasets. Among other examples, the tool is able to calculate various metrics and customize visualizations ensuring compatibility with various bibliometric data sources, making it an essential resource for analyzing complex research landscapes. VOSviewer effectively converts complex bibliometric data sets into clear visual representations. In addition, for both new and experienced users, functions such as the development of network visualizations allowing for the clustering of related analyses, the analysis of co-occurrence patterns of keywords used and the development of intensity maps help to efficiently use research landscape analysis. The evidence for bibliometric analysis is through the correlation between various bibliometric data, such as co-authorship and citation networks, highlighting its important function for academic researchers who want to gain significant influence from their data. Comprehensive insights through sophisticated metric calculations and appropriate visualization options due to frequent updates ensure that bibliometric analysis software is at the forefront. with a period setting from 2014 to 2024, information in the form of PlainText was extracted from the Scopus database, including information such as publication year, article title, author identity, journal name, citation count and keywords. After that, the collected information was analyzed through Vosviewer software which then produced data for study in the form of visual presentation. Vosviewer is a tool that prioritizes the position of elements in a reduced dimensional space as stated by Bukar et al.,

(2023), VOSviewer, unlike the approach. This is done to accurately depict their interconnectedness and similarity. This methodology corresponds to the MDS technique [59] while using a more stringent normalization approach for co-occurrence frequencies. As shown in Eqn. (1), the association strength (AS_{ij}) utilized in VOSviewer is formulated as per McAllister et al. (2022):

$$AS_{ij} = \frac{c_{ij}}{w_i w_j} \quad \text{Eqn. (1)}$$

Further explaining from Cowan and Powell (2014), this software uses a level of proportionality measurement with a metric value defined as the quotient obtained from the observed co-occurrence frequency of two elements, designated as i and j , and the predicted co-occurrence frequency, which is based on the assumption of statistical independence. The computational tool uses this index to construct a visual representation, which is achieved by minimizing the aggregate squared distance between all paired items, weighted accordingly. In addition, the application of visualization techniques in VOSviewer facilitates the identification of patterns derived from mathematical relationships. These techniques allow for comprehensive inspection, including simultaneous keyword appearance, citation inspection, and co-citation analysis. As a result, noteworthy insights are obtained from the data collection

3.0 RESULTS AND DISCUSSION

1. What are the research trends in higher education branding and marketing based on publication year?

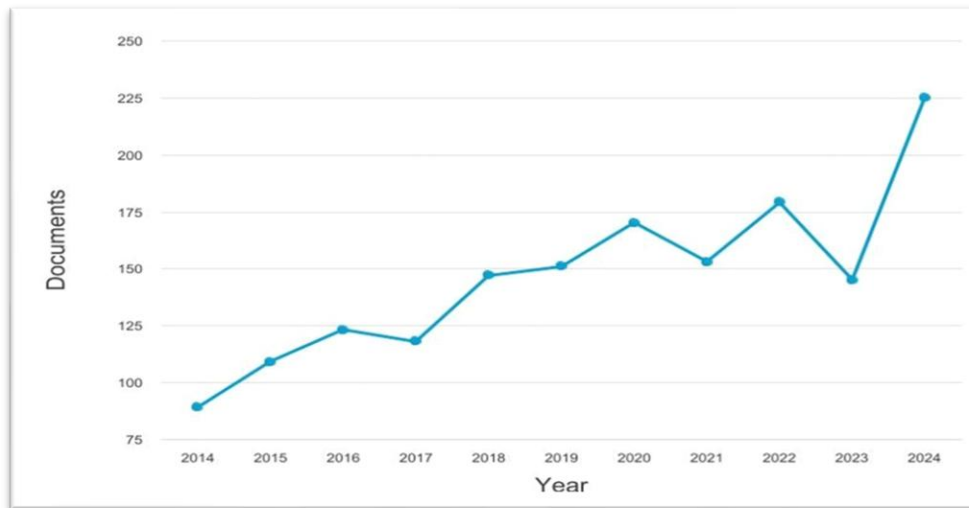


Figure 1: Evolution of higher education marketing and branding publications between 2014 and 2024

Figure 1 illustrates trends in publications related to marketing and branding in higher education over a ten-year period, from 2014 to 2024. The graph illustrates a positive trajectory in research publications, despite the fluctuations observed throughout the decade. The figure shows a progressive growth from 2014 to 2016, followed by a moderate decrease in 2017. In 2018 and 2019, there was an increase that showed increased interest among researchers in the subject. Publication trends in 2020 and 2021 experienced a significant decrease, possibly due to the trouble caused by the COVID-19 pandemic. However, the trend changed in 2022, showing a significant increase in publications. This growth continues through 2023 and 2024, marking a new focus on marketing research and branding in higher education. The information gathered describes the characteristics of

the academic landscape that is developing in relation to the marketing and branding requirements of higher education organizations. Variable trends show the impact of external factors on the academic world such as world events [61], [62]. Current trends show exciting prospects for the sector, as academics are exploring innovative strategies for marketing strategies and brand image structures in higher education institutions.

2. Who are the most prolific article writers?

Table 2: Analysis of Top 10 most influential authors' publications

Author's Name	Number of publications	Percentage (%)
Wilkins, S.	8	0.52
Chapleo, C.	7	0.45
Huisman, J.	6	0.39
Melewar, T.C.	6	0.39
Amani, D.	5	0.32
Bevan-Dye, A.L.	5	0.32
Elsharnouby, T.H.	5	0.32
Nguyen, B.	5	0.32
Pawar, S.K.	5	0.32
Stephenson, A.L.	5	0.32

Based on information taken from the Scopus database, identifying a prominent researcher is very challenging because the number of publications is modest but has a significant impact on the marketing and branding field in higher education from 2014 to 2024. Among the names with the highest publications is Wilkins, S. with 8 articles representing 0.52% of the total number of publications. This continuous effort is very necessary in maintaining momentum and improving the field of marketing and branding in higher education. Next with 7 publications by Chapleo, C. representing 0.45% shows the dedication and involvement of researchers in this field. Meanwhile, Huisman, J. and Melewar, T.C. have 6 publications each representing 0.39% of the total number of publications showing the collective efforts of researchers by contributing to publications that play a role in shaping the basic concepts and development of the field. Additionally, the authors who produced 5 publications representing 0.32% consisting of Amani, D., Bevan-Dye, A., Elsharnouby, M.H., Nguyen, B., Pawar, S.K., and Stephenson, S., provide a snapshot of the broader contribution of academic publications to the higher education landscape. Although researchers produced individual publications, their contributions to the field of marketing and branding are through diverse perspectives. To conclude this section, the data showing an even distribution and lack of dominance by a single researcher [63], [64], imply the interdisciplinary nature and strong global interest in researching marketing and branding in higher education.

3. What are the predominant subject areas for all publications?

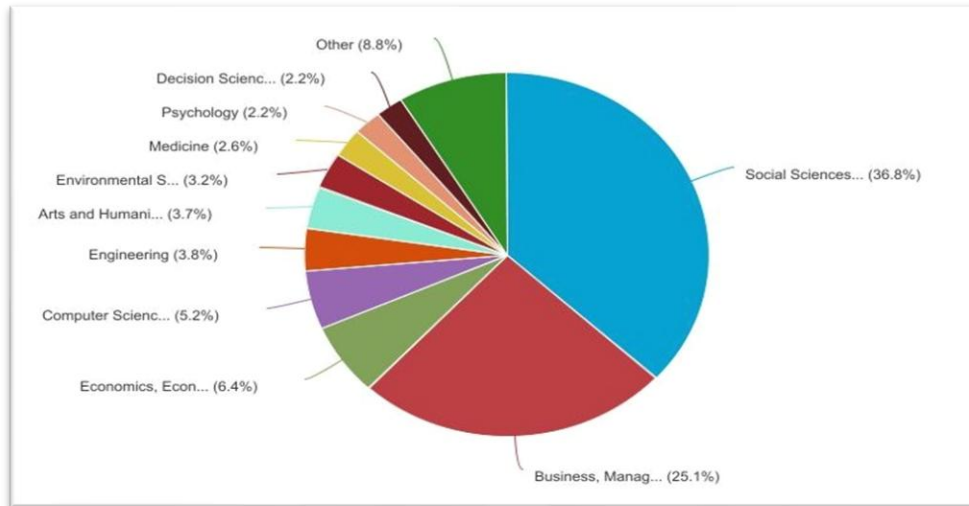


Figure 2: Documents published by subject area

In understanding the interdisciplinary field, Figure 2 shows the distribution of publications published across several subject areas from 2014 to 2024. Social Science is the largest contributor with a majority control of 36.8% compared to other fields that include social science, including sociology, psychology and anthropology, which often overlap with marketing and branding studies. Business, Management and Accounting attended the meeting at 25.1%, highlighting the importance of business-related studies in understanding customer behavior, brand management and marketing tactics in institutions of higher learning. Although Computer Science (5.2%) and Engineering (3.8%) appear to be complementary to marketing and branding, their combination underscores the increasing emphasis on technology and data-driven methodologies in modern marketing and branding strategy. In addition, Arts and Humanities (3.7%) and Economics, Econometrics and Finance (6.4%) provide significant insights into the impact of culture on consumer behaviour and the economic impact of branding and marketing strategies. This analysis reveals a diverse research environment relevant to marketing and branding in higher education. This field of study becomes more interesting with the involvement of the fields of Social Science and Commerce because it is clearer to understand the need for human behavior, user psychology and organizational dynamics to frame effective marketing and branding strategies. In contrast to previous findings [65], [66], however, the increase in the use of technology in marketing driven by data and prospects also involves fields such as Computer Science and Engineering. Arts and Humanities provide insights into the cultural and historical settings that inform branding and marketing messages, while Economics offers a framework for assessing the financial implications of marketing efforts. The multidisciplinary nature of the research underlines the need for a comprehensive strategy for marketing and branding in higher education, using multiple perspectives and approaches to achieve the best results.

4. Who are the ten foremost authors ranked by research citations?

Table 3: Ten writers with extensively cited publications

Author's Name	Year	Journal	Citation	Ref.
Autor D.H.	2014	Science	612	[67]
Woodall T.; Hiller A.; Resnick S.	2014	Studies in Higher Education	251	[68]
Chaudhary R.; Bisai S.	2018	Management of Environmental Quality: An International Journal	225	[69]
Dollinger M.; Lodge J.; Coates H.	2018	Journal of Marketing for Higher Education	193	[70]
Rutter R.; Roper S.; Lettice F.	2016	Journal of Business Research	157	[71]
Rauschnabel P.A.; Krey N.; Babin B.J.; Ivens B.S.	2016	Journal of Business Research	156	[72]
Duque L.C.	2014	Total Quality Management and Business Excellence	153	[73]
Brahimi T.; Sarirete A.	2015	Computers in Human Behavior	152	[74]
Akareem H.S.; Hossain S.S.	2016	Open Review of Educational Research	146	[75]
Peruta A.; Shields A.B.	2017	Journal of Marketing for Higher Education	143	[76]

Table 3 shows the ten most cited publications on marketing and branding in higher education from 2014 to 2024. At the forefront is Autor D.H.'s 2014 publication in Science, which has garnered an impressive 612 citations. This study arguably examines the fundamental elements of skills and education within a broader framework, highlighting its enduring influence on academic and marketing discourse. Additional notable contributions include Woodall T.'s publication in Studies in Higher Education (251 citations) and Chaudhary's 2018 work in Management (225 citations), demonstrating a continued interest in examining higher education from a variety of perspectives, including student decision-making and institutional branding. Interestingly, 2016 was a notable year, with three influential publications, including Rauschnabel and Rutter's study in the Journal of Management and the Journal of Marketing, garnering 156 and 157 citations, respectively. These publications highlight the increasing integration of social media and branding strategies in higher education. Strong citation counts for works such as Akareem (146) and Peruta (143) emphasize the role of digital media in shaping institutional branding. Collectively, these insights reveal a dynamic interplay between foundational theory and contemporary practice, suggesting that the field of research is evolving to address the challenges of digital transformation in educational branding.

5. Which country exhibits the greatest degree of co-authorship engagement in the domain of higher education marketing and branding?

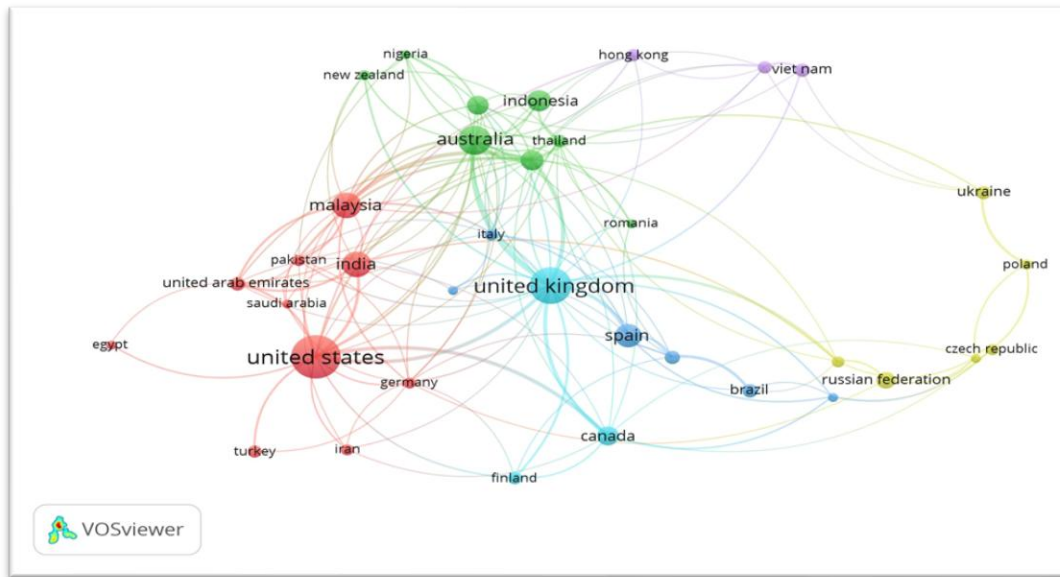


Figure 3: Co-authorship network among the most prolific countries

The co-authorship networks from Figure 3 reveal significant collaboration between countries in marketing and branding research in higher education institutions. The United States emerges as the central hub with the strongest links and highest contribution to publications, indicating its leading role in shaping research trends. This dominance is supported by strong partnerships with countries including the United Kingdom, Australia, Malaysia, and India, which illustrate its impact on the establishment of research networks worldwide. Nations such as United Kingdom and Australia have significant interests, highlighting their active participation in academic discourse. The visualization highlights regional and cross-regional collaboration through clusters. The green cluster, consisting of Australia, Indonesia, and Thailand, indicates a regional emphasis on Southeast Asian studies, likely influenced by geographical and cultural proximity [77], [78]. The red cluster highlights collaboration between the United States and emerging contributors such as India, Malaysia, and Saudi Arabia, reflecting increasing research output and interest in this area. The blue cluster, led by the United Kingdom, includes countries such as Spain and Canada, indicating strong transatlantic collaboration in higher education branding. Nodes with lower connectivity, such as Ukraine, Vietnam, and the Czech Republic, show new or underrepresented research contributions, which may provide unexplored opportunities for future investigations. These countries may face constraints such as limited finance or insufficient institutional capacity, but they can gain advantages by increasing their connections to major hubs [79], [80]. The network exhibits a hierarchical structure in which industrialized countries lead research output, but prospects for further inclusivity remain through collaboration with lesser-known contributors

6. What are the prevalent terms associated with the study, and how have they changed over the past decade?

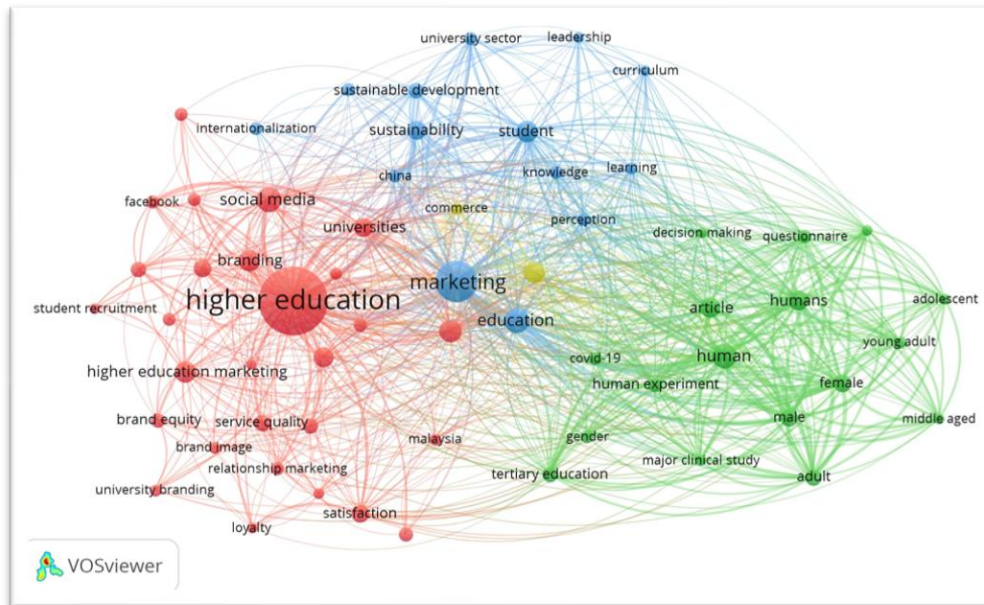


Figure 4: A network study of co-occurring author keywords

The keyword-based event network map depicted in Figure 4, created with VOSviewer, highlights key terms related to marketing and branding in higher education. The main node, “higher education,” reflects its prominent position in the research field, exhibiting strong relationships with terms such as “marketing,” “branding,” and “social media.” This indicates a continued emphasis on initiatives for student recruitment, university branding, and service quality improvement to increase institutional loyalty. Terms such as “brand equity” and “relationship marketing” emphasize the need to align marketing strategies with long-term organizational objectives. The map also depicts thematic clusters, denoting diverse yet interconnected research domains. The red cluster focuses primarily on marketing and branding principles, featuring key terms such as “higher education marketing” and “satisfaction.” The blue cluster emphasizes sustainability and curriculum, highlighting dialogue about incorporating these elements into higher education. The green cluster emphasizes terms associated with human factors and decision making, highlighting studies on the psychological and demographic aspects that influence student choice and institutional perceptions. The cluster connections, described by the strength of the links, indicate a multidisciplinary approach in the research environment. The link between “social media” and “student recruitment” highlights the growing importance of digital platforms in marketing efforts, while phrases like “COVID-19” reflect recent shifts in emphasis due to global challenges. The network highlights the dynamic evolution of marketing and branding tactics in higher education, influenced by a combination of conventional methods and modern factors such as technology and sustainability.

4.0 CONCLUSIONS

From 2014 to 2024, research in marketing and branding in higher education has exhibited a dynamic trend, characterized by fluctuations but showing long-term expansion. The early years saw modest growth in publication output, punctuated by a brief decline in 2017 and a rebound in 2018 and 2019. The COVID-19 pandemic hindered progress, resulting in declines in 2020 and 2021. Research saw a significant rebound from 2022 to 2024 reflecting renewed creative interest. This adjustment highlights the field’s resilience to external pressures and demonstrates its continued

importance in addressing modern challenges. The research is interdisciplinary in nature, featuring mostly Social Sciences and Business, with input from Computer Science, Arts, Humanities and Economics. This integration encompasses comprehensive strategies for complex challenges, encompassing digital transformation and social media tactics. Analysis of co-authorship networks sheds light on the trend of collaboration across the globe, highlighting the United States, the United Kingdom and Australia as leading research contributors, alongside emerging countries such as India and Malaysia. Keyword analysis highlighted “higher education,” “branding,” and “social media” as key themes, with a shifting emphasis on sustainability, digital platforms, and global factors such as COVID-19. Collectively, these findings underscore a dynamic and internationally relevant research environment influenced by both conventional methods and new advances.

Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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