

BIBLIOMETRICS OF HIGHER EDUCATION STUDENT'S ENROLLMENT BEHAVIOR RESEARCH: A CO-CITATION ANALYSIS

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Abstract

This study explores the dynamics of higher education in global market with a particular emphasis on student decision-making processes and recruitment tactics. Using techniques for co-citation and co-word analysis, the research examines 6,326 documents that were pulled from Web of Science to identify major themes and developing patterns. The concepts in the field of student recruitment in higher education are revealed to be interconnected by our study, which also sheds light on important writers, foundational works, and changing research paths by co-citation analysis. The study provides insights into how student's enrolment is changing in higher education and what influences their decision-making processes by clarifying the co-occurrence patterns of phrases and the connections between academic works. Furthermore, co-word analysis is employed to understand how each study theme has developed and to identify prospective avenues for future research.

Keywords: Higher Education, Student's Enrollment, Attention, Attraction, Recruitment.

1. INTRODUCTION

Higher education institutions must efficiently negotiate complex marketing environments in order to recruit and retain students in the more competitive world of today. Higher education's hiring practices have changed significantly as a result of demographic changes, technology improvements, and changing student preferences (SAYKILI, 2019). Concurrently, students had to make intricate decisions based on a multitude of aspects, including as program offerings, cost, location, and the reputation of the institution (Maringe & Foskett, 2010).

Scholars have long acknowledged that marketing plays a critical role in higher education (Kotler & Fox, 1985). But given the complexity of today's educational environment, a sophisticated grasp of new dynamics and trends is necessary. The scholarly literature can be usefully analyzed using co-citation and co-word analysis techniques to reveal hidden patterns and correlations that shed light on the development of research agendas and the connections between concepts (Borgman & Furner, 2002). Through using of co-citation and co-word analysis, this study seeks to add to the expanding body of knowledge on higher education marketing by identifying hidden patterns and important intersections

in the area. Using a large dataset of 6,326 documents from Web of Science, we want to highlight significant studies, synthesize insights, and uncover emerging trends in the field of student decision-making processes and recruitment techniques.

The complexity of higher education marketing has been emphasized by academics, who have also emphasized the significance of branding and strategic differentiation (Kotler & Fox, 1985; Hill & Lederer, 2003). In fact, in order to successfully attract potential students, universities need to create compelling value propositions and use targeted communication channel (Hemsley-Brown & Oplatka, 2006). Furthermore, the incorporation of digital technologies has transformed marketing strategies in higher education, allowing establishments to customize communications and individualize relationships (Calder et al., 2009) (Levy & Gvili, 2015).

Prospective students' decision-making processes are intricate and multidimensional, impacted by a wide range of variables from institutional reputation to cost considerations (Maringe & Foskett, 2010). According to research, students search for and evaluate a lot of information, frequently using a variety of social networks and information sources (Kotler & Fox, 1985; Zemke & Zemke, 1984). It is imperative for academic institutions to comprehend the dynamics involved in decision-making when devising methods for focused recruitment and improving student engagement.

Our analysis aims to both increase theoretical understanding and offer practical advice to higher education practitioners who want to effectively navigate the changing educational landscape and maximize their marketing efforts. In addition, authors can readily modify the subject and framework of their relevant research based on that premise.

2. LITERATURE REVIEW

2.1. HEI landscape: a brief overview

Recent decades have seen significant changes in the higher education scene brought about by globalization, technological developments, and shifting socioeconomic realities. An overview of the major ideas and viewpoints in the literature is given in this section, with a focus on how student decision-making and higher education marketing are changing over time. Higher education has been profoundly impacted by globalization, which has boosted international competition among the institution (Hoang et al., 2018). Universities are trying to draw in students from a variety of backgrounds, thus using successful marketing techniques is essential (Balmer et al., 2020). To stay competitive, institutions need to manage intricate market dynamics, set themselves apart with their services, and develop strong brand identities (Hemsley-Brown & Oplatka, 2006).

Higher education marketing has been transformed by the digital revolution, allowing universities to connect with potential students via a variety of online platforms (Papageorgiou et al., 2021) (Nunes Cruz et al., 2019). Specifically, social media platforms are important for recruiting students because they offer channels for participation and targeted advertising (Junco, 2012). But in order to fully utilize digital marketing,

organizations must change quickly to keep up with the rapidly changing needs of consumers and technological advancements (Alizadeh &Ilsa, 2015).

Researchers have emphasized how crucial it is to comprehend how potential students make decisions in order to develop successful recruitment technique (Lumby &Foskett, 2016). Students conduct in-depth information searches and evaluations, taking into the account peer recommendations, program offers, institutional reputation, and cost considerations (Kotler & Fox, 1985; Zemke & Zemke, 1984). Additionally, students' opinions and preferences are shaped by cultural and societal factors, which emphasizes the necessity for customized marketing strategy (Hemsley-Brown &Oplatka, 2006).

The idea of branding has become a major issue in marketing literature for higher education (Oplatka &Hemsley-Brown, 2021). In order to attract students and stakeholders, universities need to clearly communicate their compelling value propositions and set themselves apart from competition (Balmer et al., 2020). Successful branding techniques include visual identity, messaging, and experience marketing in order to establish lasting and genuine relationships with potential students (Boafo et al., 2020). Furthermore, there has been a rise in interest in the function of alumni participation in higher education marketing(Rather et al., 2018). Alumni act as powerful brand evangelists, promoting their former university and enhancing its standing in the eyes of the public and recruiting initiatives (Yiu et al., 2005). Using networking opportunities and focused communication tactics to engage alumni can increase university exposure and draw in new students (Phan &Ghantous, 2013).

2.2. Bibliometric analysis

In order to completely explode the whole image of Higher Education research regarding students' decision-making in the Institutions, this study used bibliometric analysis that included co-citation and co-occurrence (or co-word analysis). A bibliometric technique arranges and connects the fundamental data of publications, including citations, authors, co-authors, journals, and keywords, in order to evaluate and track the evolution of a research topic (Ferreira, 2018) (Koseoglu et al., 2016). Scientific mapping techniques are frequently used in conjunction with bibliometric analysis to visualize the intellectual structure of a specific study topic (Cobo et al., 2011). According to (vanEck &Waltman, 2010), several techniques are used in bibliometric analysis, namely co-citation analysis, co-word analysis, and bibliographic coupling. Amongst these, co-citation analysis method is the most familiar used in, following to (Ding et al., 2001). When two publications (A and B) are cited by publication C, this is known as co-citation, and it demonstrates the connection between publications A and B. Two publications are more likely to be related to one another and have a stronger co-citation strength when they receive more co-citation (Ferreira, 2018). The foundation of co-word analysis is the idea that any academic area can be described by a list of keywords, and that each publication's keywords may be compared for similarity to demonstrate a relationship between those two publications (dela Hoz-Correa et al., 2018). Co-word analysis is a content analysis method that establishes the connection between the topic ideas offered in these texts by looking at patterns in the co-occurrence of keyword pair (Leung et al., 2017).

3. METHODOLOGY

3.1. Data collection & Data analysis

The authors of this study searched for all English-language publications (books, articles, editorials, book chapters, notes, and letters) using the Web of Science database as the source. The terms "recruitment student," "intent to enroll," "HEI attract," and "Attention" were associated with these concerns during course of study of these ten years ago, starting with the collection date 2024-03-15.

More than 19,000 publications matching the same keywords were found in the Web of Science during the first search, which was conducted earlier by around a month. However, the author chose to obtain the data again, and this is the official data used for this study, as there was not enough data to run on Excel and SPSS to compute the years of publication and statistics of publications divided by different geographical places. Gathering data across various time intervals and organizing keywords based on research priorities results in varying data sizes over time, consequently yielding distinct retrieval outcomes. Simultaneously, the authors' usage of initiative data for analysis and running did not yield a matrix reflecting the intended research goal. To eliminate information that is inconsistent with this research objective, the authors therefore carried out a second round of data gathering. Consequently, 6326 Documents in total were collected for the ultimate study. The yearly changes in the quantity of researches released between 2014 and 2024 (March) are shown in Figure 1. Since 2014, there have been significantly more publications in the field of higher education. Specifically, in 2014, there were little over 200, but by 2023, there will be almost 1,000. This demonstrates the growing attention and enhancement given to the function and significance of higher education. standing in the eyes of many nations' societies.

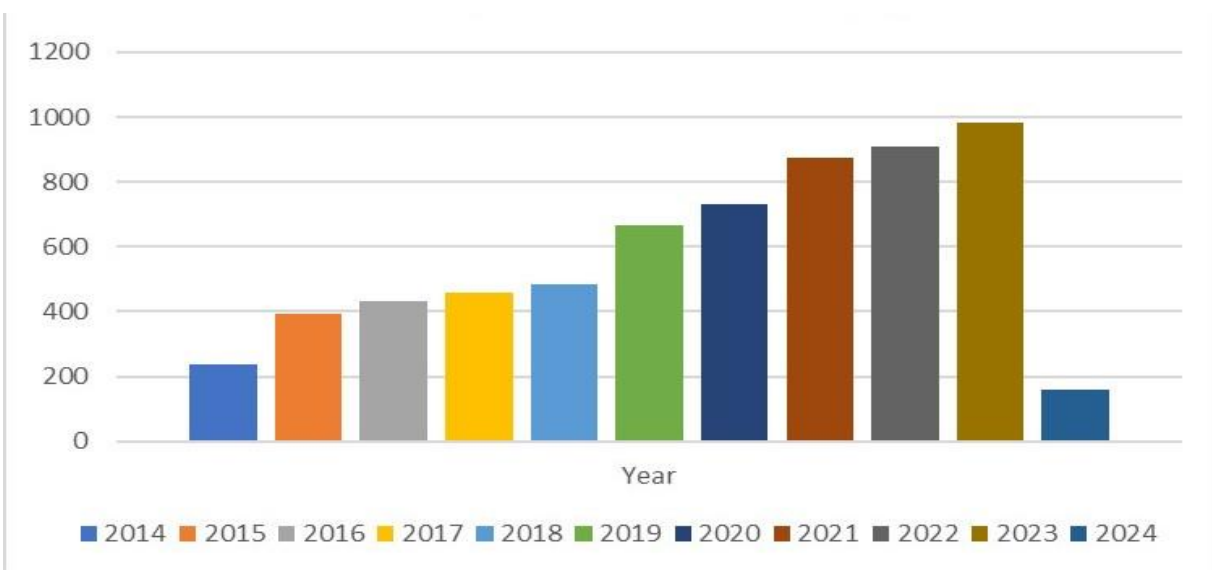


Figure 1: Number of published research papers by Year

3.2. Methodological procedure:

This study descriptive statistics were mainly shown to demonstrate:

- The quantity of pertinent articles, documents, publications, etc. released per year
- Selection of publications distributed according to geographic jurisdiction
- Research topics related to Higher Education recruitment and Student's decision-making in their HEI
- Publications distributed by authors; journals; keywords; organizations

This research utilized VOS viewer software to construct and visualize the co-citation network for research on an illustration of the latest developments in higher education (vanEck & Waltman, 2010). Subsequently, research themes were identified to investigate the framework of research in Higher Education. Descriptive statistics about the number of publications by year and region were simulated using the Excel tool.

Ultimately, all keywords from every chosen publication were categorized into co-citation research themes using co-word analysis. Two sub-periods within the explosion in student attention and recruiting enticing documents connected were formed in order to offer prospective future study directions in the higher education industry. Software known as VOS viewer was used to visualize co-word networks in two sub-periods (vanEck & Waltman, 2010). The authors propose new study directions based on the appearance of new keywords in the latter time. Scientific maps were utilized to depict the theoretical foundation of each of the aforementioned analysis methodologies (Cobo et al., 2011). The amounts of standardized citations the articles received was shown by the size of the bubble, and the strength of the citation relations was indicated by the thickness of the lines. The strength of the relationship was illustrated by the link and the separation between two publications. The bubble's color signified the cluster to which the document was assigned.


4. RESULTS & DISCUSSIONS

4.1. Co-Authorship-Authors

With respect to the authors, the findings indicated that 27438 authors were in charge of the documents that were part of the sample. Only 39 authors meet the standards with 215 publications, as a result of this research's reduction of the number of authors accountable for at least five written works. With the highest citation and overall link strength, the top three authors were Glassey Rachael (University of Western Australia, Perth, Australia), Hardcastle Sarah J. (Curtin University, Perth, Australia), and Ives Angela (University of Western Australia, Crawley, WA, Australia) (Figure 2). The network was displayed in Figure 3 to support the authors' bibliographic coupling. Based on various hues, the authors' bibliographic coupling resulted in twelve groups that were dispersed over Figure 3. A cluster of primary authors, identified as the red cluster, exhibited strong indices of bibliographic coupling among five authors. There are two to three authors in each of the remaining clusters. Glassey Rachael, Ives Angela (cluster 1), Bendtgen

Marcus, Bendtgen Preben (cluster 2), Stenhouse Rosie, Snowden Austyn (cluster 3), Morgan Philip.J., Eather Narelle (cluster 4), Jajosky Audrey.N., Jajosky Ryan Philip (cluster 5), and Wang Xin (cluster 6) are some examples of typical authors who represented the big cluster.

Create Map ×

 **Verify selected authors**

Selected	Author	Documents	Citations	Total link strength
<input checked="" type="checkbox"/>	glassey, rachael	5	50	20
<input checked="" type="checkbox"/>	hardcastle, sarah j.	5	50	20
<input checked="" type="checkbox"/>	ives, angela	5	50	20
<input checked="" type="checkbox"/>	o'connor, moira	5	50	20
<input checked="" type="checkbox"/>	saunders, christobel	5	50	20
<input checked="" type="checkbox"/>	bendtsen, marcus	10	62	9
<input checked="" type="checkbox"/>	bendtsen, preben	7	41	8
<input checked="" type="checkbox"/>	jajosky, audrey n.	5	46	5
<input checked="" type="checkbox"/>	jajosky, ryan philip	5	46	5
<input checked="" type="checkbox"/>	snowden, austyn	5	115	5
<input checked="" type="checkbox"/>	stenhouse, rosie	5	115	5
<input checked="" type="checkbox"/>	eather, narelle	5	165	3
<input checked="" type="checkbox"/>	mccambridge, jim	5	51	3
<input checked="" type="checkbox"/>	morgan, philip j.	5	115	3
<input checked="" type="checkbox"/>	campbell, narelle	5	85	2
<input checked="" type="checkbox"/>	eley, diann s.	6	48	2
<input checked="" type="checkbox"/>	wang, xin	6	63	2
<input checked="" type="checkbox"/>	zhang, yan	5	21	2
<input checked="" type="checkbox"/>	alberti, hugh	9	97	0

Figure 2: The relationship between the Co-Authors following the highest link strength

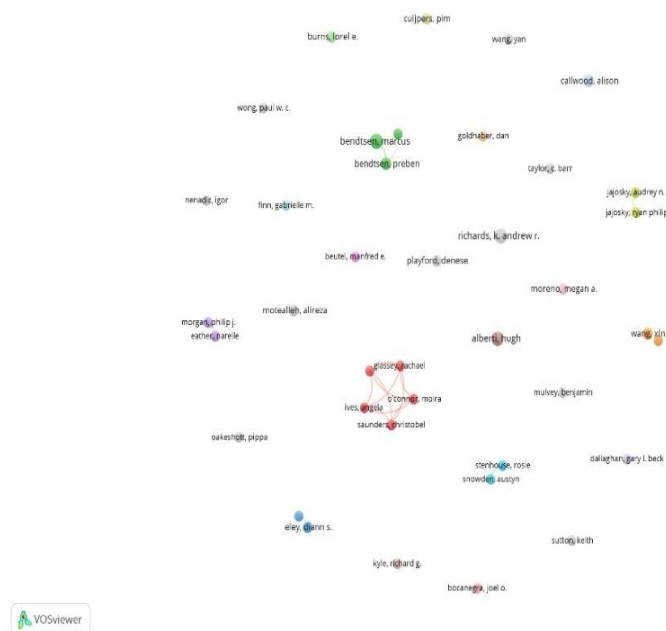


Figure 3: The co-authorship-author network

4.2. Co-authorship- countries

The data results (figure 4) pertaining to the top five countries with the highest international publication and citation rates in the realm of higher education marketing and student enrollment behavior provides valuable insights into the global landscape of academic research in this field. First and foremost, it is notable that all five countries—USA, England, Canada, Australia, and Germany—are categorized as developed nations. This underscores the significant role that developed countries play in shaping the discourse and advancement of knowledge in higher education marketing. The United States emerges as the frontrunner by a substantial margin, with 2929 documents and 37938 citations. This hegemonic position reflects the country's longstanding tradition of academic excellence, robust research funding mechanisms, and the presence of prestigious universities and research institutions. Furthermore, the USA's multicultural society and diverse higher education landscape likely contribute to the breadth and depth of research topics.

Following the USA, England, with 697 documents and 9277 citations, occupies a prominent position in the global academic arena. The United Kingdom's rich academic heritage, coupled with its globally renowned universities and research-intensive culture, affords it considerable influence and visibility in shaping scholarly discourse on higher education marketing trends and student enrollment dynamics.

Canada, Australia, and Germany, while trailing behind the USA and England in terms of publication volume and citation rates, nonetheless demonstrate a significant presence in the field. Canada's 587 documents and 976 citations reflect its commitment to fostering research excellence in higher education, supported by a robust higher education system and a culture of innovation and collaboration.

Australia, with 575 documents and 8996 citations, showcases its status as a key player in the global higher education landscape. The country's emphasis on research-led teaching, coupled with its strategic investments in higher education and research infrastructure, positions it as a hub for cutting-edge research in areas pertinent to higher education marketing and student enrollment behavior.

Germany, with 282 documents and 6891 citations, underscores its reputation as a powerhouse in academic research and innovation. Germany's renowned universities, coupled with its strong emphasis on international collaboration and knowledge exchange, contribute to its prominence in the field of higher education with the amounts of attractive policies from Government.

Additionally, Figure 6 demonstrates that, with 50% of all foreign publication related fields used over the last ten years, Europe has been the most active continent. After that, with a global ranking of 45% for international published production, the North American region came in second, followed by other regions (attained 5%). The dispersed distribution in areas is also evident in the matrix in Figure 5.

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Selected	Country	Documents	Citations	Total link strength ▼
<input checked="" type="checkbox"/>	usa	2929	37938	877
<input checked="" type="checkbox"/>	england	697	9277	561
<input checked="" type="checkbox"/>	canada	587	9768	382
<input checked="" type="checkbox"/>	australia	575	8996	369
<input checked="" type="checkbox"/>	germany	282	6891	306
<input checked="" type="checkbox"/>	peoples r china	378	7288	241
<input checked="" type="checkbox"/>	netherlands	125	2191	204
<input checked="" type="checkbox"/>	italy	97	1896	165
<input checked="" type="checkbox"/>	france	106	3987	164
<input checked="" type="checkbox"/>	switzerland	81	1433	160
<input checked="" type="checkbox"/>	sweden	107	1454	144
<input checked="" type="checkbox"/>	spain	114	1562	138
<input checked="" type="checkbox"/>	scotland	118	1650	136
<input checked="" type="checkbox"/>	south africa	84	1061	124
<input checked="" type="checkbox"/>	india	93	924	105
<input checked="" type="checkbox"/>	norway	73	733	98
<input checked="" type="checkbox"/>	belgium	54	998	85
<input checked="" type="checkbox"/>	ireland	78	680	84
<input checked="" type="checkbox"/>	finland	52	848	81

Figure 4: List of countries with the highest number of Documents and citations

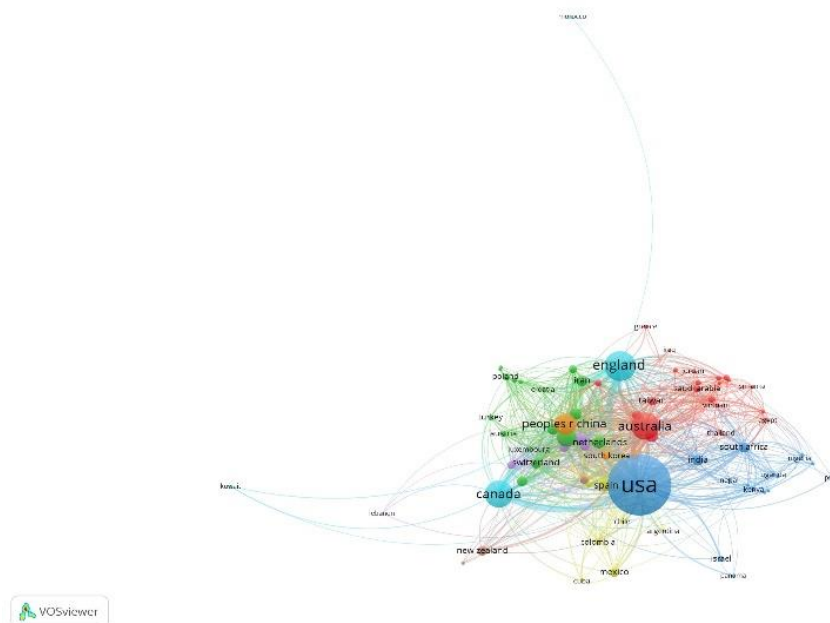


Figure 5: The matrix showing the relationships amongst the countries with their citations and publications

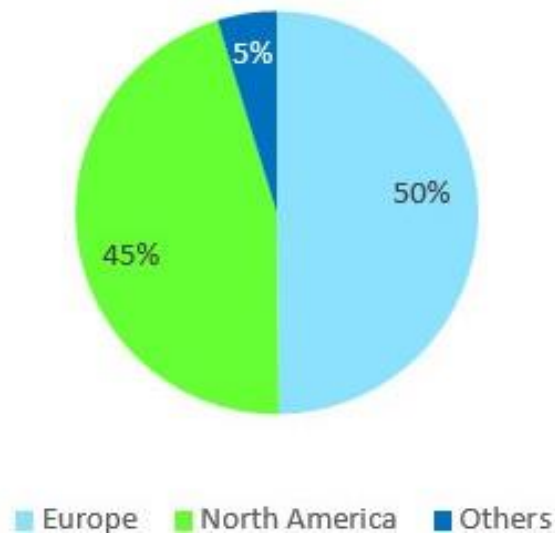


Figure 6: The proportion of researches conducted across different continents

4.3. Co-authorship with organizations

The authors proceed to investigate if international publication indices research on the recruiting student issue, building on the findings of the previous section regarding the continents and countries with the largest international joint publications on this topic. Around the world, organizations and universities are primarily responsible for overseeing students' behavior in higher education.

In actuality, the Figure 7's data reveals that the top 10 organizations in the table are primarily located in the US, Canada, Australia, and a few European nations. The author of this study set a five-document minimum for an organization. As a result, 598 organizations met the thresholds, out of the 6104 organizations that satisfied the criteria. The analysis of co-authorship with organizations within the realm of higher education student enrollment behavior research unveils intriguing patterns and dynamics. Notably, the University of Toronto emerges as a prominent player with a staggering total link strength, bolstered by its significant number of documents and citations. This underscores the institution's robust collaborative network and its pivotal role in advancing scholarly discourse in this domain. Similarly, the University of Washington commands substantial attention, leveraging its extensive citation count to foster collaborative research endeavors with other academic and research entities. Conversely, despite its respectable document count, Harvard Medicine School exhibits a comparatively lower citation count, indicative of potentially narrower collaborative engagement within the broader academic community. The University of California, San Francisco stands out as an outlier, boasting a remarkable citation count despite a relatively modest document count, suggesting highly impactful research output and strong collaborative ties with other institutions. Conversely, the University of Melbourne's lower citation count raises questions about the depth of its collaborative engagement within the academic community despite a respectable document count. These findings underscore the nuanced interplay between

document production and citation impact in shaping collaborative dynamics within the landscape of higher education research on student enrollment behavior. Furthermore, they highlight the significance of fostering robust collaborative networks to enhance the quality and impact of scholarly output in this crucial field of inquiry.

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 **Verify selected organizations**

Selected	Organization	Documents	Citations	Total link strength ▼
<input checked="" type="checkbox"/>	harvard med sch	71	927	245
<input checked="" type="checkbox"/>	univ toronto	115	3090	221
<input checked="" type="checkbox"/>	univ melbourne	75	1478	186
<input checked="" type="checkbox"/>	univ wisconsin	64	620	170
<input checked="" type="checkbox"/>	univ michigan	93	1261	162
<input checked="" type="checkbox"/>	univ washington	79	2526	159
<input checked="" type="checkbox"/>	univ n carolina	60	560	156
<input checked="" type="checkbox"/>	univ calif los angeles	63	592	144
<input checked="" type="checkbox"/>	univ calif san francisco	56	2822	138
<input checked="" type="checkbox"/>	univ penn	57	786	130
<input checked="" type="checkbox"/>	univ sydney	60	1079	127
<input checked="" type="checkbox"/>	stanford univ	57	869	126
<input checked="" type="checkbox"/>	univ illinois	71	765	123
<input checked="" type="checkbox"/>	univ pittsburgh	47	548	120
<input checked="" type="checkbox"/>	deakin univ	47	591	118
<input checked="" type="checkbox"/>	univ newcastle	47	930	118
<input checked="" type="checkbox"/>	ohio state univ	56	482	116
<input checked="" type="checkbox"/>	univ calgary	62	1478	114
<input checked="" type="checkbox"/>	univ queensland	59	807	113

Figure 7: The organizations with the highest number of international publications and citation index

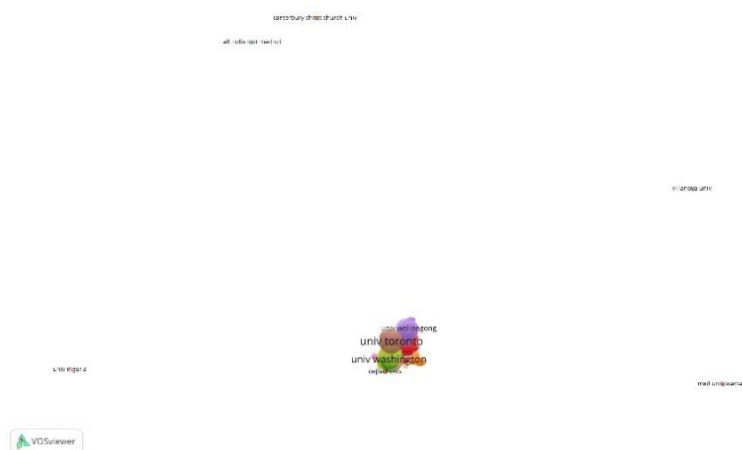


Figure 8: Network bibliographic coupling of Organizations

In Figure 9, we can easily see the enlarged picture from Figure 8 with the largest clusters depicting the connection matrix of research organizations in countries such as the US, Australia, Canada and the Western European bloc (notably the UK). In particular, the top cluster (purple) depicts the chain relationship between Australian school clusters and units. Look down to the left, where the brown cluster represents the Canadian University clusters' network relationship. British universities are represented by the red cluster. Representatives of several Western European nations, including Gent University in Belgium and Stockholm University in Sweden, are centered in the blue cluster. The organizations in the green, yellow, and orange clusters are located at the US. The remaining minor clusters are affiliated with several famous universities located on other continents, including Tokyo University in Japan and Mashhad University in Iran, etc.

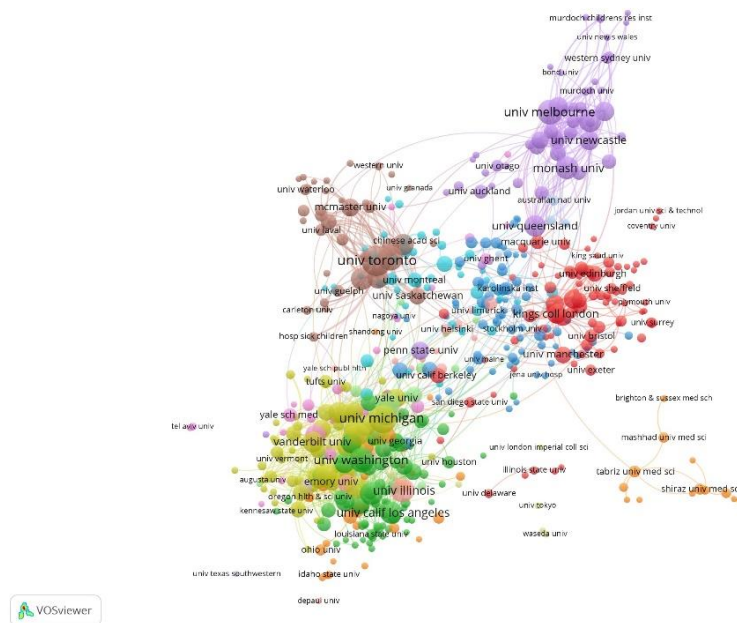


Figure 9: Enlarge the network bibliographic coupling of Organizations by the biggest Clusters

4.4. Co-occurrence with All keywords & Author keywords

To investigate prospective research themes related to students' enrollment behavior, the author concurrently established and employed two subgroups of Co-word (co-occurrence). A good way to do this is to look for the most popular keywords associated with this research throughout the past ten years (March 2014–March 2024) by going through the network of All keywords and Author keywords. Out of 1,785 words that fit the criterion, the study revealed a total of 23,620 words for the keyword using the All keywords filtering approach. Simultaneously, the investigation discovered that 14,856 words out of 722 words match the criteria when using the Author keywords filtering approach. Keywords that appeared more than five times were eliminated and the authors' list was

condensed. Consequently, about 1000 terms were kept for co-word analysis (by using the all- keywords filter) (Figure 10).

A number of variables can be identified as a direction for research models and a basis for exploring a number of scientific theories relevant studies based on the table of keywords with the highest frequency (figure 10), which includes occurrences like: recruitment (1162), students (745), education (704), impact (324), retention (300), perceptions (291), diversity (330), health (260), experiences (199), gender (200), and many more.

Selected	Keyword	Occurrences	Total link strength
<input checked="" type="checkbox"/>	recruitment	1162	6118
<input checked="" type="checkbox"/>	students	745	4469
<input checked="" type="checkbox"/>	education	706	4009
<input checked="" type="checkbox"/>	impact	324	2136
<input checked="" type="checkbox"/>	retention	300	2030
<input checked="" type="checkbox"/>	perceptions	291	1976
<input checked="" type="checkbox"/>	diversity	330	1894
<input checked="" type="checkbox"/>	health	260	1609
<input checked="" type="checkbox"/>	experiences	199	1352
<input checked="" type="checkbox"/>	gender	200	1311
<input checked="" type="checkbox"/>	performance	224	1296
<input checked="" type="checkbox"/>	attitudes	203	1259
<input checked="" type="checkbox"/>	women	203	1231
<input checked="" type="checkbox"/>	program	176	1222
<input checked="" type="checkbox"/>	children	204	1212
<input checked="" type="checkbox"/>	care	172	1113
<input checked="" type="checkbox"/>	depression	136	1068
<input checked="" type="checkbox"/>	choice	150	1034
<input checked="" type="checkbox"/>	adolescents	146	1010

Figure 10: The list of keywords with highest frequency

When comparing the clusters of the two figures, there is a small variation, but it makes perfect sense because the most of the variation is due to the words' varied magnitudes and orders of distribution. Figures 11 and 12 make this evident. The keys in certain clusters differ slightly, or the authors employ comparable phrases depending on the goal of the research.

Simultaneously, both statistics include references to health-related or COVID-19-related difficulties. This makes sense since study data collected from 2014 to 2024 shows that the COVID-19 pandemic peaked in 2019 and 2020, when humankind was most affected. Everything about human existence and industry at the period was entirely upside down, even university education.

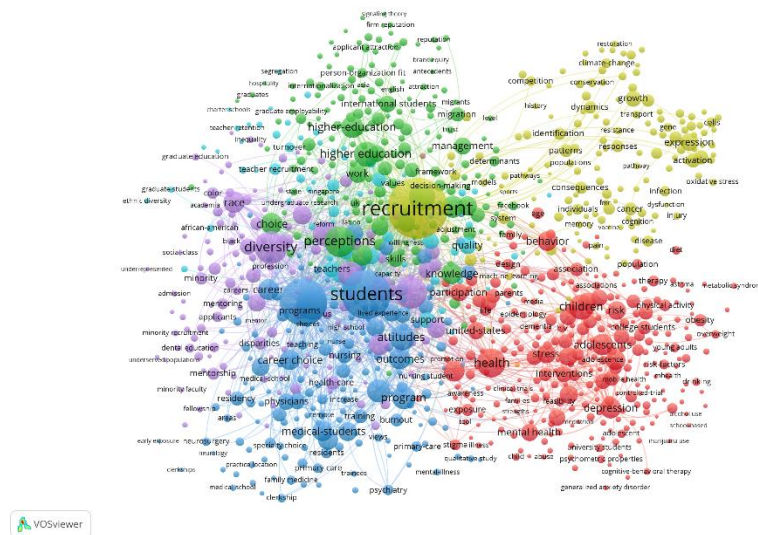


Figure 11: Network of all keywords

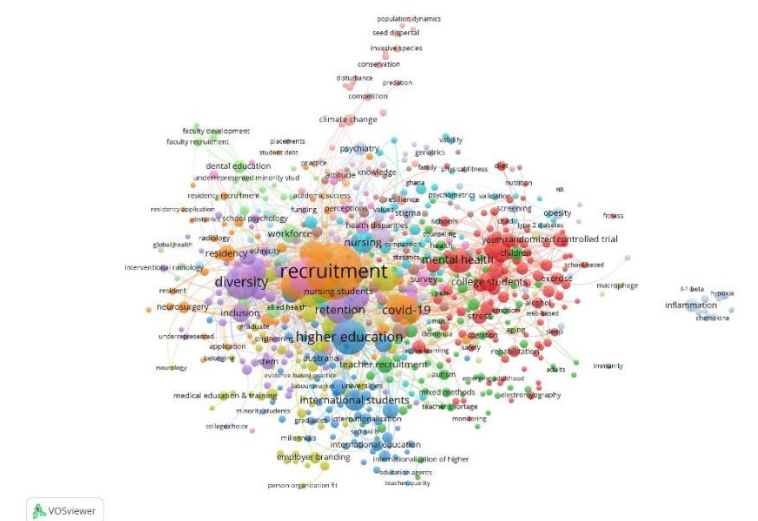


Figure 12: Network of Author keywords

Using terms like these can lead to some interesting study ideas as recruitment, retention, diversity, quality, program, profession, career, etc. as the suggestion gained from keywords network above.

5. CONCLUSIONS

This study delved into the intricate landscape of higher education student enrollment behavior through the lens of co-citation analysis, shedding light on key trends, themes, and future directions (Raman et al., 2021). The exploration began with a comprehensive overview, capturing the pulse of scholarly activity in this domain across different regions

and timelines (Aydin, 2014). Through meticulous bibliometric analysis of 6,326 documents from the Web of Science database, it was evident that research on higher education student enrollment behavior has experienced a notable surge, particularly since 2014, with Europe and North America emerging as hubs of scholarly discourse.

The richness of this research endeavor lies in its multifaceted approach, employing both co-citation and co-word analyses to unearth latent themes and conceptual structures. These methodologies served as invaluable tools in unraveling the intricate tapestry of factors influencing student enrollment decisions (Kusakunniran et al., 2018). From the keyword matrices, a nuanced understanding emerged, highlighting the dynamic interplay of diverse determinants such as curriculum offerings, institutional policies, socio-economic dynamics, personal aspirations, and evolving global contexts. Indeed, the landscape of higher education today is marked by unprecedented complexity, shaped by the confluence of technological advancements, economic globalization, and socio-cultural dynamics. Amidst this complexity, students navigate a myriad of considerations when selecting a university, ranging from academic offerings to career prospects, from familial expectations to health and safety concerns exacerbated by events like the Covid-19 pandemic. However, it is crucial to acknowledge the inherent limitations of this study. The classification of themes and the selection of keywords are inherently subjective processes, susceptible to biases inherent in the researchers' perspectives. Furthermore, the constraints of keyword limitations within publications may have led to oversights in capturing the full breadth of scholarly discourse (Pesta et al., 2018; Chae et al., 2020). Looking ahead, the findings of this study serve as a springboard for future research endeavors in the realm of higher education student enrollment behavior. To enrich our theoretical understanding, future studies may adopt a multi-methodological approach, integrating qualitative inquiries, longitudinal analyses, and interdisciplinary perspectives. Moreover, there is a pressing need for research that transcends geographical boundaries, capturing the nuances of student enrollment behavior in diverse cultural contexts.

In conclusion, this study represents a significant step towards unraveling the complexities of higher education student enrollment behavior, offering valuable insights for policymakers, educators, and researchers alike. By embracing the inherent dynamism of this field and fostering interdisciplinary collaboration, we can strive towards a more nuanced understanding of the factors shaping the educational trajectories of tomorrow's leaders.

References

- 1) Alizadeh, A., & Isa, R. M. (2015). *The use of social media in destination marketing: An exploratory study*. 63(2), 175–192.
- 2) Aydin, O. T. (2014). Current Developments And Trends In Higher Education. *Journal of Business, Economics & Finance*, 3, 471–489.
- 3) Balmer, J. M. T., Mahmoud, R., & Chen, W. (2020). Impact of multilateral place dimensions on corporate brand attractiveness and identification in higher education: Business school insights. *Journal of Business Research*, 116(March), 628–641. <https://doi.org/10.1016/j.jbusres.2019.03.015>

- 4) Boafo, N. D., Agyapong, F., Asare, P., &Amponsah, G. (2020). The Balance Between Corporate Identity And Corporate Image And Its Impact On Marketing Of Universities In Ghana. *Archives of Business Research*, 8(5), 302–315. <https://doi.org/10.14738/abr.85.8323>
- 5) Borgman, C. L., &Furner, J. (2002). Scholarly communication and bibliometrics. *Annual Review of Information Science and Technology*, 36(August 2001), 2–72. <https://doi.org/10.1002/aris.1440360102>
- 6) Calder, B. J., Malthouse, E. C., &Schaedel, U. (2009). An Experimental Study of the Relationship between Online Engagement and Advertising Effectiveness. *Journal of Interactive Marketing*, 23(4), 321–331. <https://doi.org/10.1016/j.intmar.2009.07.002>
- 7) Chae, C., Yim, J. H., Lee, J., Jo, S. J., &Oh, J. R. (2020). The bibliometric keywords network analysis of human resource management research trends: The case of human resource management journals in South Korea. In *Sustainability (Switzerland)* (Vol. 12, Issue 14). <https://doi.org/10.3390/su12145700>
- 8) Cobo, M. J., López-Herrera, A. G., Herrera-Viedma, E., &Herrera, F. (2011). An approach for detecting, quantifying, and visualizing the evolution of a research field: A practical application to the Fuzzy Sets Theory field. *Journal of Informetrics*, 5(1), 146–166. <https://doi.org/10.1016/j.joi.2010.10.002>
- 9) dela Hoz-Correa, A., Muñoz-Leiva, F., &Bakucz, M. (2018). Past themes and future trends in medical tourism research: A co-word analysis. *Tourism Management*, 65, 200–211. <https://doi.org/10.1016/j.tourman.2017.10.001>
- 10) Ding, Y., Chowdhury, G. G., &Foo, S. (2001). Bibliometric cartography of information retrieval research by using co-word analysis. *Information Processing and Management*, 37(6), 817–842. [https://doi.org/10.1016/S0306-4573\(00\)00051-0](https://doi.org/10.1016/S0306-4573(00)00051-0)
- 11) Ferreira, F. A. F. (2018). Mapping the field of arts-based management: Bibliographic coupling and co-citation analyses. *Journal of Business Research*, 85(March), 348–357. <https://doi.org/10.1016/j.jbusres.2017.03.026>
- 12) Hemsley-Brown, J., &Oplatka, I. (2006). Universities in a competitive global marketplace: A systematic review of the literature on higher education marketing. *International Journal of Public Sector Management*, 19(4), 316–338. <https://doi.org/10.1108/09513550610669176>
- 13) Hill, M., & Lederer, A. L. (2003). *The Infinite Asset: Managing Brands to Build New Value*. Harvard Business Press.
- 14) Hoang, L., Tran, L. T., &Pham, H. H. (2018). Vietnamese government policies and practices in internationalisation of higher education. *Higher Education Dynamics*, 51, 19–42. https://doi.org/10.1007/978-3-319-78492-2_2
- 15) Junco, R. (2012). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. *Computers in Human Behavior*, 28(1), 187–198. <https://doi.org/10.1016/j.chb.2011.08.026>
- 16) Koseoglu, M. A., Rahimi, R., Okumus, F., &Liu, J. (2016). Bibliometric studies in tourism. *Annals of Tourism Research*, 61, 180–198. <https://doi.org/10.1016/j.annals.2016.10.006>
- 17) Kusakunniran, W., Dahal, A. S., &Viriyasitavat, W. (2018). Journal Co-Citation Analysis for Identifying Trends of Inter-Disciplinary Research: An Exploratory Case Study in a University. *Journal of Information and Knowledge Management*, 17(4), 1–22. <https://doi.org/10.1142/S0219649218500405>
- 18) Leung, X. Y., Sun, J., &Bai, B. (2017). Bibliometrics of social media research: A co-citation and co-word analysis. *International Journal of Hospitality Management*, 66, 35–45. <https://doi.org/10.1016/j.ijhm.2017.06.012>

- 19) Levy, S., &Gvili, Y. (2015). How credible is e-word of mouth across digital-marketing channels? The roles of social capital, information richness, and interactivity. *Journal of Advertising Research*, 55(1), 95–109. <https://doi.org/10.2501/JAR-55-1-095-109>
- 20) Lumby, J., &Foskett, N. (2016). Internationalization and Culture in Higher Education. *Educational Management Administration and Leadership*, 44(1), 95–111. <https://doi.org/10.1177/1741143214549978>
- 21) Kotler, P., & Fox, K. F. (1985). *Strategic Marketing for Educational Institutions*. Prentice-Hall.
- 22) Maringe, F., & Foskett, N. (2010). Globalisation and Internationalisation in Higher Education: Theoretical, Strategic and Management Perspectives. Continuum.
- 23) Nunes Cruz, R., Fernandes, A. M., &Rosário, T. (2019). Determinants of Innovation in Digital Marketing. *Journal of Reviews on Global Economics*, 8(July), 1722–1731. <https://doi.org/10.6000/1929-7092.2019.08.154>
- 24) Oplatka, I., &Hemsley-Brown, J. (2021). A Systematic and Updated Review of the Literature on Higher Education Marketing 2005–2019. *International Series in Operations Research and Management Science*, 309(May), 35–80. https://doi.org/10.1007/978-3-030-74051-1_2
- 25) Papageorgiou, G., Mihai-Yiannaki, S., Ioannou, M., Varnava-Marouchou, D., &Marneros, S. (2021). Entrepreneurship education in an era of digital communications. *Contemporary Issues in Entrepreneurship Research*, 11(February), 65–77. <https://doi.org/10.1108/S2040-724620210000011005>
- 26) Pesta, B., Fuerst, J., &Kirkegaard, E. O. W. (2018). Bibliometric keyword analysis across seventeen years (2000–2016) of intelligence articles. *Journal of Intelligence*, 6(4), 1–12. <https://doi.org/10.3390/jintelligence6040046>
- 27) Phan, K. N., &Ghantous, N. (2013). Managing brand associations to drive customers' trust and loyalty in Vietnamese banking. *International Journal of Bank Marketing*, 31(6), 456–480. <https://doi.org/10.1108/IJBM-04-2013-0038>
- 28) Raman, A., Thannimalai, R., Don, Y., &Rathakrishnan, M. (2021). A bibliometric analysis of blended learning in higher education: perception, achievement and engagement. *International Journal of Learning, Teaching and Educational Research*, 20(6), 126–151. <https://doi.org/10.26803/IJLTER.20.6.7>
- 29) Rather, R. A., Tehseen, S., &Parrey, S. H. (2018). Promoting customer brand engagement and brand loyalty through customer brand identification and value congruity. *Spanish Journal of Marketing - ESIC*, 22(3), 321–341. <https://doi.org/10.1108/SJME-06-2018-0030>
- 30) SAYKILI, A. (2019). Higher Education in The Digital Age: The Impact of Digital Connective Technologies. *Journal of Educational Technology and Online Learning*, 2(1), 1–15. <https://doi.org/10.31681/jetol.516971>
- 31) vanEck, N. J., &Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- 32) Yiu, D., Bruton, G. D., &Lu, Y. (2005). Understanding business group performance in an emerging economy: Acquiring resources and capabilities in order to prosper. *Journal of Management Studies*, 42(1), 183–206. <https://doi.org/10.1111/j.1467-6486.2005.00493.x>