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Exploring the Relationship between Social Media and Student Communication: A Bibliometric Analysis

Khalid Alshabibi¹, Nurazmallail Bin Marni¹, Freed Away², Hassan Abuhassna³

¹Academy of Islamic Civilization, Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 Skudai, Johor, Malaysia, ² Academy of Islamic Civilization, University Malaya, ³School of education, Sunway University Email: Khalid55660@hotmail.com, nurazmal@utm.my, hashas10@gmail.com

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Abstract

There is a close relationship between social media and communication among students in various related fields, and this relationship is evident through bibliometric analysis. The study sought to analyze all research over the past decade from 2013 to 2024 by utilizing the phosphorescence visualization program. By analyzing a total of 6,260 publications classified as authoritative in the Scopus database between 2013 and 2024, the most pressing topics covered by the journal were identified. The results revealed several important study interests in the field of (social media - communication - students - learning and values). The research provides a roadmap for potential researchers, focusing on critical areas where success is possible.

Keywords: Social Media, Communication, Students, Education, Bibliometric Analytics

Introduction

This research quantitatively analyzes social media and student communication, and its distributions published between (2014 - 2023) to comprehensively examine the research landscape, especially social media and student communication using bibliometric analysis. Biometrics. Although multivariate analysis is commonly used in social media research, students communicate the use of relationship variables in different fields of research. Studies show that social media platforms can increase students' motivation to learn.(Anna et al., 2023).

This study helps to reveal the relationship between social media and communication with students and their interconnectedness, as the bibliometric analysis showed a good number of publications in the field of social media and students at the Scopus classification level,

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which reached 6260 publications, and it also shows the percentage of countries participating in social media and students research, indicating that the topic of communication, education and students is of interest to researchers and authors around the world. The bibliometric analysis has been addressed in the past ten years because it is consistent with the research topic and the specified period, and social media in its various types is a new topic in the field of scientific research in recent years due to its spread among students. Communication between students in education is a major contributor to national development, as it provides a wide range of learning spaces, and the functions and productivity of educational institutions have been greatly affected by the emergence of technology. The main goal of global computing technologies is to expand student participation. (Kazem, 2023).

The study was limited to a decade (2014-2024) and consisted of 991 publications in the fields of humanities, social communication, education and students, in addition to studies that were in English only. To achieve this goal, the objectives of this study are to analyze studies and publications indexed in Scopus using bibliometric measurements that addressed the topic of social media and communication between students and to analyze the images and tables that the researcher contributed to the current study after collecting all relevant data from Scopus, the leading database in the field of abstracts and citations for peer-reviewed research. It included many leading journals and publications in the field of social media and communication with students and aims exclusively to answer the following research questions:

- 1. What is the distribution of social media posts and students by year over the past decade?
- 2. Which journals and authors are most relevant to social media and student research?
- 3. What are the most productive countries in the field of social communication and students?
- 4. What are the keywords for research in the last decade of "social media and students"?

The researchers were interested in the topic of scientific publications that dealt with social media, education, and communication between students, as he noticed the interest of researchers in the topic of social media and education. This topic is considered one of the important topics for research and study in line with this period throughout the past decade. The articles that the researcher dealt with in his study amounted to 991 articles in the humanities, social communication, and communication between students and teachers.

Material and Methods

This review aimed to reveal the most common studies in the field of social media and communication with students and education. To achieve this bibliometric analysis, a review was conducted in this study. This search was conducted on October 15, 2024. The Scopus database was used in this research. The initial search revealed 6,260 articles in the field of research on social media and communication with students. The keywords used were KEY (social media and communication with students). This search covered the past decade from 2014 to 2023. This search included (SUBJAREA, "SOCI") or Limit-TO (SUBJAREA, "COMP") or LIMIT-TO (SUBJAREA, "ARTS"). Finally, the search language used is articles published in English only and excludes any other languages. Moreover, the final articles used in this review are 991about research on social media and communication with students.

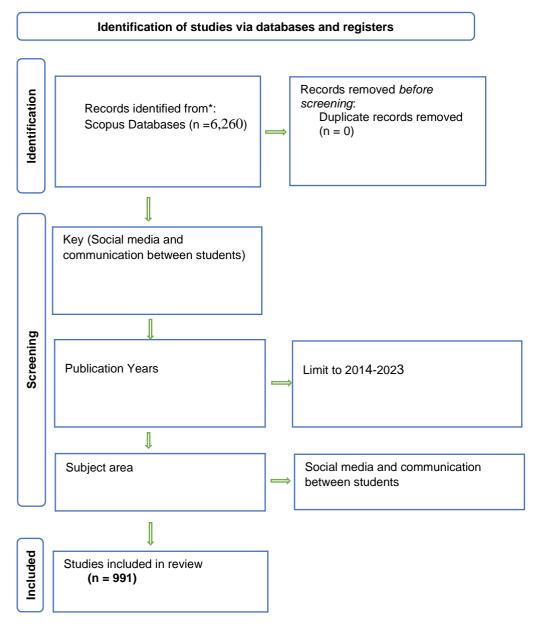


Figure 1: Study Map

Bibliometric Analysis

This research used bibliometric analysis using VOS Viewer, which is one of the most widely used programs in the field of bibliometric analysis. This review is conducted based on the following purposes. First, the evolution and diversity of social media and student communication in education have become a compelling research area with increasing research numbers. Thus, it is necessary to investigate the thematic structure of this study area by employing an accurate method of value analysis that can automatically examine the data of the published and documented literature. Then, current research is done to help provide a true and accurate view of what was discussed and trends on the topic of social media and Communication between students.

The use of scientific and technological applications in the analysis would help provide accurate results that can be trusted in scientific studies related to the current research topic.

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Table (1)
Inclusion and Exclusion Criteria

inclusion criteria	Social media+ communication + Education+students
exclusion criteria	Medical fields
	Engineering fields
	Conference papers
	Nonindexed papers

Findings

The study aims to reveal publications related to social communication and communication between students through publications during the past ten years 2014-2023, and the results of this review are discussed based on the research questions.

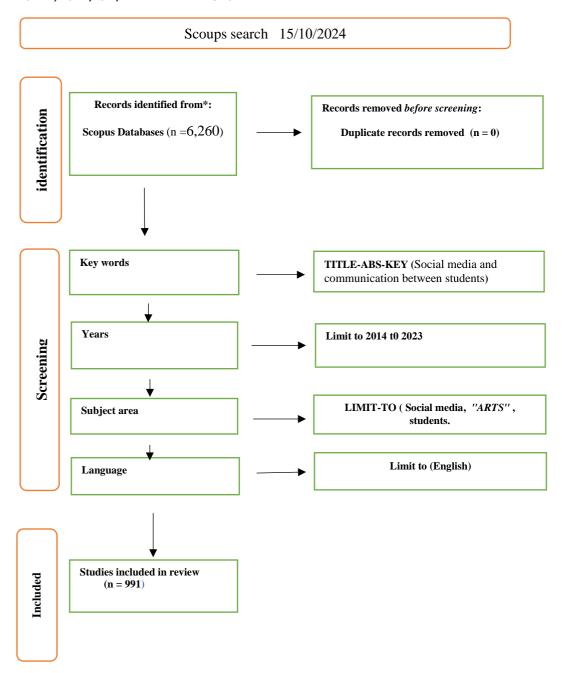


Figure 2: Search history and number of publications in Scopus

Research Question: 1

What is the distribution of social media and student publications by year over the past decade? It was observed that papers were mainly published between 2020 and 2021; in 2020, there were a total of 125 publications in social media and student communication; in 2021, there were a total of 139 publications in social media and student communication, while in 2022, there was a significant decrease in publications to 94 published articles. The remaining publications were distributed over the remaining years between 2014 and 2018, as shown in Figure 1.

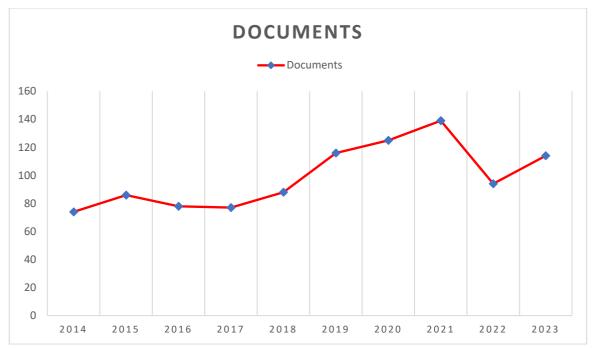


Fig (3) Distribution of publications by years (2014-2023)

The figure also shows studies and publications that dealt with social communication and communication between students. It is worth noting that the number of articles published in the field of social communication and communication between students has increased during the past five years from 2019-2023 in the Scopus database. In 2021, the number of articles published in the field of social communication and communication between students increased to reach 139 publications. This year is the year that contributed the largest number of articles indicating the importance of social media and communication between students and their impact on society. The study (Al-Aseel, 2019) indicates that social media and communication between students are among the most important topics that should be researched because they help shape the intellectual, psychological and emotional capabilities of students.

Research Question 2

What are the most important journals and authors for research in the field of social media and student communication? In the content analysis conducted for the most cited journals, "total publication", "total citations", "journal citation score", "most cited articles", "number of citations", and "publisher" were selected as the analysis criteria as shown in Table (4) and Figure (2) for the ten most productive journals in the field of social media and student communication during the past ten years (2014-2023).

Table (2)

Top 10 SOURCES in Social Communication and Communication between Students

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Journal	TP	TC	Cite	The most cited	Time	Publisher
			scor	article	S	
			e		Cited	
Computers in	1511	28,811	19.1		148	Elsevier
Human Behavior		,		Social benefits of		
				living in the		
				metaverse: The		
				<u>relationships</u>		
				among social		
				presence,		
				<u>supportive</u>		
				interaction,		
				social self-		
				efficacy, and		
				<u>feelings</u> of		
				<u>loneliness</u>		
Computers and	757	20,486	27.1	Effects of	122	Elsevier
Education				<u>artificial</u>		
				<u>Intelligence–</u>		
				Enabled		
				<u>personalized</u>		
				<u>recommendatio</u>		
				ns on learners'		
				<u>learning</u>		
				engagement,		
				motivation, and		
				outcomes in a		
				<u>flipped</u>		
Cuetainali!!!	FF 00	204 25	6.0	classroom	174	NALIHIAI oo salaa sa
Sustainability	55,99 1	381,35	6.8	Chathata :-	174	Multidisciplina
(Switzerland)	1	7		<u>Chatbots</u> in		ry Digital
				Education and Research: A		Publishing Institute
				Research: A Critical		ווואוועופ
				Ethical Implications and		
				Solutions and		
				<u> </u>		

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International Journal of Emerging Technologies in Learning	1,683	8,389	5.0	Enhancement of Online Education in Engineering College Based on Mobile Wireless Communication Networks and IOT	55	International Association of Online Engineering
Education and Information Technologies	1,767	17,613	10.0	Interacting with educational chatbots: A systematic review	247	Springer Nature
Cyberpsycholog y, Behavior, and Social Networking	476	4,580	9.6	Instagram and TikTok Flow States and Their Association with Psychological Well-Being	22	Mary Ann Liebert
JMIR Medical Education	269	1,855	6.9	How Does ChatGPT Perform on the United States Medical Licensing Examination? The Implications of Large Language Models for Medical Education and Knowledge Assessment	775	JMIR Publications Inc.

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Nurse Education Today	1,327	9114	6.9	Chatting or cheating? The impacts of ChatGPT and other artificial intelligence language models on nurse education	66	Elsevier
Journalism and Mass Communication Educator	116	428	3.7	Collaborating With ChatGPT: Considering the Implications of Generative Artificial Intelligence for Journalism and Media Education	363	SAGE
BMC Medical Education	2,958	14,457	4.9	Revolutionizing healthcare: the role of artificial intelligence in clinical practice	265	Springer Nature

TP= Total publications, TC= total citations

Table (2) shows that the most productive journals in the field of social media and student communication are the journal "Sustainability (Switzerland)" with a total number of 55,991 publications and a total of 381,357 citations, followed by the journal "Education and Information Technology" with a total number of 1,767 publications and a total of 17,613 citations, the journal "International Journal of Emerging Technologies in Learning" with a total number of 1,683 publications and a total of 8,389 citations, and the journal "Nursing Education Today" with a total number of 1,327 publications and a total of 9,114 citations. Furthermore, the distribution of the most productive journals related to social media and student communication is presented accordingly in Table 4. On the other hand, "Total citations", "Current affiliation" and "Country" were selected as the criteria for the analysis.

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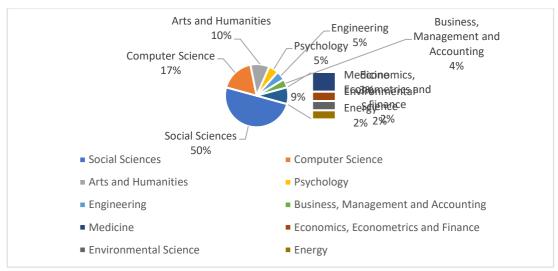


Figure 3: the distribution of scientific articles by specialization

Fig (3) shows the distribution of scientific articles by specialization. It is noted from the figure that the specializations that obtained the highest percentage of articles in the field of social communication and communication between students were social sciences specializations at 50%, followed by computer science specializations and fields at 17%. As for the lowest percentage of articles in the field of social communication and communication between students, they were science and energy specializations at only 2%. This means that social sciences are frequently discussed in the field of humanities and social sciences because social communication and communication between students are humanities specializations and are compatible with these fields. In addition, social communication and communication between students are done using computer sciences and electronic applications.

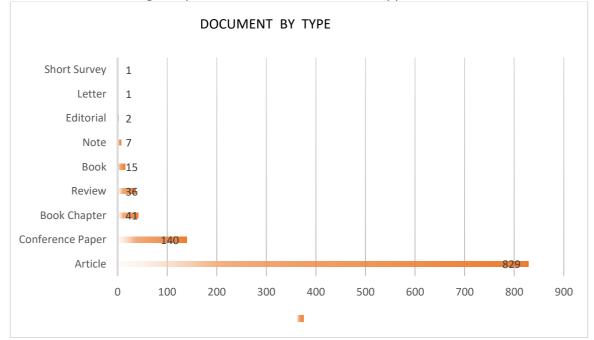


Fig (4) shows the distribution of articles in the field of social communication and communication between students according to type

Fig (4) shows the distribution of articles in the field of social communication and communication between students according to type in terms of book, research paper or

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conference, as it was shown that the number of publications of articles, books, notes and reviews reached 1068 publications and that most of the publications according to the Scopus classification are in the field of articles at a rate of 77% and their number is 829 publications during the past ten years which included the field of social communication and communication between students, and this confirms that articles are usually the most preferred research method by researchers in their studies and publications.

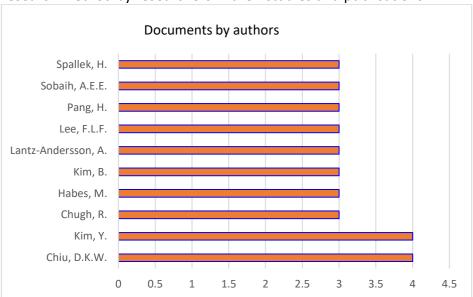


Fig (5) shows the distribution of authors of articles on social communication and communication among students

Fig (5) shows the distribution of authors of articles on social communication and communication among students. It is noted from the previous figure that the authors of the most articles on social communication and students are: KIM. Y Chiu, D.K.W. As for the rest of the authors such as Chugh, R, Habes, M, Kim, B, and Spallek, H, they are the least in article publications during the past ten years.

Research Question 3

What are the most productive countries in the field of social communication and communication between students? In the content analysis conducted on the most productive countries in social communication and students on the following elements: "country", "total participation" and "most productive", the results of this research agree with (Al-Maliki, 2019) who claimed that social communication has a close relationship with communication with students, and (Ano, 2018) confirms the quality of social communication that gains positive attitudes and behaviors among students in schools, and Table No. (5) shows the top ten countries and educational institutions in the field of research in social communication and communication with students.

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Table 3

Top 10 countries and Educational Institutions

Country	Educational institutions	TP
USA	University of Iowa	296
United Kingdom	Nottingham Trent University	82
Australia	Deakin University	71
China	ShenZhen University	63
INDIA	Sharda University	53
Spain	University of Granada	44
Malaysia	Curtin University Malaysia	36
Canada	University of Ottawa	33
Turkey	Near East University	31
Indonesia	Universitas Islam Negeri Sultan	31
	Maulana Hasanuddin Banten	

Table No. (3) shows the most productive countries and educational institutions and the number of publications in the field of social communication and communication between students. The first of these countries is the United States of America, and the most widespread educational institution in the field of communication and students is the University of Iowa, which published 296 articles, followed by the United Kingdom, which published 82 articles published by Nottingham Trent University. As for the least productive countries in terms of communication and publications in the field of social communication and communication between students, they are Turkey according to Scopus, where the Near East University published 33 articles, and Indonesia, where the Islam Negeri Sultan Maulana University published 31 articles.

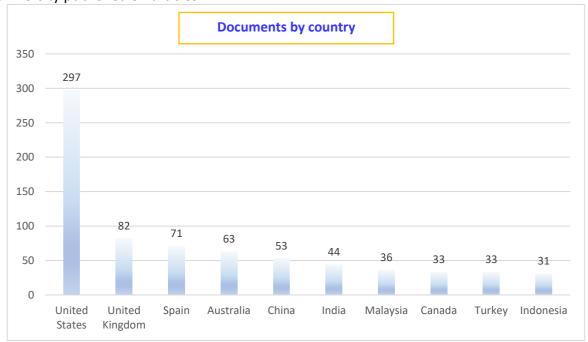


Fig (4) shows the distribution of articles by country or region.

Fig (4) shows the distribution of articles by country or region. It is worth noting that Indonesia and Turkey recorded the lowest number of articles, with 33 and 31 articles, while the United

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States of America topped the list in terms of publishing the largest number of articles of value in school curricula, with 297 articles during the past ten years.

Documents by affiliation

Compare the document counts for up to 15 affiliations.

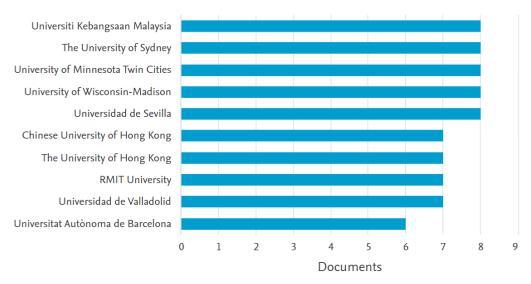


Fig (5)Country distribution and total publications

Fig (5) shows the distribution of social media and student communication articles in the curricula of universities around the world. From the previous figure, we can see that Universiti Kebangsaan Malaysia is the university that publishes the largest number of social media and student communication articles, while Universitat Autonoma de Barcelona is the university that publishes the least number of social media and student communication articles.

Research Question 4

What are the keywords related to social communication and student communication in the past ten years? For the bibliometric analysis of the most used keywords, it was determined to apply term analysis to the titles and excerpts of the publication under study, so that we could accurately analyze the terms with the main topics and research trends in the field of social communication and student communication as shown in Fig (9) and Fig (10).

Selected	Keyword	Occurrences	Total link v
▼	social media	711	3663
√	human	174	2569
\checkmark	students	295	2186
	humans	123	2006
\checkmark	education	184	1557
	female	81	1402
	male	77	1360
\checkmark	social networking (online)	178	1281
\checkmark	communication	164	1246
	article	71	1118
	adult	63	1097
	student	86	1058
⋖	teaching	104	942
V	interpersonal communication	62	933
	questionnaire	46	847
	human experiment	50	814
	learning	64	766
√	young adult	42	766
√	psychology	40	702
	surveys and questionnaires	36	674

Fig (6) Keyword post-analysis results

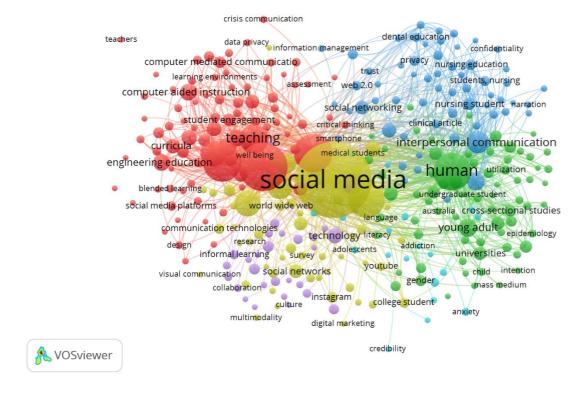


Fig (7) Analysis of the results of posts with keywords in VOSViewer

When examining Figure 6, the top 7 keywords used in the studies were listed as "social communication and student communication" ("social communication" Oc = 711), "human" (Oc = 174), "students" (Oc = 295), "education" (Oc = 184), "online social networking" (Oc = 178), "communication" (OK = 164), followed by teaching, personal communication, and youth. When examining the job keywords, it is noticeable that they (Oc = 1594) use words such as social communication, students, education, personal communication, and networking, and

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other words such as gender such as male, female, human, surveys, and questionnaires are not preferred in the bibliometric analysis.

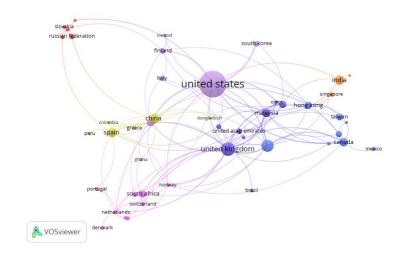


Fig (8) shows the analytical results of the producing countries in the field of values and education

According to the Scopus ranking, the network of countries/regions' collaborations through co-authorship on the topic of social media and student communication was analyzed using VOSviewer. The figure showed a greater interest in specific issues in social media and students. The most productive country was the "United States", followed by the "United Kingdom", followed by "Australia", then Malaysia, Canada, Spain, China, and Saudi Arabia. Countries/regions from within the same institutions and continents, from within the same countries. Areas of similar academic interest tend to collaborate more in social media and student communication than in areas of scientific research. The figure also shows that the topics of social media and student communication are topics of global interest, especially in the last ten years, according to the Scopus ranking.

Conclusion

The world is witnessing great challenges in the field of social communication and communication between students, and countries are competing in researching the importance of social communication and communication between students and the relationship between them, including regular educational schools and universities to uncover the topics of social communication and communication between students, and this is shown by the volume of publications related to communication and students conducted around the world during the past ten years, which amounted to 6258 publications in the field of social communication and communication between students, and according to the Scopus classification, this paper analyzes 991 publications on social communication and communication between students, and the publications were read using benchmarks and content analysis, as well as distribution, and the annual number of publications related to communication and students reflects the reasons for the increasing interest in social media and communication between students in various countries of the world, and making it a priority for education in schools, universities and regular higher education. The University of lowa in the United States was the most productive with 296 valuable and educational

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publications in the past ten years 2014-2023. This can help develop the knowledge of school and university students, as the presence of social media next to students brings the greatest benefit to learning. We see that social communication in its various forms and communication between students in schools and universities receive a high percentage of research in various countries of the world. More precise search terms were used in this analysis, namely social communication and communication between students, with a focus on analyzing the impact of social communication on students and education. From the results of this article, it can be said that the results of the analysis showed that 2021 is the most popular and used year for the field of social communication and communication between students. This is due to the spread of the Corona Covid 19 pandemic, which forced many countries to use social communication and communication between students in education and social life in general. The results of the analysis in this article also showed that the most cited author in the field of social communication and communication between students is Kim, Y and Chiu, D.K.W. The study also provided information in terms of authors, countries, research institutions, citations, and the most important researchers in the world according to the scientific Scopus classification.

Recommendations

Through the results of the analysis obtained from this study, we can come up with several recommendations, including that universities encourage their students to conduct this type of study represented by bibliometric analysis of published research on a topic, especially the topic of social communication in its various forms and communication between students, as it is one of the topics worthy of study, research and attention. This type of study also provides a base for other researchers for references that they can rely on in their research; and the bibliometric study of research published in a non-Scopus database on the topic of social communication and communication between students by 2024 and interest in communication between students, which helps learners build their personality and be good in their country, able to learn using social media that is characterized by the speed of global communication between students and low cost, and the accuracy of searching for relevant information.

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