

The Role of University Administration in Achieving Quality Education: A Bibliometric Analysis

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Abstract

This study attempts to identify the management of education quality by determining the extent of intellectual creation in the field of university administrators' role in obtaining quality education. Learn how to use Vosviewer to capitalize on similarities. A total of 85,561 publications documented in the Scopus database were evaluated, and the study discovered that the number of publications on maintaining the quality of education was greater in the previous decade than in 2019, 2020, and 2021, the study years. We also find that authors such as: have an interest in this type of research, as well as a number of appropriate authors from countries such as: the United States and the United Kingdom. These authors contribute significantly to the publication of research and scientific articles in this field, but the most popular and widely used terms are: In addition to the most popular scientific journals, Wolters Kluwer Health published the following publications: The research proposes a Roadmap to improve the research process for learning quality management researchers in academic medicine.

Keywords: Management, Quality, Learning, Bibliometric Analysis, VOSviewer.

Introduction

How did these countries accomplish a very advanced degree of renaissance and growth in various disciplines, such as the scientific, economic, social, and other aspects of renaissance in their homelands, and how were they able to progress at a steady and cohesive pace? Instead, we find that nations have failed in these areas; what is the explanation for this, given the availability of education and institutions at all levels? (Abu Halima, & Ahmed, 2022). Quality management has become a crucial and necessary factor for any country or institution that delivers services to achieve global competitiveness, and universities are regarded as the most essential pillar and instrument for achieving global progress, prosperity, and renaissance. Rehabilitation of students is the cornerstone of pre-university education's success and resurrection, and they must be rehabilitated scientifically and psychologically. (Boumaza & Nasira, 2022). The quality of education is meant for the permanent and continual development of the education process by establishing standards and procedures to enhance specifications in order to achieve results that contribute to the improvement of education at all levels (the teaching staff, teachers and students). The process of enhancing education

involves both the administration and the community in order to achieve the educational quality requirements (Amarah, 2011).

Methods

Determining the function of university administration in managing the quality of education is the purpose of this study. In addition to examining the education quality management publications in terms of their chronological development, authors, co-authorship, geographical distribution, and educational institutions in order to meet the study's objectives, the study also analyzed their co-authorship. For the past decade, from 2013 to 2022, bibliometric search indicators from the Scopus database were utilized to reach this objective. Using the (Vosviewer) application to take use of the similarities. There were a total of 85,561 papers from the Scopus database that were analyzed. This study quantitatively investigates the function of education quality management in achieving quality education, focusing on university management. To evaluate academic outcomes, the researcher will study (Bibliometrics) for research published in the Scopus database in the subject of education quality management. For this purpose, he systematically analyzed the intellectual structure and trends of management knowledge of universities in achieving quality education in order to produce this research in an analytical manner about publications in the same field, using data collected from a database, summaries, and citations and research from world leaders. Consequently, this research will help us better understand 10 publications, 10 countries, 10 educational institutions, as well as the most widely published works in this sector. This study will also demonstrate the significance of university management in attaining quality education. Given the preceding, the following question can be posed:

- 1- What was the decade-by-decade distribution of the most education quality management publications in the previous decade?
- 2- Which journals and authors have been the most important to education quality management during the past five years?
- 3- Which countries have been the most productive in the field of education quality management during the past five years?
- 4- What have been the most sought-after keywords in education quality management during the past 10 years?

Results

This review seeks to disclose the files of studies conducted over the past ten years to determine the role of university administration in achieving educational quality. To develop a future vision for studies related to education quality management in general, Herrera (2003) discusses the five fundamental concepts of interest in achieving administrative standards at the national level, namely quality in policy, administration, system, monitoring, and guarantee (Herrera, 2003). In order to learn about education quality management and its role in the United Arab Emirates, we find that education ranked first in the Arab world and sixth globally in 2021, while the UAE ranked ninth in vocational education, according to the most recent global indicators published by US News. These indicators were developed using a variety of statistics pertaining to the rating of education quality from numerous institutions and organizations. In addition, after evaluating the monitoring tools that can be accessed in 2021 to track countries with reputable and well-developed educational systems, it will be possible to identify the countries that possess these characteristics. For the need to understand the quality management of education, bibliometric methods were utilized in this

study. In addition, bibliometric analysis is subject-specific and reveals results through sense analysis, employing mathematical and quantitative methods to study the structural characteristics of intellectual production and to comprehend the information flow process (Yahya & Bilal, 2021).

The bibliometric study defines: "Analyze the data and employ a set of statistical and mathematical methods to analyze the document's data in order to comprehend the characteristics of the information flow" (Bahaa, 2016). As shown in Figure [1], the study extracted relevant publications from the Scopus database to access the top 10 articles in education quality management. By selecting "Subject" during the 2-2-2023> search, keywords were looked for in the Title, Abstract, and Keywords sections. Articles in English and with open access were included in the study from the search results. The terms "Management - Quality - Education" serve as keywords and evocative phrases. As shown in Figure [2], Scopus was used to obtain journals on the role of university administration in achieving education quality. To ensure the relative importance of the analyzed publications in the management of education quality, we performed a manual check to exclude irrelevant publications based on the criteria shown in Figure [2]. Thus, the number "8933" of publications remained for further examination. In addition, Figure [3] depicts the framework for analytical research.

In this study, the program VOSviewer was utilized, which is a program that analyzes data in the form of relationships (between the publisher, the country, and the most frequently used terms in the publications), which is a type of analysis, and is one of the most popular programs for visualizing bibliometric networks. As shown in the following format, an initial plan has been drafted.

Table 1
Map of the search data

Search strategy	type Articles	Bibliometric analysis	
		Genre	Software
database (scopus) Research topic: The role of university administration in achieving the quality of education. Search time frame Search time frame 2012"to 2022""10 years" History of data extraction from Scopus 2023/2/2:	Essay data sheet conference papers	Article data Years Composers Institutions Countries Publications cited Keywords	VOSviewer program Drawing graphs Excel drawing percentage graphs

Scopus was accessed by logging into the researcher's account on the university's website (<https://extranet.zu.ac.ae/main/en/library>) and then logging into Scopus. The keywords "management & quality & Education" are essential for entering the title of the researcher's upcoming publication, "The Role of University Administration in Achieving Quality Education." In addition, the results for the year 2023 were omitted because the research was conducted in the same year as the publication and the year was not yet complete, as shown in Table 1.

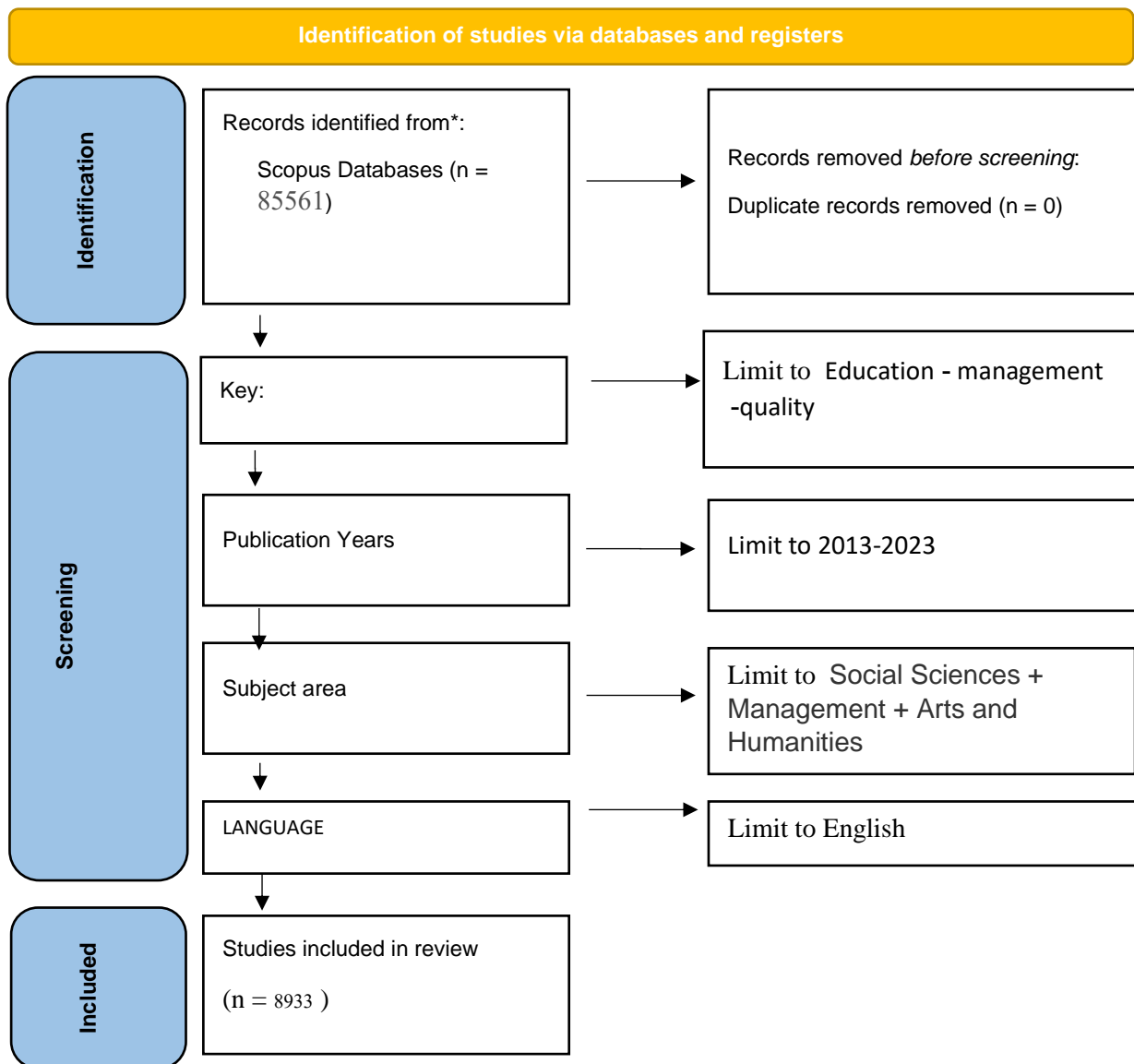


Figure 1: Map of the search data.

During the research, search results far from the field of research were also excluded, as shown in Table 2.

Table 2

Inclusion and Exclusion Criteria

inclusion criteria	Keywords + any related keywords social sciences + Arts and Humanities psychology + quality
exclusion criteria	Medical fields Conference papers Nonindexed papers Computer science Earth and Planetary Sciences Engineering.

Through what had been placed on the table previously 1, 2, and 3 As a result, we had when downloading databases, which are entered into the Excel program to extract results related to the production of publications, and the trend of temporal development of the subject; The purpose of the study is to reveal the file of studies related to the main question, what role has university administration played in achieving the quality of education over the past decade? The discussion of the results will be based on the research questions.

Research Question 1

What is the distribution of the education quality management role's publications by decade over the past 10 years? To address the finding, a decade-long analysis of publications was conducted. As shown in the diagram below:

It is observed that the trend of growth in publications in the field of education quality management, particularly over the past decade, is notable as shown in figure 2.

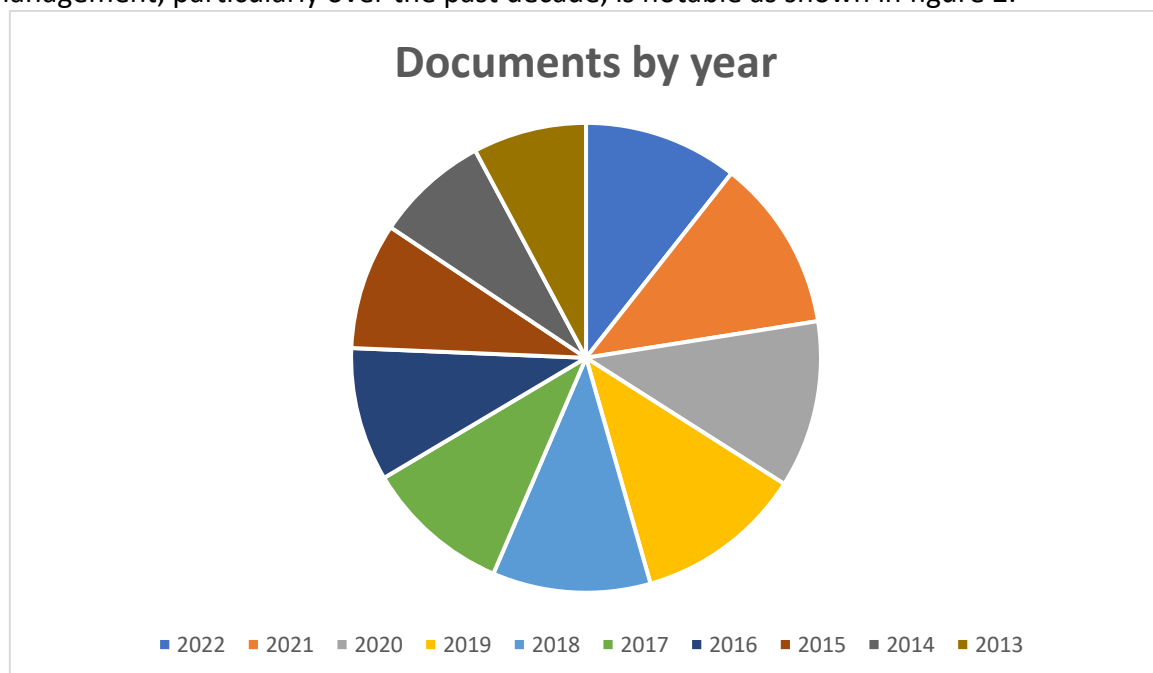


Figure 2: documents by years.

It is observed that the trend of growth in publications in the field of education quality management, particularly over the past decade, is notable. Figure [4] also revealed the direction of publication evolution. Where we find a large and accelerated production of research in the last decade of it (2021), it is noted that there is a large number of publications, particularly in 2022, by 12 percent during the last 10 years and decade of research, with an average of 949 publications. They are the most prolific years for research-related publications, followed by 2016 by a 9 percent margin. Due to the Covid-19 crisis, the researcher believes that the reason for the increase in publications in the year (2019-2021-2021) is the shift from traditional education to e-learning and then hybrid education. During these years, publications have focused on e-learning as a high-quality education. The reason for these years is the recent increase in publication rates.

Regarding the source-based search for year documents, Figure 3 depicts the following

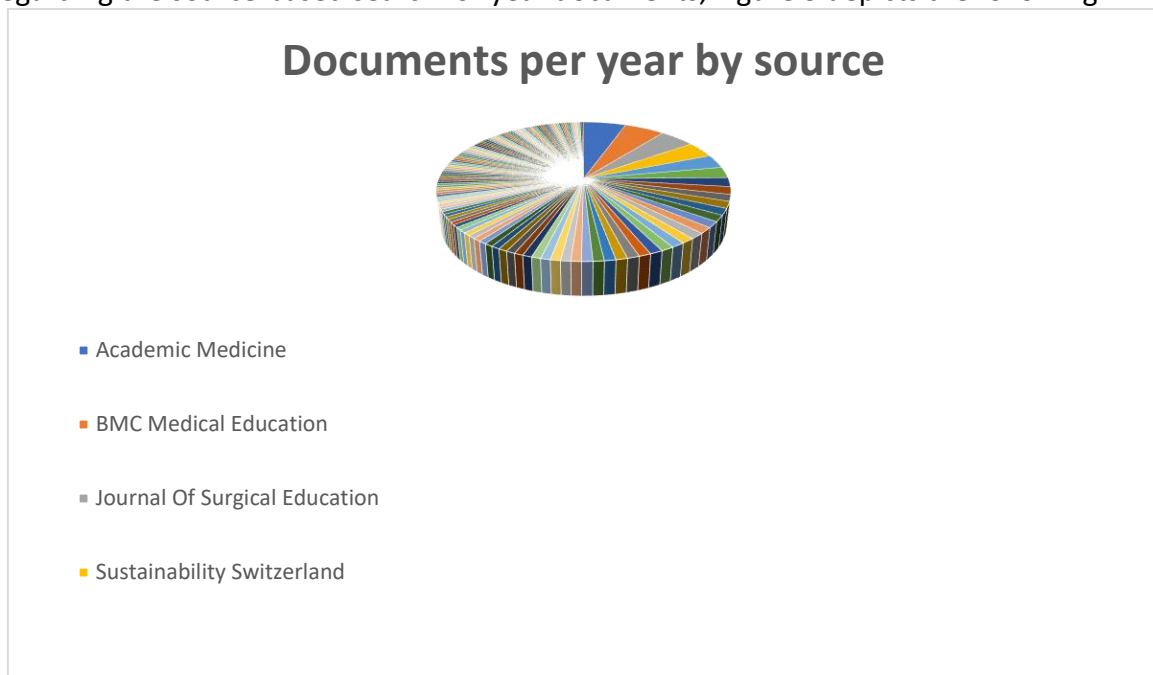


Figure 3: source-based search for year documents

According to the source, the documents that were culled from the Scopus database were those that were published throughout the year. 86 people searched for the Journal of Continuing Education in Nursing, while 72 people searched for the Journal of Nursing Education. You will be able to move us on to the second question with these findings:

Research question 2

What are the 10 journals and authors most relevant to education quality management research over the past decade?

As shown in the table below, for the top 10 highly productive journals on administrative crisis management, during the past few years, "total publication," "total citation," "journal citation score," "most cited article," "frequency citation," and "publisher" were selected as the criteria analysis on which to base the content analysis that was conducted for the most cited journals (2013-2022). The documents are organized into the following subject areas, as shown in the following figure 4.

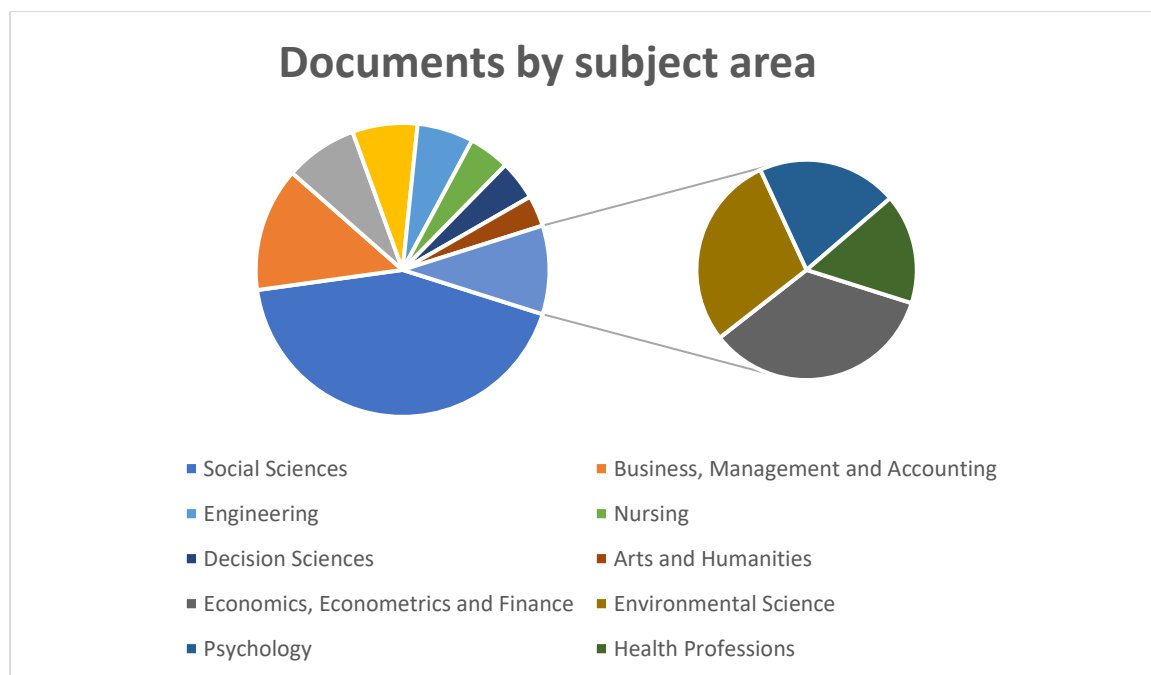


Figure 4: The documents based on the following subject areas

According to figure 4, 43 percent of students major in social sciences; 14 percent of students major in business, management, and accounting; and 3 percent of students major in arts and humanities.

Table 3

Top 10 SOURCES journals

Journal	TP	TC	Cite score	The most cited article	Times cited	Publisher
Academic Medicine	1389	7690	5.5	The Otolaryngology Residency Program Preference Signaling Experience	18	Wolters Kluwer Health
BMC Medical Education	2463	10609	4.3	Effectiveness of problem-based learning methodology in undergraduate medical education: a scoping review	11	Springer Nature
Journal Of Surgical Education	979	4789	4.9	The Effect of COVID-19 on the Medical School Experience, Specialty Selection, and Career Choice: A	6	Elsevier

				Qualitative Study		
Sustainability Switzerland	47983	268642	5.6	The Impact of Financial Development and FDI on Renewable Energy in the UAE: A Path towards Sustainable Development	59	MDPI
Medical Teacher	803	5220	6.5	A practical guide to reflexivity in qualitative research: AMEE Guide No. 149	16	Taylor & Francis
Nurse Education Today	1246	6510	5.2	Effectiveness of serious games in nurse education: A systematic review	12	Elsevier
Journal Of Continuing Education In Nursing	386	581	1.5	Educational Interventions to Improve Nurses' Competency in Genetics and Genomics: A Scoping Review	4	Slack Incorporated
Journal Of Nursing Education	491	1255	2.6	Nursing Students and Cognitive Rehearsal Training as an Antibullying Strategy: A Canadian National Study	2	Slack Incorporated
American Journal Of Pharmaceutical Education	627	2434	3.9	Inclusion of health disparities, cultural competence, and health literacy content in us and canadian pharmacy curriculums	11	American Association of Colleges of Pharmacy

Nurse Educator	644	1326	2.1	National Study of Nursing Faculty and Administrators' Perceptions of Professional Identity in Nursing	7	Wolters Kluwer Health
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TP= Total publications, TC= total citations,

Table 3 presents the publications of Education Quality Management, for the ten most productive authors in the field of education quality management research. The arrangement depends on the total number of publications of the author as shown in the table, where we find that "Wolters Kluwer Health" is the most productive author with total citations (1,389), the total number of publications (7690), and it is clear from the table that the researcher (Elsevier) is more than the other researchers. In addition, the data were taken from the Scopus database and organized in the following table according to the names of the two files.

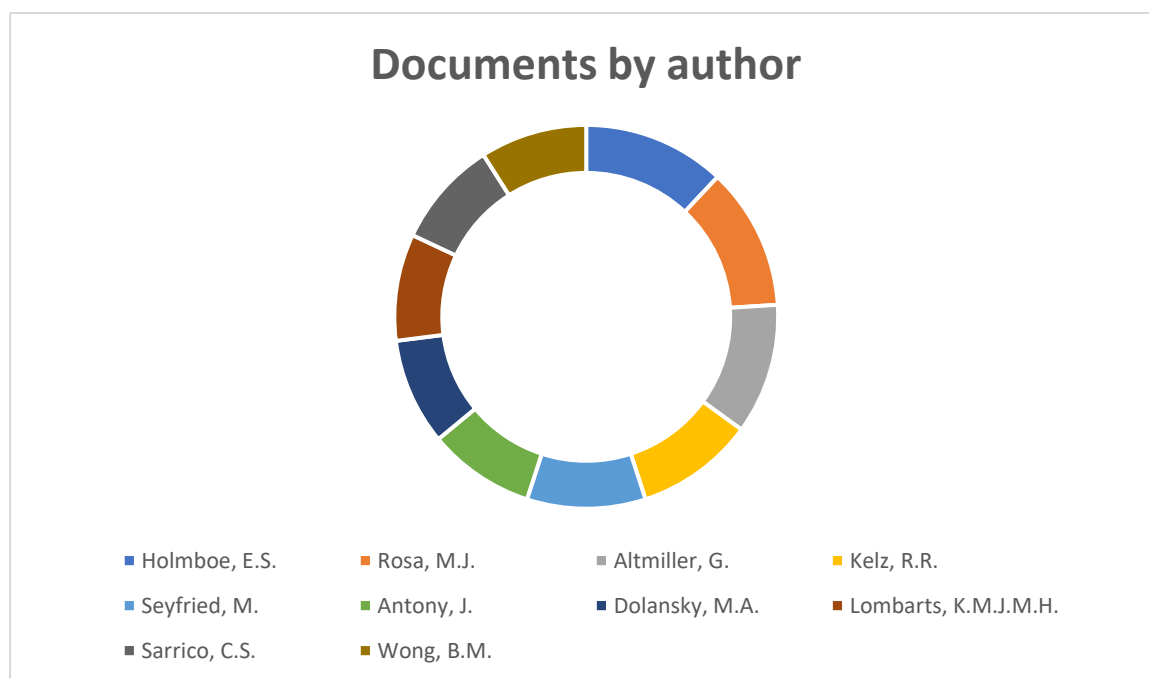


Figure 5: list of the top 10 authors in the Scopus database.

The researcher believes, based on previous studies of publications, that the reason for the increased interest from publishers in publications in the field of education quality management is the eagerness of governments and competent departments to encourage researchers and specialists to contribute to scientific enrichment to serve the treatment of what afflicted the world from the Covid-19 crisis, which tried to infect the body of learning. This is something that we have noticed, and the researcher believes that this is due to the fact that governments and competent departments are eager to encourage researchers and specialists to contribute to He was unable to move, so he worked with administrative specialists to manage the problem and accomplish quality in e-learning. As a result, they were successful in achieving outstanding quality for the educational generations of the future. (Baufelfel, 2021).

Research question 3

What are the 5 most productive countries in education quality management research in the last decade?

By searching in the search engine (Scopus) as shown in the following tables. Table 4 presents the five most productive countries in the field of education quality management research.

Table 4


Top 5 countries and educational institutions.

Country	educational institutions	TP
United States	Stanford University School of Medicine	508
United Kingdom	Kingston University and St George's, University of London	444
China	CDC	315
Australia	University of Technology Sydney	961
Canada	Kingston University and St George's	444

TP= Total publications

The publications of education quality management that have been entered into the "Scopus" database are broken down by country and university in table [9]. According to the data in the table, the nation with the highest total number of published research papers is. The number of publications in the United Kingdom was 508 published papers, and the number of publications in the United Kingdom came in second place (444). Also explains the differences in different countries. The findings from education quality management pointed to an interest on the part of countries in this kind of publication. The table below displays the various publishing distributions. pertaining to the top five most productive nations/regions and organizations. When viewed from the perspective of educational establishments, the vast majority of the establishments that were analyzed during the research time period (2013-2022) shown a consistent interest in all research questions pertaining to antiquities and museums. For instance, "Stanford University School of Medicine" was followed by "Kingston University and St. George's, University of London," which was followed by, as the figure shows, the analytical results of the most productive countries in the field of education quality management, which is why the researcher will use the (VOSviewer) program.

Create Map ×

 **Verify selected countries**

Selected	Country	Documents	Citations	Total link strength
<input checked="" type="checkbox"/>	united kingdom	127	891	34
<input checked="" type="checkbox"/>	italy	46	127	33
<input checked="" type="checkbox"/>	united states	155	1092	29
<input checked="" type="checkbox"/>	france	33	149	19
<input checked="" type="checkbox"/>	greece	27	101	17
<input checked="" type="checkbox"/>	australia	21	83	13
<input checked="" type="checkbox"/>	germany	26	94	13
<input checked="" type="checkbox"/>	canada	15	68	10
<input checked="" type="checkbox"/>	romania	11	15	8
<input checked="" type="checkbox"/>	turkey	21	18	8
<input checked="" type="checkbox"/>	austria	6	14	7
<input checked="" type="checkbox"/>	switzerland	7	40	7
<input checked="" type="checkbox"/>	sweden	13	28	6
<input checked="" type="checkbox"/>	ukraine	5	11	5
<input checked="" type="checkbox"/>	belgium	6	18	3
<input checked="" type="checkbox"/>	bulgaria	5	17	3
<input checked="" type="checkbox"/>	czech republic	12	26	3
<input checked="" type="checkbox"/>	netherlands	14	22	3
<input checked="" type="checkbox"/>	spain	11	24	3
<input checked="" type="checkbox"/>	croatia	18	12	2

Figure 6 shows the top five countries in the VOSviewer database.

Following the extraction of the most fruitful nations in the field of education quality management research, all of the statistics were entered into Excel within the researcher (VOSviewer) application as shown in the table below

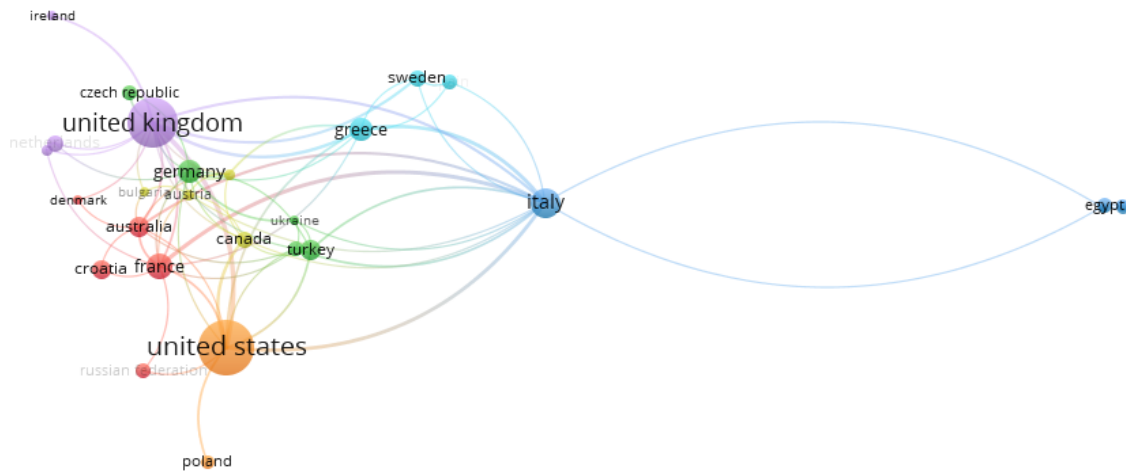


Figure 7: The top 5 countries interconnected In VOSview


The analytical findings for producing countries are presented in Figure 7, which may be found in study on education quality management. The cooperation network of countries and regions was analyzed through co-authoring on the subject of the role of university administration in achieving quality education, utilizing the (VOSviewer) program, in which the clarity of the colours of the circles represents the state's common relationship with the rest of the countries, and the thickness of the links represents the strength of participation, and the colours represent the participation groups; We are able to differentiate between four primary groups: the grouping around the violet colour includes (United Kingdom and Ireland); the grouping around the orange colour includes (United States and Poland); it gathered in green around (Germany, Turkey,,) and in blue (Italy, Egypt, Sweden, Greece); and the grouping

around the orange colour includes (United States and Poland). During the course of our research using Scopus, it became abundantly clear that the current crisis is an exceptional occurrence; consequently, its resolution calls for exceptional and extraordinary capabilities on the part of nations and the institutions within them, particularly in terms of the management of the quality of education; moreover, it requires innovative solutions that are capable of addressing this concern; consequently, we discovered that nations are interested in scientific research, particularly with regard to the Covid-19 crisis. This suggests that universities are eager to publish publications, and they are also motivated to encourage researchers and publishers to produce articles that serve this element of research by nation.

Research question 4

In the past ten years, what have been the most important terms associated with the management of education quality? As for the bibliometric analysis of the most frequently used keywords, the terminology analysis was applied to titles and extracts from the study publication. This was done so that we could accurately analyze the terms in relation to the most important topics and research trends in the field of research. The results of this analysis are presented in Table 4 and Figure 8.

Create Map ×

 **Verify selected keywords**

Selected	Keyword	Occurrences	Total link strength ▼
<input checked="" type="checkbox"/>	human	964	20685
<input checked="" type="checkbox"/>	humans	891	19489
<input checked="" type="checkbox"/>	organization and management	539	11854
<input checked="" type="checkbox"/>	education	590	11630
<input checked="" type="checkbox"/>	female	392	10023
<input checked="" type="checkbox"/>	male	373	9575
<input checked="" type="checkbox"/>	article	386	9292
<input checked="" type="checkbox"/>	medical education	368	7941
<input checked="" type="checkbox"/>	adult	287	7563
<input checked="" type="checkbox"/>	total quality management	303	6102
<input checked="" type="checkbox"/>	curriculum	254	5289
<input checked="" type="checkbox"/>	procedures	233	5253
<input checked="" type="checkbox"/>	quality improvement	239	5006
<input checked="" type="checkbox"/>	standards	208	4715
<input checked="" type="checkbox"/>	clinical competence	192	4518
<input checked="" type="checkbox"/>	united states	198	4259
<input checked="" type="checkbox"/>	psychology	173	4234
<input checked="" type="checkbox"/>	health care quality	158	3930
<input checked="" type="checkbox"/>	questionnaire	150	3883
<input checked="" type="checkbox"/>	human experiment	155	3629

Figure 8: Most used keywords

Printed and handed out on (VOSviewer). As may be seen in Figure [13], the outcomes were as predicted. person (OC = 964), organization and management (OC = 539), and education

capacity of the educational institution to meet the needs of the educational institution. In other words, quality management in the field of education refers to the capacity to meet the educational objectives of graduates in a manner that satisfies societies as the first link in the chain of benefiting from the existence of education. This is something that the scientist Frederick Taylor sees as the accurate knowledge of what one wants one's students to accomplish, followed by the need to ensure that one's students accomplish this goal in the most efficient and cost-effective manner possible (Fadi, 2003).

As a result of this, the researcher in this work conducted an analysis of 85,561 pre-existing papers in the field of education quality management. Employing bibliometric criteria in conjunction with content analysis. Inadequate interest in the area of research is reflected in the distribution of the annual number of publications, which in turn indicates the role that universities play in the achievement of quality management in education. The researcher relied solely on the Scopus database to compile the data. Thus, it does not cover all academic periodicals. Therefore, journals contained in a different database might not be included. In addition, the terms "management," "quality," and "education" were the only ones utilized as search terms during the data retrieval process. Despite the fact that utilizing more specific search phrases might sometimes produce more relevant results. Because this study required the use of more specific search phrases, with the primary focus being on the accomplishment of the research topic, any and all potential applications for future technologies were taken into consideration. According to the findings of this study, it is possible to assert that it demonstrated the path that the development of publications took over the course of the most recent decade, one that was highly robust and high in terms of articles, publishers, and countries. Therefore, we find a large number of authors who contributed, particularly with their publications that serve the aspect of education quality management; In view of the geographical distribution, we find that a number of countries on all continents, Asia, Europe, and Africa, all of them contributed to the publication on the subject of the research, Education Quality Management. In conclusion, we find a large number of authors who contributed, especially with their publications that serve the aspect of education quality management. Additionally, information on authors, countries, research institutions, citations, and the most influential researchers in the field of research was provided by the study.

Recommendations

The infrastructure of universities needs to be improved so that it can accommodate and stimulate the use of digital media and tools. Many educational institutions are making it a priority to equip students with the information and a variety of psychological abilities necessary to deal with advanced, cutting-edge technologies. The administration of the institution have to take into account the age of globalization and all of its elements in each and every one of those components. Benefiting from Emirati expertise and global experiences in the field of application of education quality management, particularly in the university education quality management system, and accomplishing and upgrading administrative choices and processes are two of the goals.

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