



## **A BIBLIOMETRIC ANALYSIS ON TWO DECADES OF QUALITY PRACTICES OF HIGHER EDUCATION MANAGERS & LEADERS IN FOSTERING PRACTICAL & ORGANIZATIONAL WISDOM**

*Uma análise bibliométrica de duas décadas de práticas de qualidade de gerentes e líderes de ensino superior na promoção da sabedoria prática e organizacional*

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### **ABSTRACT**

Does fostering wisdom have a place among practices of higher education leaders? If yes, what percentage of scientific documents produced or published by higher education institutions have analyzed this subject? In today's complicated world, higher education institutions, because of their knowledge background, play better and more effective roles than other organizations in creating a civilized world and in solving complicated, "wicked" problems. In higher education institutions, students of various majors are taught different knowledge and techniques which seem to be kept in a closed place and inside journals and books and play no sensible roles in solving problems of the present day. Hence, wisdom and being wise in higher education become very important issues. Accordingly, the present paper focuses on the practices of higher education leaders and managers in fostering practical and organizational wisdom. To this end, related research published and profiled in SCOPUS from 2000 to 2021 was analyzed through bibliometric research. Results indicated that despite the necessity of fostering wisdom and wise action in higher education, understanding and implementing it is still at the beginning of the road.

**Keywords:** Organizational wisdom, Practical wisdom, Higher education, Management, Leadership, Bibliometric analysis, Science mapping.

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## UMA ANÁLISE BIBLIOMÉTRICA DE DUAS DÉCADAS DE PRÁTICAS DE QUALIDADE DE GERENTES E LÍDERES DE ENSINO SUPERIOR NA PROMOÇÃO DA SABEDORIA PRÁTICA E ORGANIZACIONAL

*A bibliometric analysis on two decades of quality practices of higher education managers & leaders in fostering practical & organizational wisdom*

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### RESUMO

A promoção da sabedoria tem lugar entre as práticas dos líderes do ensino superior? Se sim, qual a percentagem de documentos científicos produzidos ou publicados por instituições de ensino superior que analisam este tema? No mundo complicado de hoje, as instituições de ensino superior, devido ao seu conhecimento, desempenham papéis melhores e mais eficazes do que outras organizações na criação de um mundo civilizado e na resolução de problemas complicados e “perversos”. Nas instituições de ensino superior, alunos de diversas áreas aprendem diferentes conhecimentos e técnicas que parecem estar guardados em local fechado e dentro de diários e livros e não desempenham nenhum papel sensato na resolução dos problemas dos dias de hoje. Conseqüentemente, sabedoria e ser sábio no ensino superior tornam-se questões muito importantes. Assim, o presente artigo centra-se nas práticas dos líderes e gestores do ensino superior na promoção da sabedoria prática e organizacional. Para tanto, pesquisas relacionadas publicadas e perfiladas no SCOPUS de 2000 a 2021 foram analisadas por meio de pesquisa bibliométrica. Os resultados indicaram que, apesar da necessidade de promover a sabedoria e a acção sábia no ensino superior, a sua compreensão e implementação ainda está no início do caminho.

**Palavras-chave:** Sabedoria organizacional, Sabedoria prática, Ensino superior, Gestão, Liderança, Análise bibliométrica, Mapeamento científico.

## INTRODUCTION

Wisdom is a reflection of intelligence, introspection, ethics, philosophical balance, intuition, compassion, and so on. People who used these characteristics to serve society were respected and considered wise (Limas & Hansson, 2004). A variety of disciplines including organizational studies, leadership research, philosophy, psychology, and ethics consider wisdom as the main research area and the use of this topic in the above-mentioned research has increased significantly (Thompson & Bevan, 2013). Management literature has also reviewed some aspects of wise thinking. Knowledge management, learning or inability in it, decision-making and planning, complexity theory and systems thinking, positive contradiction, emotional intelligence, innovation and change, and organizational development are all different aspects of organizational studies that employ wise thinking in their related research (Hays, 2004).

The history of wisdom management in different countries, especially in Iran, goes back many years. When it is seen in the different governance systems during the Achaemenid period (Ardabili, & McKenna, 2020). With the advent of the Industrial Revolution in the 19th century, technical knowledge was considered the main factor in individual progress and process improvement. Methods of scientific management, rooted in the boring science of economy, became popular among business leaders and were taught by theorists such as Frank Gilberth.

In the early 20th century, efforts toward scientific management led to some leadership theories that, unfortunately, did not consider the human mind and heart. Thus, at least half of business management articles were published in the 1960s and afterward aimed at deteriorating the value of such theories (Davis, 2016). Hence, positivist psychology, after being officially introduced in the Meeting of the American Scientific Association, came to help the stream to improve various aspects of individual life. The new wave of thinking and reflection on humans was also considered in the management area so it was believed that organizations not only have to seek new methods to solve their problems, but also must act, in today's competitive and changing environment, in a way that leads to their excellence and ensure their survival (Luthans et. al; 2006).

Moreover, Sen<sup>1</sup> (2009) considered an extended concept of short-term profitability and personal interest in the business environment. Unfortunately, modern capitalist life is heavily based upon this and on Adam Smith's<sup>2</sup> market principles. That's why wisdom and its implementation in various organizations are receiving more attention despite being ignored until recently (Hays, 2004). Thus, Bierly et. al. (2006) developed the term "organizational wisdom" to depict collective wisdom in different organizational disciplines and investigated it in their studies of management. They described wisdom not as a theoretical concept but as an operational idea relevant to judgment, selection, and use of a certain type of knowledge in the organization that is employed in processes such as planning, decision-making, and implementation.

As shown in Figure 1, scientific and academic research have extensively studied "organizational wisdom" in various subject areas. Of all reviewed articles, 70.5% are articles, 10.17 are reviews, 6.05 are book chapters, 5.5% are conference papers, 5.17% are books, 0.9% are editorials, 0.9% short surveys and, finally, 0.5% are notes. It is noteworthy that most documents are focused on social sciences.

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<sup>1</sup> <https://thewire.in/books/book-review-how-to-read-amartya-sen-lawrence-hamilton>

<sup>2</sup> <https://thegreatthinkers.org/smith/introduction/>

**Figure 1 - A Bar Chart of Analysis of Documents by Subject Area**

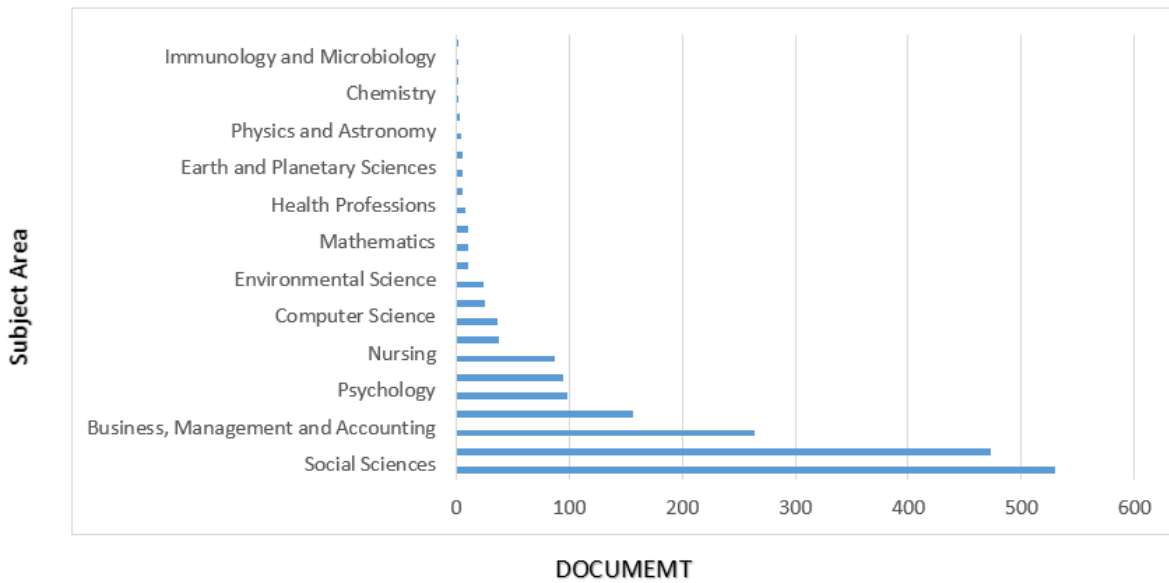
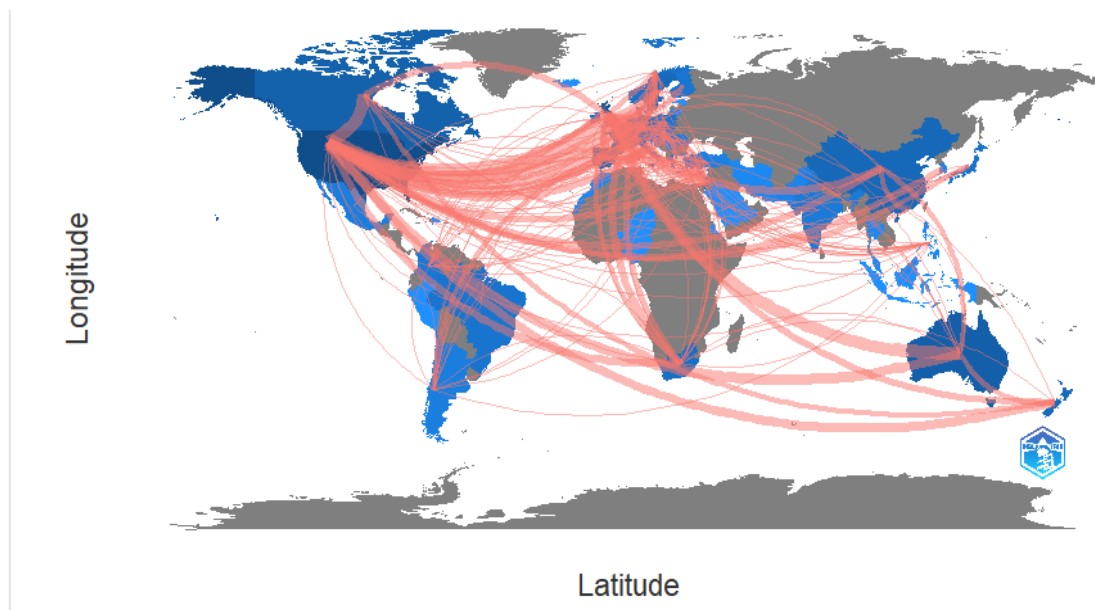


Figure 2 shows the cooperation map between 240 countries in the production of 1226 scientific documents on organizational wisdom.

**Figure 2 - The Cooperation Map between 240 Countries in the Production of Scientific Documents in the Subject Area**



Of course, there are a variety of reasons for paying this significant amount of attention to the area most of which are rooted in different causes and dynamics or a combination of them. First, human beings gradually reached an understanding that there is something over pure knowledge management. Second, with the evolution of businesses and organizational processes, intellectual approaches appeared that emphasized the need for this category in studying organizations. Third and last, significant progress in complex technologies and the invention of new products and services in various industries have questioned traditional models of running organizations and businesses. This led organizations to adopt new approaches to organizational behavior and stewardship, emphasizing that success is not necessarily reached by those companies capable of making the best use of their knowledge. Instances of such approaches include moral behavior and corporate social responsibility (Kessler, 2006).

The dynamic balance is, in fact, the more excellent goal of businesses; exactly what Gentile (2013) defines as a revived idea of public interest. That is where instrumental rationality<sup>3</sup> such as formal rules of corporate governance and companies' financial incentives must properly match value rationality<sup>4</sup> (Thompson & Bevan, 2013). But our main concern leading to writing the present paper was that only a slight amount of relevant produced knowledge considers the "being" and nature of higher education (including universities) while these institutions could be the places to foster wisdom and thoughtfulness. Nevertheless, it seems that despite a consensus on the importance of organizational and managerial wisdom and its penetration into all disciplines, little is written on fostering it in universities and higher education institutions and on practices to improve the situation. The present paper tries to propose the necessity of this subject in higher education institutions and, besides, analyze relevant literature in quantitative manners.

Nixon (2008), respecting the importance of wisdom and thoughtfulness in universities and higher education institutions, believes that the transformation of universities during recent decades, caused by a new pattern of management in public affairs, is the main reason of dominance of administrative functions and advent of a type of "non-thoughtfulness" in practices of university members. The tendency to change toward market models of higher education and increased pressure of neoliberal public management and globalization (Dredge et. al; 2012) lead to the advent of a new zeitgeist (the spirit of the contemporary or thinking style of an era) and turns universities from civil societies into a key concept in organizing "the contemporary spirit". The increasing commercialization of universities and commodification of higher education have changed them from places of possible wisdom and thoughtfulness to institutions in which specialized areas are mixed with managerial goals and values. Nowadays, goals regulations, and evaluation systems by which universities are evaluated and ranked are among issues specifying university sections and financial priorities such as methods of domestic exports income, and methods to possess winners of the Nobel Prize and transfer them from one country to another are closely related to career and personal life of individuals in universities (Nixon, 2008). Perhaps, the growth of economic systems in the late 19th century and early 20th century as well as increased demand for university degrees in the labor market could be considered as a reason for this close relationship; an important issue that turned education from an "elite" commodity (exclusive to higher classes of the society) to one accessible by the public. Afterward, public accessibility and development of higher education became principles of the renovation project and also a part of the sustainable development goal. It was assumed that since higher education is one of the most important underlying factors in the formation of the middle-class urban population, it plays a general role in the economic social development of societies, especially in the early stages of the development process (Mousavi Madani & Dadgar, 2020).

As to the commodification of higher education, Salman Mahini (2016) suggests that although demanding profitability from higher education for the practical development and progress of society is a wise and pertinent request, there seems to be a conscious or unconscious deviation in this path. That is, as the irrefutable role of science and technology in economic development is significantly considered, the opposite, the development of economic knowledge being considered the main mission of higher education, is incorrectly considered true. Seemingly, a tendency to develop, and solely its economic aspect, caused a deficiency of social, moral, and cultural functions in higher education. In this economic approach, higher education is considered an economic agency and is in charge of knowledge commercialization.

The main danger threatening societies is that scientific research priorities are determined based on the needs of those (governments and industries) funding research projects, only consider first-world countries, and do not pay proper attention to the needs and demands of third-world countries (Maxwell, 2017). The dominance of quantitative spirit (Guenon, 1945) and the tendency to gain such privileges indicate the concept of university no longer exists or has lost its content (Nixon, 2008).

Ardelt (2020) describes schools and universities as institutions in charge of conveying theoretic knowledge about the world, teaching practical and thinking skills, and responsible for social psychological growth in people, without playing an effective role in general interests by reducing egocentrism, assist in solving social problems and

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<sup>3</sup> Instrumental rationality presumes that individuals require specific tools and devices in order to achieve success and meet their goals in a more convenient and rapid way. Means and goal are the two most important principles of this type of rationality accompanied by utilitarianism and accounting

<sup>4</sup> The practice rationalized by value rationality always obeys orders or commitments imposed on an individual

finding deeper goals and meaning of life. Hence, higher education is an important area in organizational life that strongly requires investigating theories related to wise and socially responsible practices because of its significant role in removing social, cultural, technological and scientific challenges of the society (Barnhardt & Phillips, 2017). Rooney (2013; as cited in Thompson & Bevan, 2013) views wisdom from the lens of action, a method or at least a metaphoric window reclaiming academics of the 21st century through a complex systems approach. Maxwell (1984, 2009, 2012; as cited in Rooney, 2013) believes universities should switch from playing roles in a specific area of knowledge to playing roles in the wisdom area. Walker (2019) states that "reasonableness of practical knowledge" is a better description of practical wisdom than its literal translation to be employed in analyzing and evaluating leadership and management practices in higher education.

Karam et al. (2015) emphasize meaningful learning in higher education from a practical wisdom point of view. This type of learning higher education occurs only when individuals understand where their society remains concerning others, what goals it pursues, and what is good or desirable based on various inner social interests and values.

A review of the literature on the subject area indicates that no bibliometric analysis on fostering practical and organizational wisdom in universities and higher education institutions has been performed so far.

Rousseau (2012) believes literature review helps us play a significant role in making effective use of a combination of previous research findings to develop research paths and create measure-based viewpoints on implementing and preserving professional judgment and expertise.

Literature review in its traditional and narrative form is not generalizable since it emphasizes the individual experience and knowledge of the researcher whereas perspectives of bibliometric analyses could be generalized from micro to macro levels (Chen et. al., 2019; Wang et. al., 2019). This type of systematic literature review is designed with the aim of a higher level of comprehensiveness and transparency (Cornish, 2015).

Clear and transparent criteria to include or exclude some studies from the defined database in a certain period and their analysis and report is the main characteristic of a systematic review with a clear protocol (Waddington et. al., 2012). Despite other techniques, bibliometric analysis is more practical and useful because of presenting more reliable and objective structural analyses of available data, tendencies, and subject areas, identifying changes in boundaries of various disciplines, and observing most cited researchers and institutions among a huge amount of research (Aria & Cuccurullo, 2017)

Our main goal is to perform a bibliometric analysis to be able to investigate the thought framework in the literature, determine the research gap as well as propose a road map for future studies. Accordingly, we seek to answer the following questions in the present paper:

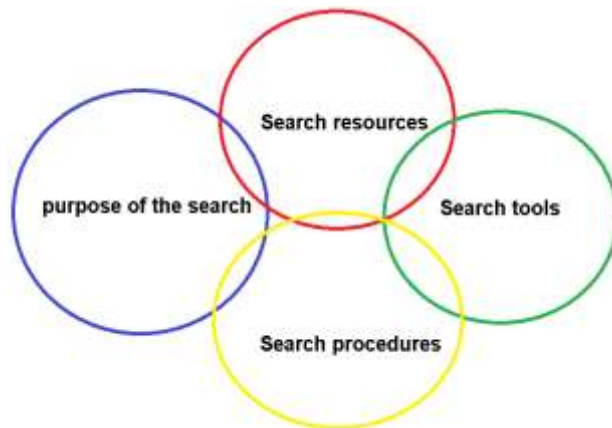
- Research Question1 (RQ1): What are the newest and most popular in the research topics literature of the field?
- Research Question2 (RQ2): What are stimulant, basic, emergent, and specialized topics in relevant literature?
- Research Question3 (RQ3): Which are the most cited documents in relevant literature?
- Research Question4 (RQ4): Which are the most efficient journals and authors in the relevant literature?
- Research Question5 (RQ5): Which are the most active countries in the relevant literature?
- Research Question6 (RQ6): In what subject categories are the references used to author the documents in the relevant literature?

The remaining of the paper is organized as follows: the next section considers research methodology and focuses on analytical results of bibliometric findings. Finally, the paper ends in findings, discussion and conclusion.

## **1 METHODOLOGY (Quantitative analysis)**

In the first step, problems and the subject area were determined by reviewing literature and identifying research gaps. In the second step, according to Snyder (2019), research objectives were divided into two classes: performance goals, and depicting scientific maps. The third step included determining strategies to search cited documents and their components in order to search in a huge pool of data (Moradi & Mir Almasi, 2020).

Figure 3 - Components of strategies employed to search for cited documents  
(Moradi & Miralmasi, 2020)



In the fourth step, based on the procedures and criteria of searching for cited references, data was collected, screened and extracted from online bibliographic databases. Although most online bibliometric databases on which metadata of scientific work is stored could be proper references for bibliometric data (Cobo et. al;2011) the databases don't cover scientific areas and journals in the same, unified manner and hence, researchers' choices are of considerable significance (Waltman, 2016; Zupic & Cater,2014). For our objective analysis in this paper, we used published data on SCOPUS[1] and Web of Science (WoS)[2] databases. Although WoS is one of the largest and most valuable databases in literature analysis and retrieval, SCOPUS is more complete and inclusive in terms of covered journals (Agarwal et. al., 2016). To achieve a proper quantitative analysis, in addition to the review of the relevant literature, we performed a comprehensive search based on data published in the two aforementioned databases considering all similarities and synonyms. The search launched on October 21st, 2021 in four stages:

### **SCOPUS**

#### **Stage 1:**

My query : (TITLE-ABS-KEY ( "practical wisdom" ) OR TITLE-ABS-KEY ( "practical prudence" ) OR TITLE-ABS-KEY ( "organizational prudence" ) OR TITLE-ABS-KEY ( "organizational wisdom" ) OR TITLE-ABS-KEY ( "managerial wisdom" ) OR TITLE-ABS-KEY ( "managerial prudence" ) )

Number of results : 1226

#### **Stage2:**

My query : ((TITLE-ABS-KEY ("practical wisdom") OR TITLE-ABS-KEY ("practical prudence") OR TITLE-ABS-KEY ("organizational prudence") OR TITLE-ABS-KEY ("organizational wisdom") OR TITLE-ABS-KEY ("managerial wisdom") OR TITLE-ABS-KEY ("managerial prudence")) AND TITLE-ABS-KEY("Management"))

Number of results: 217

#### **Stage3:**

My query: ((TITLE-ABS-KEY ("practical wisdom") OR TITLE-ABS-KEY ("practical prudence") OR TITLE-ABS-KEY ("organizational prudence") OR TITLE-ABS-KEY ("organizational wisdom") OR TITLE-ABS-KEY ("managerial wisdom") OR TITLE-ABS-KEY ("managerial prudence")) AND (TITLE-ABS-KEY("Management") OR TITLE-ABS-KEY("leadership")))

Number of results: 274

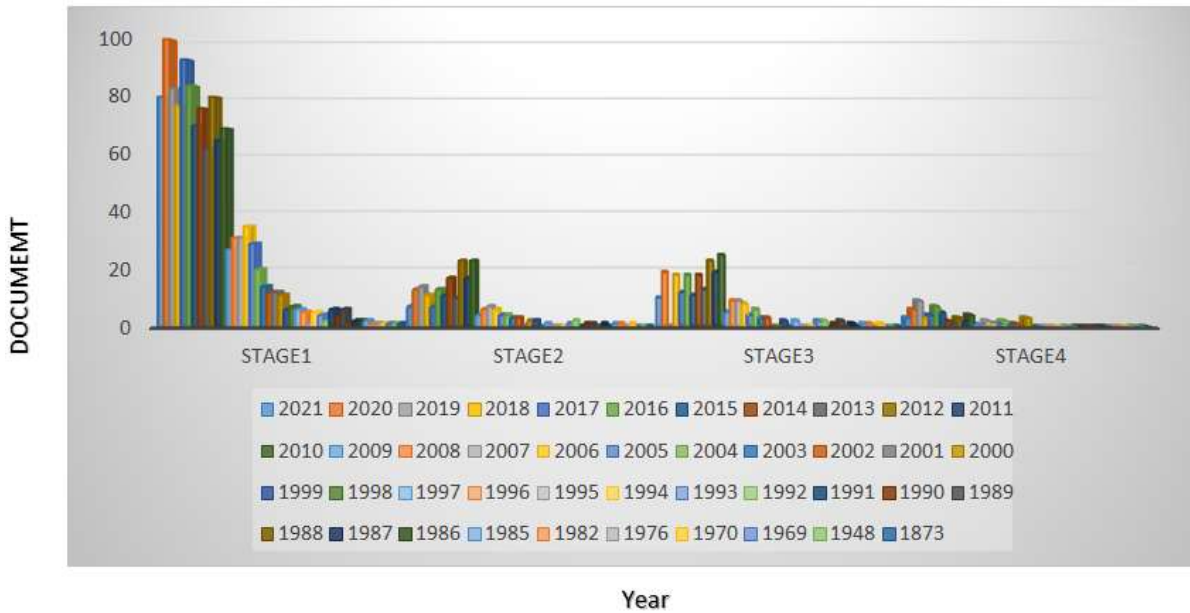
#### **Stage4:**

Your query: (((TITLE-ABS-KEY ("practical wisdom") OR TITLE-ABS-KEY ("practical prudence") OR TITLE-ABS-KEY ("organizational prudence") OR TITLE-ABS-KEY ("organizational wisdom") OR TITLE-ABS-KEY ("managerial wisdom") OR TITLE-ABS-KEY ("managerial prudence")) AND (TITLE-ABS-KEY ("Management") OR TITLE-ABS-KEY("leadership")))) AND (higher education\*))

Number of results: 61



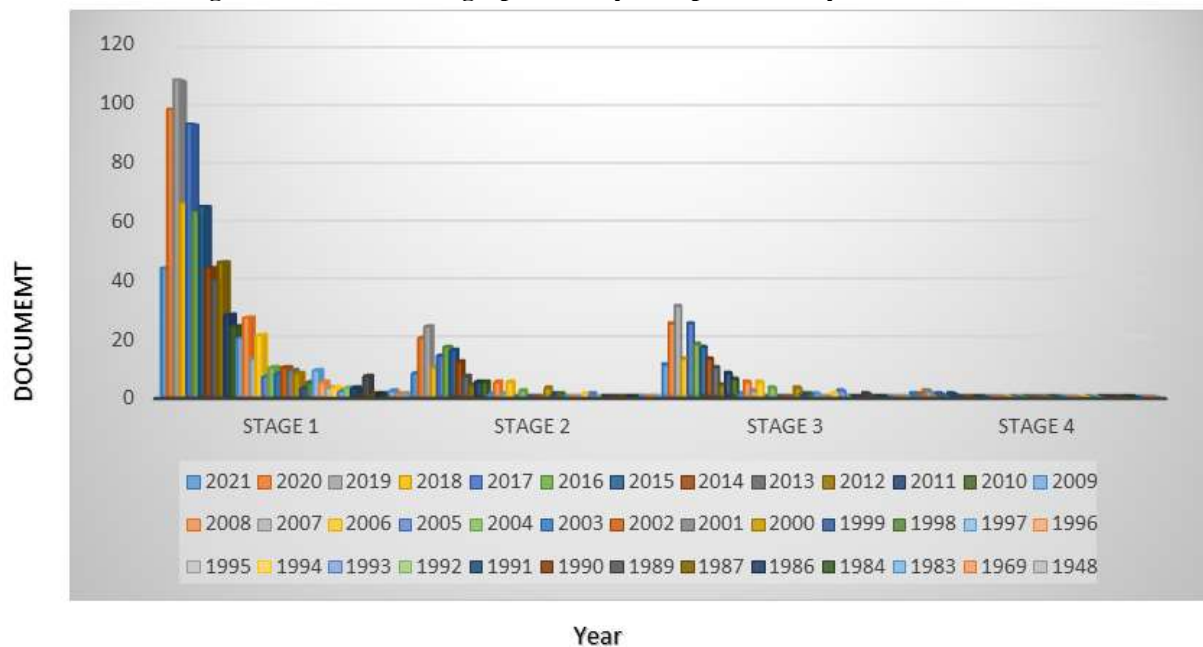
Figure 4 - A cumulative graph of analysis of publication years



### Web of Science

The same formula applied to WoS. The only difference was that TITLE-ABS-KEY in SCOPUS equaled TOPIC (TS) in WoS and tat search in the section Web of Science Core Collection: Citation Indexes performed in a complete manner. The total number of documents obtained in stages 1, 2, 3 and 4 was 903, 163, 207 and 6, respectively.

Figure 5 - A cumulative graph of analysis of publication years



These figures are the number of all published documents in the history. In other words, these are the number of all documents profiled in the studied database in the history of research topic.

Considering the mentioned research gap on higher education and respecting the necessity of quantitative analysis in addition to review of rare published studies on the subject area, we decided to study documents obtained from SCOPUS and excluded those of WoS because of scarcity of documents in the database. That is, the quantitative analysis of the present paper is limited to documents produced in 2000 onwards profiled in SCOPUS.



In the fifth step, collected data was analyzed using VOSViewer (version 1.6), Bibliometrix package (a software in R language (version 4.1) for comprehensive analysis of science mapping) and CiteSpace (version 6.1).

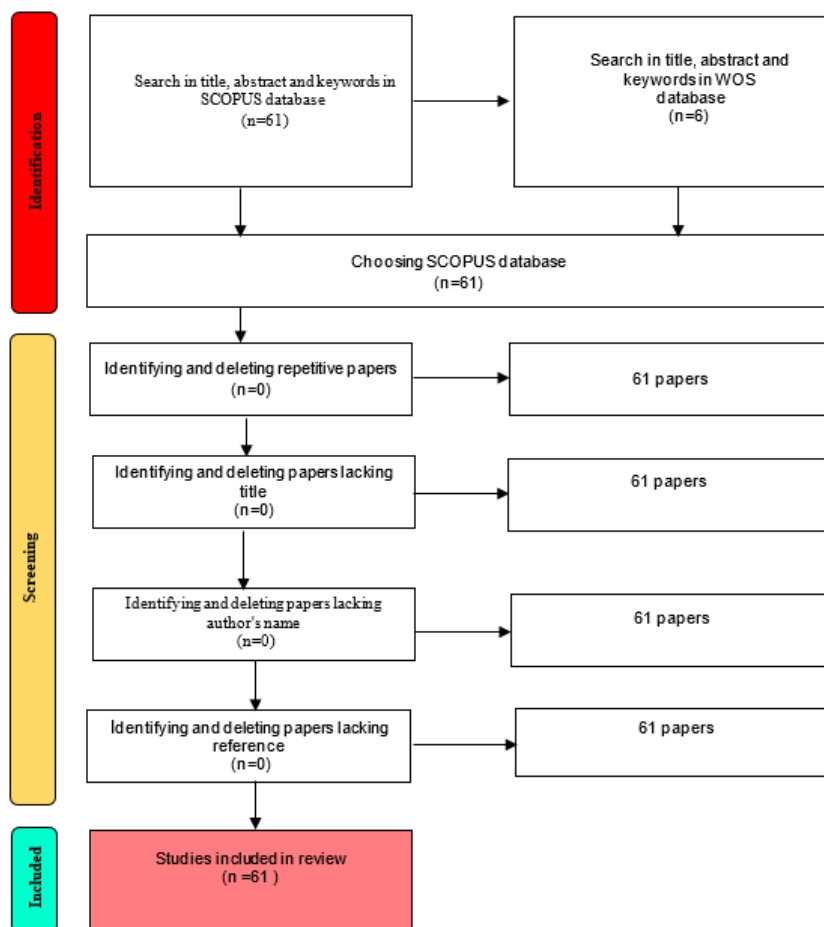
VOSViewer is a free software in JAVA environment used to analyze and depict reference networks in scientific collections that investigates graphic illustrations of bibliometric mapping and is particularly helpful in illustrating huge mapping to simplify interpretations (Eck & Waltman, 2010).

R is specific language and environment to express statistical calculations (Aria & Cuccurullo, 2017). Bibliometrix Package, written in R, provides users with a wide range of various and useful tools for quantitative analyses in bibliometrics and scientometrics (Aria & Cuccurullo, 2017).

CiteSpace is a free application in JAVA based and mostly focused on identifying important and critical points in developing an area, especially turning points of thought and axial points. This application is used to illustrate and analyze biases and patterns of scientific literature (Chen, 2006).

Data collection procedure is illustrated in Figure 6 in the form of PRISMA<sup>5</sup> Flow diagram.

Figure 6 - The PRISMA Flow Diagram for the Bibliometric Analysis



Source: Page et al (2020)

## 2 FINDINGS

In order to analyze the relationship between the subject area of practical and organizational wisdom with leadership and management in higher education, data obtained from the 4th stage of research were entered into VOSViewer. Moreover, we set Co-occurrence as the Type of Analysis and Author Keywords Unit of Analysis. To confirm those recently added keywords (probably lacking enough occurrence) we considered the lowest

<sup>5</sup> Preferred Reporting Items for Systematic Reviews and Meta-Analyses

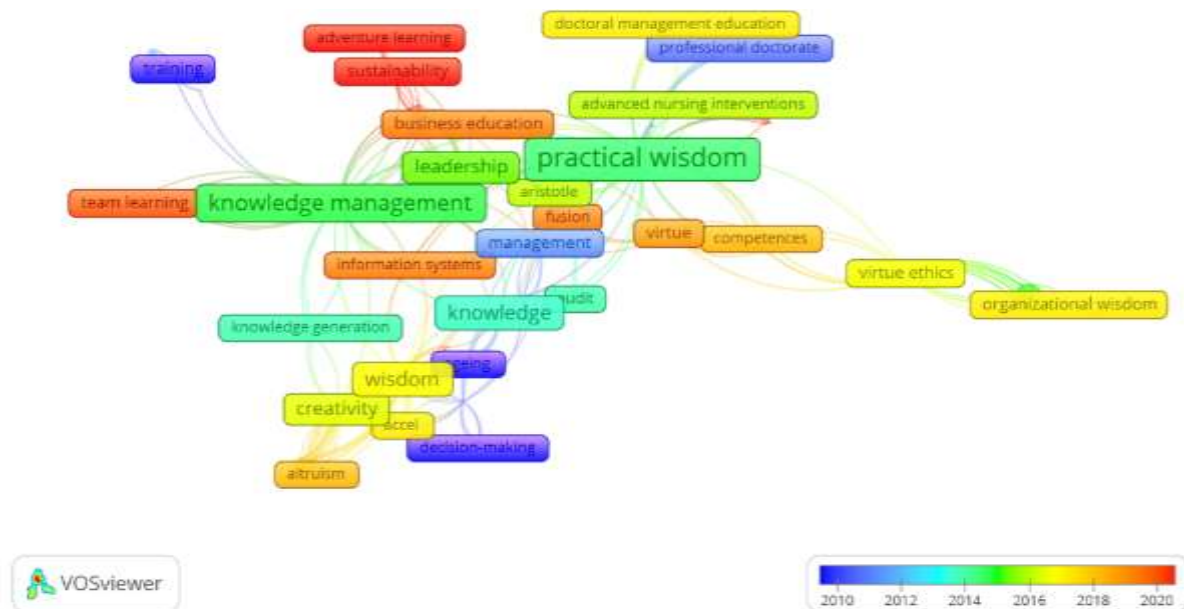
number of keyword occurrences as one. Figure 7 (RQ1) shows the network structure of 164 keywords used in data and documents. Different colors for keywords indicate the starting date of their relevant documents and lines in the figure present correlations of co-occurrences between different keywords.

The structure includes 127 nodes, 14 clusters, and 474 links with an inter-network total link strength of 480. This demonstrates that practical wisdom (12 occurrences) and knowledge management (7 occurrences) are the most frequent keywords from 2000 onwards.

Results of structure analysis are as follows:

- The hottest topics in the literature include "Adventure Learning" and "Sustainability" (colored in red).
- The keyword "Higher Education" in Cluster 12 was used only once in a research in 2011. However, its total link strength with the frequent keyword "Practical Wisdom" was 4.
- The keyword "Doctoral Management Education" in Cluster 11 only occurred once in a research in 2017 and its total link strength with the frequent keyword "Practical Wisdom" was 4.
- The keyword "Business Education" in Cluster 1 occurred just once in a research in 2019 and its total link strength with other keywords such as "Sustainability", "Leadership", "Practical Wisdom" and "Knowledge Management" was 14.

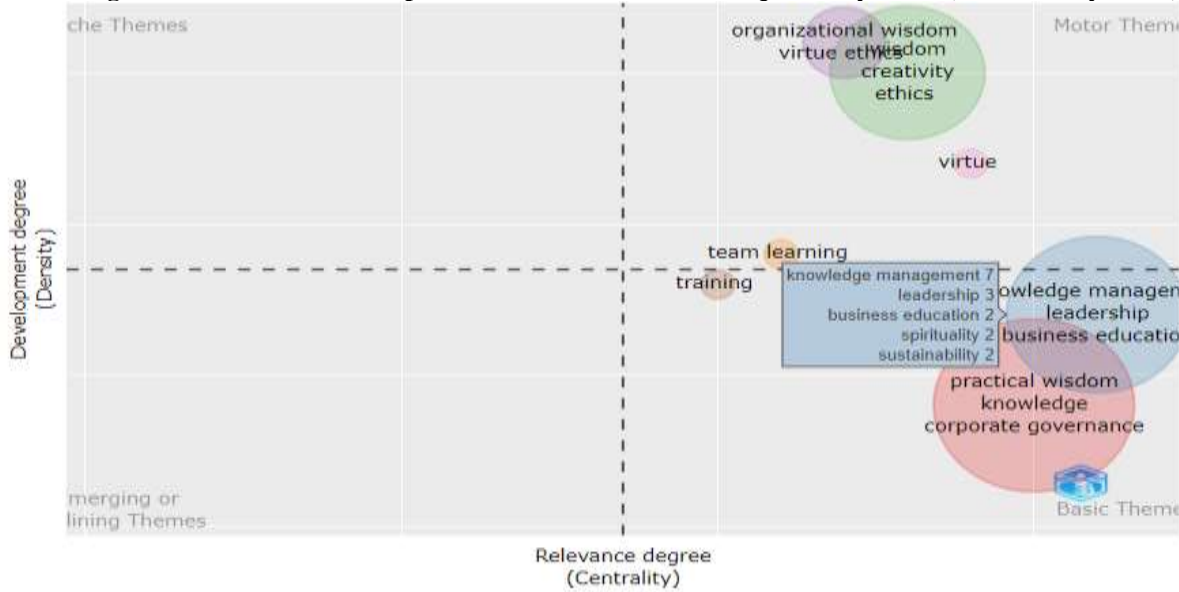
Figure 7 - The Network Structure of 164 Keywords (Authors Keywords)



Moreover, 7 subject clusters obtained from keywords with 2 times (or more) of occurrence were analyzed by a Thematic Map (RQ2) based on the quarter in which they are placed (upper-right quadrant: motor-themes; lower-right quadrant: basic themes; lower-left quadrant: emerging or disappearing themes; upper-left quadrant: very specialized/nich-themes). As expected, the most important topics in the lower right quarter (basic topics) included the practical wisdom cluster (composed of a subject such as corporate governance, management, and knowledge) and knowledge management cluster (composed of a subject such as business education, leadership, spirituality, and sustainability). Similarity and overlap of the two subject clusters indicate that management and leadership in both clusters are highly focused on educating issues related to companies and businesses.

Clusters wisdom, organizational wisdom, and virtue were considered the most important driving topics in this area (upper right quarter) so that review of literature related to wisdom and practical and organizational wisdom, in general, indicate an emphasis on proposing and educating ethical issues in organizational life. It is interesting to note that, as the keywords thematic map shows, different derivatives of the word "virtue" including "spirituality", "virtue ethics" and "ethics" are in relatively different clusters providing for representation of ethical, moral, and human considerations (such as corporate governance and sustainability) in the future of organizational and corporate life in a variety of manners and aspects.

**Figure 8 - The Thematic Map of Seven Cluster of Most Frequent Keywords (Authors Keywords)**



Refining 1226 documents based on the research target population led to a total number of 61 documents from the SCOPUS database. Table 1 presents details of the results.

There are 107 active authors in the subject area of practical and organizational wisdom in leadership and management of higher education. The average number of authors per document is 1.75; that is, relevant documents are partly the result of collaboration and common research efforts. From obtained data, only 26 documents are single-authored, and the other 35 documents are written with the collaboration of 81 different authors. According to the Collaboration Index, the average number of authors contributing to documents is 2.31. It means that there is a strong tendency to collaborate in authoring relevant documents on the subject area. According to Table 1, the average citation per document of 27.33, in comparison with figure 8.34 obtained from the table of baseline-citation rates, which is a big figure showing the smaller number of documents with the most citations and bigger number of documents with the least citations (Ale Ebrahim et. al; 2020).

**Table 1 - The Summarized Data for the Bibliometric Study**

Description	Result
Documents	61
Sources (Journals, Books, etc)	53
Keywords Plus (ID)	200
Author's Keywords (DE)	164
Timespan	2000-2021
Average citations per documents	27.33
Authors	107
Author Appearances	114
Authors of single-authored documents	26
Authors of multi-authored documents	81
Single-authored documents	26
Documents per Author	0.57
Authors per Document	1.75

Co-Authors per Documents	1.87
Collaboration Index	2.31
<b>Document Type</b>	<b>Result</b>
Article	38
Book	5
Book Chapter	6
Conference paper	7
Note	1
Review	4

Table 2 (RQ3) shows the top 10 most-global-cited documents. Respecting titles of documents and journals, Clegg's (2005) paper with 59 citations is more compatible (in terms of content) with the subject area of its journal (Journal of Higher Education Policy and Management) and the present paper.

**Table 2 - The Top 10 Most-Global-Cited-Document**

Author	Source	Total Citation	Title	Year
Boal KB; Hooijberg R	Leadership Quarterly	377	Strategic Leadership Research: Moving On	2000
Bierly III PE; Kessler EH; Christensen EW	Journal of Organizational Change Management	321	Organizational Learning, Knowledge and Wisdom	2000
Tribe J	Journal of Sustainable Tourism	81	Education for Ethical Tourism Action	2002
Halverson R	American Journal of Education	79	Accessing, Documenting, and Communicating Practical Wisdom: The Phronesis of School Leadership Practice	2004
Sternberg RJ	Roeper Review	65	Accel: A New Model for Identifying the Gifted	2017
Rooney D; Mckenna B; Liesch P	Wisdom and Management In The Knowledge Economy	65	Wisdom and Management In The Knowledge Economy	2010
Clegg S; Mcauley J	Journal of Higher Education Policy and Management	59	Conceptualizing Middle Management In Higher Education: A Multifaceted Discourse	2005
Nonaka I; ZHU Z	Pragmatic Strategy: Eastern Wisdom, Global Success	56	Pragmatic Strategy: Eastern Wisdom, Global Success	2012
Godfredson JW; Thomas SDM Ogloff JRP; Luebbbers S	Australian and New Zealand Journal of Criminology	50	Police Perceptions Of Their Encounters With Individuals Experiencing Mental Illness: A Victorian Survey	2011
Rowley J	Journal of Documentation	48	Where is the Wisdom that We Have Lost In Knowledge?	2006
Yee DL	Journal of Information Technology for Teacher Education	47	Images of School Principals' Information and Communications Technology Leadership	2000

Figure 9 (RQ4) shows the top authors on the subject area and their most cited sources with a depiction of relations between authors (left side), keywords with 2 times (or more) of occurrence (middle part), and journals (right side). Akgun, Calleja, McKenna, Mele, Pinheiro, and Rocha, each with 2 relevant documents are the most relevant authors, and the journals Business Ethics, Journal of Management Development, and Proceedings of European Conference on Knowledge Management, each containing 3 documents, are the most efficient sources of the area. It is noteworthy that three of the most cited documents, written by Boal & Hooijberg (2000), Bierly et. al. (2000), and Tribe (2010) and presented in Table 2, are published in journals other than those mentioned above have 377, 321 and 81 citations, respectively.

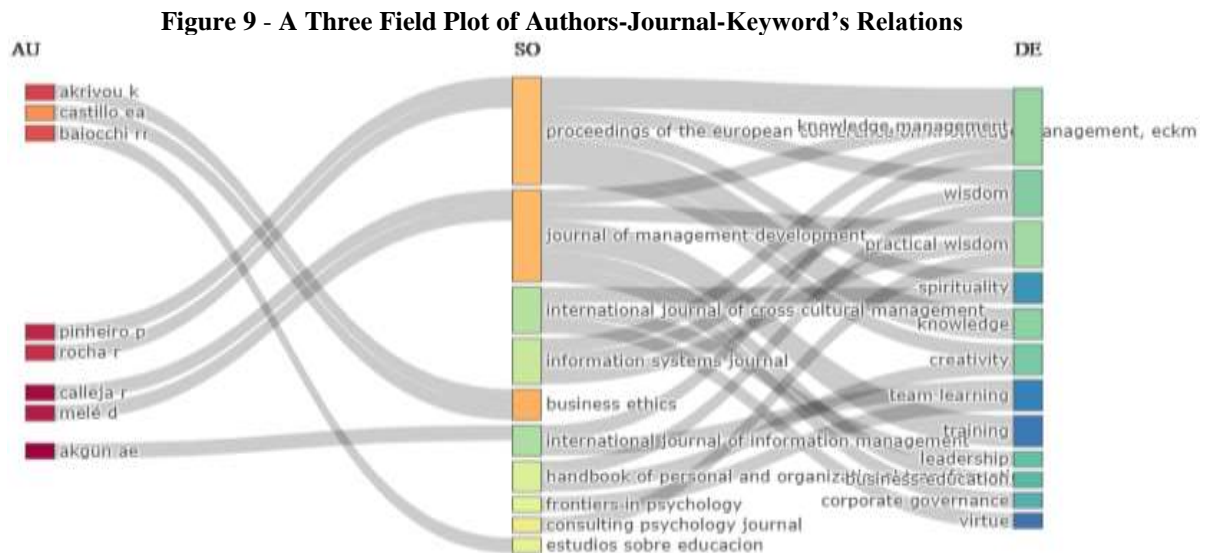
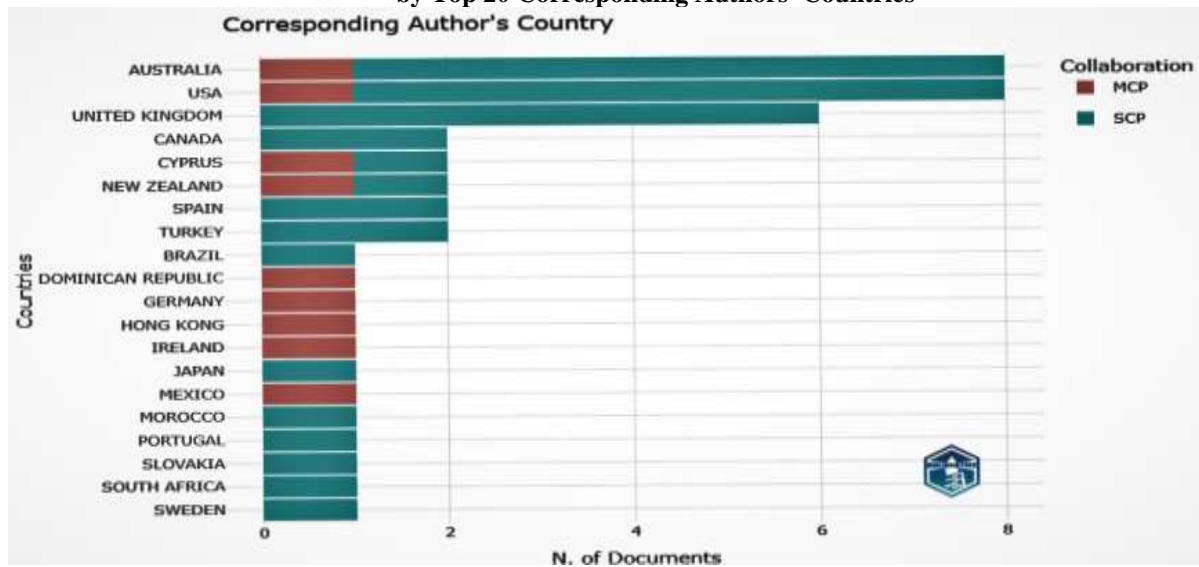


Figure 10 (RQ5) shows single-country and multiple-country publications resulting from the 4th stage of search (practical and organizational wisdom in leadership and management of higher education) among the most cited countries. Countries are selected based on the nationality of the corresponding author. A total of 8 documents are written by Australian authors of which 1 document is a multiple-country publication (MCP) and 7 documents are single-country publications (SCP). In terms of the corresponding author, the US is in the same position as Australia. Corresponding authors of documents belonging to England solely tend to collaborate with their compatriots; that is, all authors of the 6 documents are from England. Moreover, countries such as Canada, Spain, Turkey, Brazil, Japan, Morocco, Portugal, Slovakia, South Africa, and Sweden prefer to collaborate with authors from their own countries on producing literature on the subject area whereas Dominican Republic, Germany, Hong Kong, Ireland, and Mexico possess research productions developed by collaborating authors from other countries but the corresponding author is from their own country.

**Figure 10 - Total Number of Publications (Multiple Country Publication & Single Country Publication) by Top 20 Corresponding Authors' Countries**



The density visualization map (RQ5) also shows two main country clusters: (1) a collection of Denmark, Hong Kong, Switzerland, and the US, and (2) a collection of Australia, Cyprus, Mexico, and England. Although the US is in the same position as Australia in terms of corresponding authors, as shown in Figure 11, American authors turned their homeland into a country with the highest rate of collaboration on publishing relevant documents. So that having 16 documents and a total number of 956 citations, the US has the highest rate of collaboration with other authors in producing relevant literature. Among the citations, 377 cases belong to a document authored in collaboration with Switzerland. After the US, England is in the second rank of collaboration with other authors having 12 documents and 322 citations from which 203 citations belong to 9 documents written in collaboration with Australia. The main function of these collections is to help those researchers willing to identify colleagues to produce research work.

**Figure 11 - Density Visualization Map of Top Countries' Collaboration**

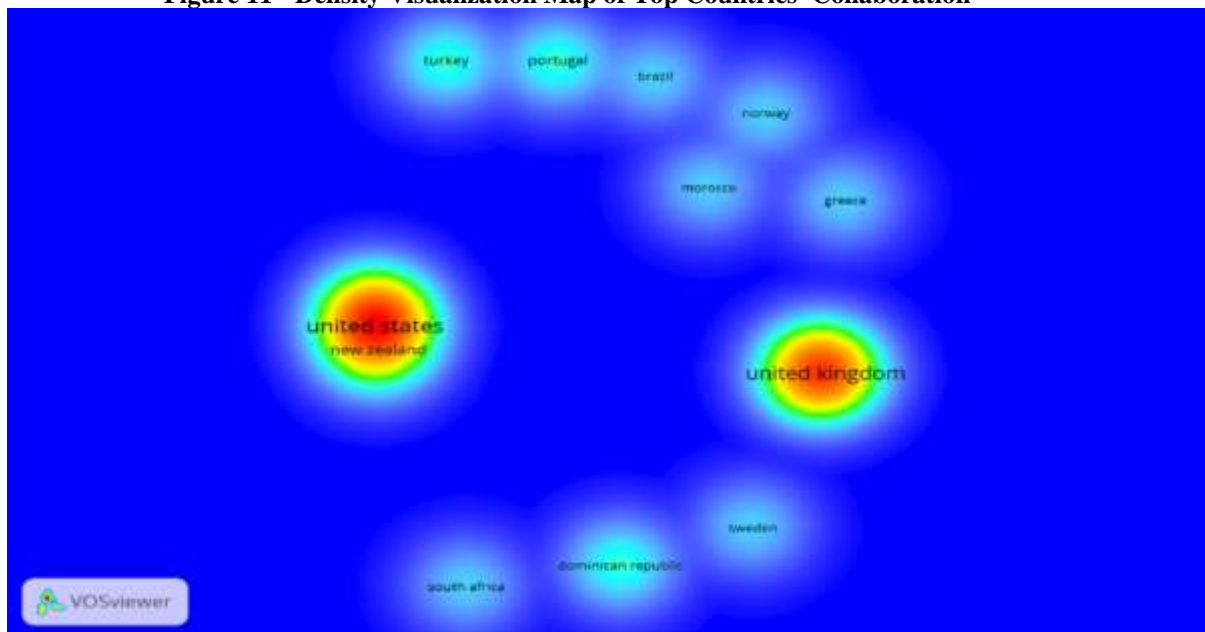


Figure 12 (RQ6) illustrates a common documented network of 439 nodes and 1269 links. The network shows the most cited references by SCOPUS documents between 2000 and 2021. Clusters 0 and 17 are clusters of references that are often co-cited. Labels of each cluster represent its nature. Cluster 0, with the title of



Knowledge Management, has 25 references, and Cluster 17, titled Multi-level Issue, has 11 references attended, on average, in 2006 and 2007, respectively. The most important document in Cluster 0 (Where is the wisdom that we have lost in knowledge) is written by Roeley and that in Cluster 17 (Wisdom in organization: whence and whither) is authored by Rooney.

**Figure 12 - A Visualization of What the Top 8% Most Cited SCOPUS Documents Each Year Cite Between 2000 & 2021**

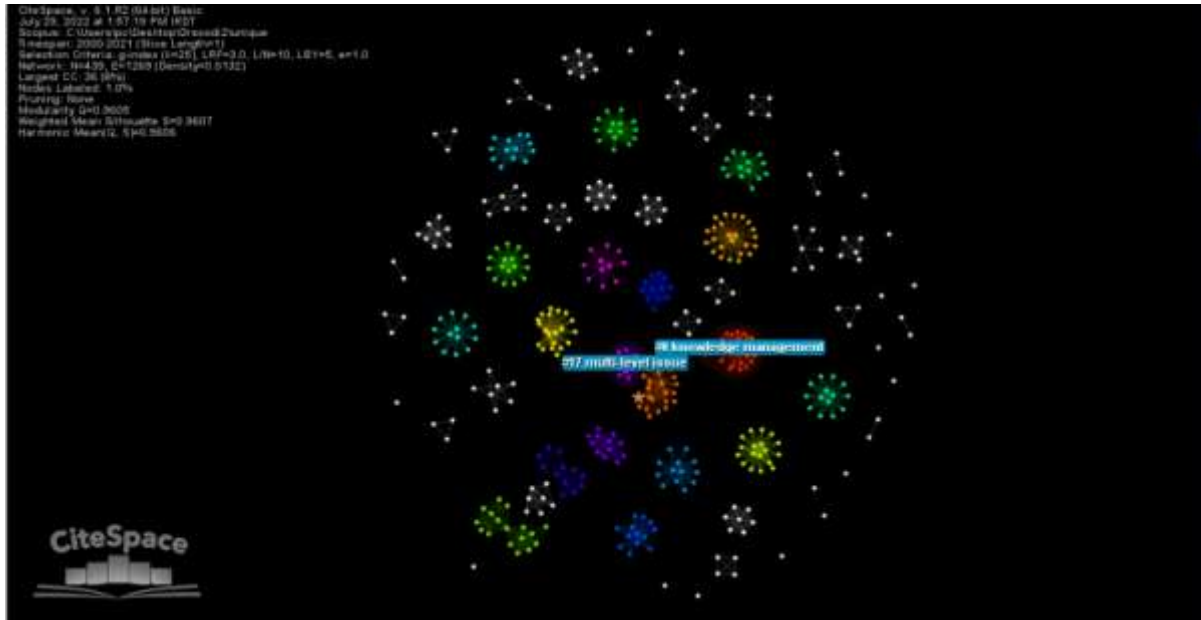


Table 3 also presents top 5 references with strong ideas and potential impacts between 2000 and 2021, reference that attracted significant attention in a short period of time.

**Table 3 - Top 5 References with the Strongest Citation Bursts**

Reference	Author	Year	Strongest	Begin	End
The Getting and Keeping of Wisdom	Hammer	2002	1.17	2006	2007
When Organization are too Good	Kaptein	2017	1.25	2020	2021
Moral Standards in Managerial Decisions	Procopio	2019	1.25	2020	2021
Practical Wisdom	Batchman	2018	1.25	2020	2021
Practical Wisdom	Batchman	2017	1.13	2020	2021

### 3 CONCLUSIONS

According to the data obtained from the Scopus database the subject area of practical and organizational wisdom started to be considered by researchers and authors from 1873. The highest number of scientific documents (100 documents) was produced in 2020 while the highest number of scientific productions on practical and organizational wisdom in organizational leadership and management belongs to 2012 (23 documents). The significant difference indicates that the subject area of practical and organizational wisdom in organizational leadership and management was considerably respected between 1873 and 2012. The important point is that although most scientific content including research papers, books, etc. on the subject is produced by academic environments and authors, unfortunately the subject is either ignored or rarely considered in the field of higher education, and in university and academic environments. Findings show that only 4.9% of the whole produced knowledge on the subject area belongs to higher education management and leadership. So that scientific

production on practical and organizational wisdom in organizational leadership and management started in 2000 with the highest rate (9 documents) in 2019.

In a similar comparison, producing scientific content on practical and organizational wisdom in WoS started in 1948 with the highest rate (108 documents) reached in 2019.

The highest number of documents on practical and organizational wisdom in organizational management and leadership was reached in 2019 (24 and 31 documents, respectively) but unfortunately only 0.6% of the total scientific production related to management and leadership in higher education with the highest rate (2 documents) obtained in 2019.

The significant difference between results of various inquiries, especially 3<sup>rd</sup> and 4<sup>th</sup> stages of the inquiry, revealed that since most universities approached wealth creation or entrepreneurship, namely creating wealth from the produced knowledge, during last decades, the wise leadership of the essence of higher education in neglected. Hence, published works mainly tend toward businesses and, pointing that leadership is not necessarily to possess a position but is a process, most leaders are willing to teach wisdom in business areas. As the analytical results of 3<sup>rd</sup> and 4<sup>th</sup> inquiry steps show, business education is more strongly linked to issues such as sustainability, leadership, practical wisdom and knowledge management than higher education. Furthermore, using a schematic map we showed that management and leadership, categorized as practical wisdom and knowledge management, are mainly concentrated on business related topics. It seems that universities are, unfortunately, experiencing responsibility pressures from state and government authorities in a continuous way because of their vital role in the knowledge-based economy. Therefore, most reports in this area are financial and economic ones. However, we believe that even despite this economic approach to universities, this question could be asked: "To what cost this is happening?"

In order to come to a better and more desirable conclusion on bibliometric analysis of literature, we also studied the content of review articles obtained for the database search. Among 17054 words employed in writing 4 review articles (Hassi, 2012; Dala & Pauleen, 2018; Monturo & Hook, 2009; Cornish, 2015), "Wisdom", "Knowledge", "Development", "Training", and "Practical" were the five most frequent keywords used in mentioned articles, with a frequency of 328, 158, 123, 106, and 98 times, respectively.

Figure 13 - The Word Cloud resulted from content of review articles



Despite the close correlation between wisdom and knowledge, there are still unsolved problems remaining in the world and universities have not been able to solve them yet. It would be negligent and short-sighted to say that in a linear path, data leads to information, information leads to knowledge and knowledge leads to wisdom, especially when "development" (the third most frequent keyword) of one's knowledge approaches financial and business issues and universities turn to be economy-based. Even if this is true, the area of sustainability (as an important and prior subject in finance and accounting) has a strong relationship with wisdom and organizational



- Cobo, M J; Lopez-Herrera, A.G.; Herrera-Viedma, E.; & Herrera, F. (2011). Science mapping software tools: Review, analysis, & cooperative study among tools. *Journal of The American Society for Information Science & Technology*, 62(7), 1382–1402. <https://doi.org/10.1002/asi>
- Cornish, F. (2015). Evidence synthesis in international development : A critique of systematic reviews & a pragmatist alternative. *Anthropology & Medicine*, 22(3), 263–277. <https://doi.org/10.1080/13648470.2015.1077199>
- Dala, Nikunj; & Pauleen, David J (2018). The Wisdom nexus: Guiding information system research, practice, & education. *Information system Journal*, 1-21. <https://doi.org/10.1111/isj.12196>
- Davis, J. (2016). *The Greats on Leadership: Classic Wisdom for Modern Managers*. Nicholas Brealey Publishing.
- Dredge, Dianne; Benckendorff, P., Day, M., Gross, M. J., Walo, Maree., Weeks, P. (2012). The philosophic practitioner & curriculum Space. *Annals of Tourism Research*, 39(4), 2154–2176. <https://doi.org/10.1016/j.annals.2012.07.017>
- Eck, Nees John Van; & Waltman, Ludo (2009). Software survey: Vosviewer, a computer program for bibliometric mapping. *Scientometrics*, 84, 523-538. <https://doi.org/10.1007/s11192-009-0146-3>
- Gentile, Mary C. (2013). *Giving Voice to Values: An Innovative Pedagogy for Values-driven Leadership Education*. in M. J. Thompson & David Bevan (Eds.), *Wise Management in Organizational Complexity* (pp. 169–180). Palgrave Macmillan.
- Hassi, Abderrahman. (2012). Islamic perspectives on training & professional development. *Journal of Management Development*, 31(10), 1035-1045.
- Hays, J. M. (2004). Dynamics of organizational wisdom. *Australian National University*, 17–35.
- Karam, C. M., Sidani, Y. M., & Showail, S. (2015). Teaching business ethics in the global south: Control, resistance, & phronesis. *Teaching in Higher Education*, 20(3), 255–271. <http://dx.doi.org/10.1080/13562517.2014.1001833>
- Kessler, E. H. (2006). Organizational wisdom. *Group & Organization Management*, 31(3), 296–299. <https://doi.org/10.1177/1059601106286883>
- Limas, Michael J; Hansson, R. O. (2004). Organizational wisdom. *Aging & Human Development*, 59(2), 85–103.
- Luthans, F., Vogelgesang, G. R., & Lester, P. B. (2006). Developing the psychological capital of resiliency. *Human Resource Development Review*, 5(1), 25–44. <https://doi.org/10.1177/1534484305285335>
- Maxwell, N. (2017). Can universities save us from disaster? *on The Horizon: The International Journal of Learning Futures*, 25(2), 115–130. <https://doi.org/10.1108/OTH-04-2016-0019>
- Monturo, Cheryl., & Hook, Kevin (2009). *From Means to Ends: Artificial Nutrition & Hydration*. *Nurs Clin N Am*, 44, 505-515. <https://doi.org/10.1016/j.cnur.2009.07.005>
- Mousavi Madani, Yaqub; Dadgar, A. (2020). *Pathology of Iran's higher education system from the point of view of Inflation of educational qualification (In Persian)*. Alzahra University. <https://www.alzahra.ac.ir>
- Moradi, M., & Miralmasi, A. (2020). Pragmatic research method. *Tehran: School of quantitative and qualitative research*. Retrieved from. Available at: <https://analysisacademy.com>
- Nixon, J. (2008). *Towards the Virtuous University: The Moral Bases of Academic Practice*. Routledge.
- Page, Matthew J; McKenzie, Joanne; Bossuyt, Patrick M; Boutron, Isabelle; Hoffmann, Tammy C., Mulrow, Cynthia D., Shamseer, Larissa., Tetzlaff, Jennifer M., Akl, Eli a., Brennan, Sue E., Chou, Roger., Glanville, Julie., Grimshaw, Jeremy M., Hróbjartsson, Asbjorn., Lalu, Manoj M., Li, Tianjing., Loder, Elizabeth W., Mayo-Wilson, Evan., McDonald, Steve., McGuinness, Luke A., Stewart, Lesley A., Thomas, James .(2020). The PRISMA 2020 tatement: An updated guideline for reporting systematic reviews. *Research Methods & Reporting*, 19. <http://dx.doi.org/10.1136/bmj.n71>
- Rooney, D. (2013). *Empirical wisdom research: A community approach*. in M. J. Thompson & David Bevan (Eds.), *Wise Management in Organizational Complexity* (pp. 34–52). Palgrave Macmillan.
- Rousseau, D. M. (Ed.). (2012). *The Oxford Handbook of Evidence-Based Management*. Oxford University Press.
- Salman Mahini, S. (2016). Delivery perspective in higher education: Knowledge - Based economy or Economy - Oriented knowledge? *National Congress of Higher Education of Iran*, 1–7(In Persian).
- Sen, A. (2009). *Capitalism beyond the crisis*. *New York Review of Books*, 56(5), 1–7.

- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/https://doi.org/10.1016/j.jbusres.2019.07.039>
- Thompson, M., & Bevan, D. (2013). Wise management in organisational complexity: An introduction. in M. J. Thompson & David Bevan (Eds.), *Wise Management in Organizational Complexity* (pp. 1–12). Palgrave Macmillan.
- Waddington, H., White, H., Snilstveit, B., Garcia Hombrados, J., Vojtkova, M., Davies, P. (2012). How to do a good systematic review of effects in international development: A tool kit. *Journal of Development Effectiveness*, 4(3), 359–387. <https://doi.org/10.1080/19439342.2012.711765>
- Walker, G. (2019). Higher education leadership & management as “practical reasonableness”: A phronetic approach to higher education research. *Theory & Method Higher Education Research*, 5, 73–90. <https://doi.org/10.1108/S2056-375220190000005006>
- Waltman, L. (2016). A review of the literature on citation impact indicators. *Journal of Informetrics*, 10(2), 365–391. <https://doi.org/10.1016/j.joi.2016.02.007>
- Wang, C., Lim, M. K., Zhao, L., Tseng, M., Chien, C., & Lev, B. (2019). The evolution of omega. *The International Journal of Management Science Over The Past 40 Years: A Bibliometric Overview*. *Omega*, 1–40. <https://doi.org/10.1016/j.omega.2019.08.005>
- Zupic, Ivan; & Cater, T. (2014). Bibliometric methods in management & rganization. *Organizational Research Methods*, 1–44. <https://doi.org/10.1177/1094428114562629>