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Research trends in the domain of Economic Sciences, Business, and Management Sciences: The case of the Algerian Scientific Journal Platform (ASJP)

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Abstract

Although scientific publishing in the field of economics, business and management sciences in Algeria has been the focus of interest for researchers and practitioners for over 40 years, there has been little research into its content.

The study investigates and analyzes the publications available on the Algerian Scientific Journal Platform (ASJP) through text mining techniques. Analysis was conducted on the keywords extracted from 68,909 papers published between 1984 and 2023 to identify the broad research areas.

The primary research concerns of the Economic Sciences, Business, and Management Sciences publications on the Algerian Scientific Journal Platform

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(ASJP) were shown. Thus, this work provided valuable insights and implications and could be used as a guide for contributors in this domain.

Keywords: ASJP, Latent Semantic Analysis, LSA, Text mining, Scientific research

1. INTRODUCTION

In the epoch of the information revolution that succeeded in the twentieth century, accumulating knowledge lacks significance unless it is endowed with accessibility to diverse scientific practices (Lamraoui & Tamrabet, 2022). The domain[1] of Economic Sciences, Business, and Management Sciences covers various areas (Coccia, 2018). The Algerian research community has contributed significantly to knowledge production for many years through various issues and research questions. Gaining insight into the patterns among research themes in recent years is of the greatest importance in exploring further themes and making meaningful contributions to advancing knowledge. An inherent trend within the contemporary economy is the substantial increase in quantity and widespread accessibility of structured and unstructured (textual) data, which is now regarded as a valuable resource for enhancing decision-making processes (Kulkarni et al., 2014). This area of research is under widespread scrutiny and investigation, even if a limited body of international research has been conducted to analyze this subject.

Despite this, there has been an increased interest in text-mining approaches in recent years. García-Jurado et al. (2021) conducted an empirical investigation to elucidate the conceptual evolution of social entrepreneurship and identify salient research directions within the field. The researchers employed latent semantic analysis (LSA) to examine the keywords in a corpus of 882 scholarly papers. Wagire et al. (2020) employed a text mining technique, Latent Semantic Analysis (LSA), to examine a corpus of 503 abstracts from scholarly publications and conference papers.

[1] A domaine is: A field is a coherent set of disciplines and specialties, reflecting the institution's fields of competence of the higher education establishment (Arrêté n° 712 du 03 Nov 2011 fixant les modalités d'évaluation, de progression et d'orientation dans les cycles d'études en vue de l'obtention des diplômes de Licence et de Master, 2011).

The authors engaged in a discourse on research dynamics and put up a taxonomy about the research landscape of Industry 4.0. 13 primary research areas and 100 distinct research themes were identified. The analysis conducted by Manikas et al. (2020) is similar. Their study aims to analyze 21,053 abstracts to identify the primary themes or subjects that have emerged in operations management research from 1961 to 2017. A total of 18 distinct topic groupings were algorithmically determined.

Text mining techniques are advanced analytical tools that possess the capability to extract a larger quantity of information from research content and encompass several methods such as text categorization, text summarization, topic detection, keyword extraction, search and retrieval, and document clustering, among others (Hashimi et al., 2015; Kondeti et al., 2022; Thakur & Kumar, 2022). Text mining has the potential to overcome the restrictions often associated with conventional literature review methods. An automated procedure can efficiently discern patterns and common themes by applying objective data (Romero-Silva & Leeuw, 2021). According to Paul and Parra (2021), Latent Semantic Analysis (LSA) is a quantitative technique used to infer underlying themes by analyzing word frequencies and relationships within a given corpus, encompassing all articles within a specified publication over a specific period.

However, a literature search has revealed a lack of scholarly investigation of the primary research themes within the domain of Economic Sciences, Business, and Management Sciences about ASJP. This indicates a need to identify the main research themes in this domain.

More specifically, we explore the following three research questions in the paper:

- RQ1. What are the main research themes in Economic Sciences, Business, and Management Sciences?

- RQ2. How have the main research themes evolved over time?

- RQ3. How major research themes are semantically linked to the principal research areas?

Numerous new techniques are being developed to extract underlying conceptual information from unstructured data. In this work, Latent Semantic Analysis (LSA) was employed to examine the keywords extracted from a dataset including 68,497 articles accessible through the ASJP.

This study represents the initial comprehensive analysis of scholarly articles published within the Algerian context. It focuses on the Algerian Scientific Journal Platform (ASJP), established in 2017 by the General Direction of Scientific Research. The ASJP was created as a strategic initiative to streamline the organization of scientific journal publications in Algeria, serving as an information system. Moreover, it aims to facilitate access to national scientific publications, promoting open access and serving as a centralized repository for national journals and manuscripts (Zeghdani & Gamouh, 2022). These challenges include the process of submitting articles, biases in the editorial process by journal boards, inadequate communication between researchers and journal teams, and various other problems and difficulties (Lamraoui & Tamrabet, 2022).

To fulfill the above aim, this paper first gives a brief overview of the studies using text mining and Latent semantic analysis, which are later used to analyze the findings. Afterward, a procedure for treating the dataset in the method section, followed by a presentation and analysis of the results. Afterward, a discussion elaborating upon the results is held, summarized in the conclusion depicting the main research themes in Economic Sciences, Business, and Management Sciences.

2. LITERATURE REVIEW

The landscape of academic research is vast and multifaceted, encompassing various topics and methodologies. A comparative analysis of several studies provides a comprehensive insight into the dynamic nature of scholarly endeavors. The studies discussed here, ranging from operations management, accounting, social responsibility, and information systems, employ text data mining techniques to unravel hidden patterns, identify trends, and draw meaningful conclusions.

When the data is unstructured, Latent Semantic Analysis (LSA) has been used as a statistical text analysis method. For instance, Accounting Information Systems (AIS) (Hutchison, Daigle, & George, 2018), OpenStreetMap (OSM) (Sehra et al., 2017), and Building Information Modeling (BIM) (Yalcinkaya & Singh, 2015). LSA has been instrumental in identifying prevalent academic research themes, trends, and emerging research domains in these fields. It has facilitated the visualization of thematic trends over time and yielded insights for future research directions. Additionally, LSA has been implemented in document retrieval to enhance efficiency by pre-clustering documents and computing similarity between query vectors and cluster central points (Wenli, 2016).

The Latent Semantic Analysis (LSA) technique has been effectively employed in the examination of business literature within the fields of management information systems and operations research (Kulkarni et al., 2014; Love & Hirschheim, 2016; Sidorova et al., 2008). Additionally, LSA has been applied in the analysis of real estate research (Winson-Geideman & Evangelopoulos, 2013a, 2013b), as well as various other domains.

One trend in the research is to analyze published papers from a domain or field perspective. Love and Hirschheim (2016) analyzed the scholarly output within Information Systems. The analysis focused on a dataset comprising 4,745 papers, encompassing titles, keywords, and abstracts, spanning 1991 to 2013. This study

reveals the latent semantic relationships that may not be immediately apparent through traditional analysis methods. However, the dataset used in this study seems to be limited when compared, for example, to the study of Manikas et al. (2020), encompassing a substantial dataset of 21,053 abstracts. The researchers sought to discern the evolving landscape of operations management scholarship from 1961 to 2017. This led to the identification of 18 distinct and unique topic clusters.

Studies also show that it is possible to conduct more rigorous research using a systematic review and the application of Latent Semantic Analysis (LSA). This is the case for the study of García-Jurado et al. (2021), who conducted a systematic review to decipher the conceptual evolution of social entrepreneurship and identify the most captivating research trends within this domain. Their approach encompassed a database of keywords derived from 882 academic articles, more limited than Love and Hirschheim (2016) used in their study.

On the other hand, recent research has taken a new approach by conducting a study to evaluate the pattern of national research cooperation, research hotspots, and research evolution before and during the epidemic (Wang et al., 2022). Employing a combination of text mining and systematic literature review, Wang et al. (2022) focused on publications concerning marine plastic pollution from January 2015 to 2022. Their analysis incorporated a total of 1702 publications. Notably, the investigation revealed a distinctive trend in publications about marine pollution during the COVID-19 pandemic.

All these studies used latent semantic analysis on different sizes of unstructured data. However, it is possible to highlight that more recent studies conducted systematic reviews and LSA. These studies contribute to a deeper understanding of the landscape of the chosen domain/field, providing insights into the changing dynamics and focus areas within the field over the examined period.

Whereas the studies presented above investigate trends domains/fields, other research focused more on only some Journals. It is the case of Winson-Geideman and Evangelopoulos (2013b), who conducted a comparative analysis of only three academic journals, focusing on their intellectual characteristics. This investigation examined a dataset consisting of 2,526 abstracts from research articles to identify a shared group of topics that constitute the intellectual core of real estate research. Moreover, Hutchison, Daigle, and George (2018) have investigated the academic research themes utilized Latent Semantic Analysis on 1033 article abstracts from three journals from 1986 to 2015. As a result, they have identified 14 prominent academic research themes. However, another study by Hutchison, Plummer, and George (2018) employed the LSA technique to scrutinize 2,300 abstracts of articles spanning from 1979 to 2015. The authors could delineate various research topics within scholarly tax research journals through this method. More recently, Guan et al. (2019) undertook a comprehensive study to pinpoint the fundamental research domains covered in the International Journal of Production Research (IJPR) from the journal's inception in 1961 through to 2015. Their research also sought to illuminate the progression of thematic emphasis by analyzing abstracts from a substantial collection of 8653 articles.

All these studies employed a text mining technique, specifically Latent Semantic Analysis (LSA), in their investigation to identify the core areas of research that have been the focus of contributions to the journal over a of time (Guan et al., 2019; Hutchison, Daigle, & George, 2018; Hutchison, Plummer, & George, 2018). This research sheds light on the enduring and evolving themes within production research. It offers insights into how a specific journal's focus areas have evolved. Moreover, they are also helpful in uncovering the distinct thematic emphases of each journal (e.g., Winson-Geideman & Evangelopoulos, 2013b), underscoring the unique angles and areas of focus that set these journals apart.

LSA analysis was used on keywords, titles, and abstracts, but other applications can be done. Some research used LSA techniques on online reviews. For instance, the study of Fresneda and Gefen (2019) introduced a novel approach to a dataset consisting of 20,722 reviews centered around appliances and appliance supplies available on Amazon.com. Similarly, Anagnostopoulou et al. (2020) aimed at quantifying online customer reputation's influence on businesses' financial profitability. Their research employed text data mining, explicitly utilizing Latent Semantic Analysis (LSA) on online reviews of 159 hotels located in the UK. Their findings suggest a tangible connection between the nature of online customer feedback and the financial success of businesses, highlighting the importance of cultivating positive online reputations. The same research with a more important sample size was conducted by Xu (2020) on hotel reviews to scrutinize and contrast customers' attention toward different attributes of products and services across varying star levels. The researcher employed a text data mining approach, utilizing latent semantic analysis and a text regression methodology. This investigation encompassed the analysis of 4120 customer reviews relating to 600 hotels situated in the 100 largest cities in the United States. This research contributes to a deeper understanding of customer feedback and satisfaction dynamics, highlighting the nuances in how different attributes influence customer perceptions.

Furthermore, there have been several studies that have investigated trends on specific themes. Paul and Parra (2021) conducted an assessment regarding incorporating Corporate Social Responsibility (CSR) or Social Responsibility (SR) themes within 1188 articles published between 2000 and 2018. Wagire et al. (2020) embarked on a study to explore the dynamic aspects of research in Industry 4.0. Their analysis focused on 503 abstracts derived from journal papers and conference proceedings. Notably, the LSA-driven analysis unveiled 13 principal research areas and 100 research themes, providing a comprehensive and structured view of the multifaceted nature of Industry 4.0 research. Similar work has also been pursued by

Daspit et al. (2021), who undertook a comprehensive review to assess scholarly progress and elucidate distinctions within family firms. Utilizing a text-mining approach, their research analyzed a dataset of 781 articles sourced from 33 distinct journals. The work of Wu and Chen (2021) extends the idea of using LSA by studying the design and delivery of New Product Development (NPD) courses for business students. Through text data mining, they analyzed a comprehensive dataset comprising 3240 papers published in journals between 2010 and the end of 2019, focusing on titles, abstracts, and keywords of research papers.

It can be seen from these studies that LSA has been used for a variety of research purposes. Some studies have analyzed articles published in a broad field, others have focused on a limited number of journals, and others have chosen a specific theme. Trends research seems important and has interested more researchers in recent years. Trends Topic emerged through the use of the LSA technique. However, to fully understand the impact and potential of LSA in diverse contexts, it is essential to consider its applications beyond the academic realm.

Kulkarni et al. (2014) conducted a study aimed at showcasing the utility of Latent Semantic Analysis (LSA) as a technique for revealing the underlying intellectual framework within the domain of Operations Management (OM). Their approach involved text data mining, specifically focusing on applying LSA. Their analysis centered around the abstracts of 3,207 research articles in OM. By examining abstracts, they sought to showcase how LSA can bring to the forefront the underlying intellectual structure that may not be readily apparent through manual review alone. This study highlights the power of LSA in revealing the complex relationships and themes within a body of academic literature, offering insights into the organizational and conceptual framework that defines the field of Operations Management research. Their study resonates with Indulska et al. (2012), who used a quantitative methodology to perform content analysis in their research. Their investigation entailed contrasting Leximancer and latent semantic analysis (LSA) as

data mining analytical techniques on a dataset encompassing a 25-year timeframe. The dataset, comprised of 8544 abstracts from papers published across various journals within the domains of information systems, management, and accounting, served as the focus of their study. The comparison between LSA and Leximancer provided a valuable perspective on how these techniques can contribute to text data mining, enhancing researchers' ability to extract meaningful insights from large volumes of textual data. These studies collectively underscore the importance of methodologies in deciphering the underlying fabric of academic discourse.

Fresneda and Gefen (2019) also highlighted that the LSA approach could mitigate some of the biases inherent in conventional vote-up/vote-down-based measures. This innovative approach suggests the potential for more accurate and nuanced assessments of review helpfulness, emphasizing the role of text mining and semantic analysis in advancing the methods of evaluating user-generated content. At the same time, for Hutchison et al. (2023), LSA is a valuable research tool that effectively mitigates subjective bias and allows analysis of unstructured data and text by individuals of any standing. In a recent study, the authors have outlined the essential procedures required for natural language processing by LSA and other possible research opportunities. This demonstrates the expanding relevance of LSA and its contributions to both research and practical applications.

3. METHODS

3.1. Data Collection

The study investigates and analyzes the publications available on the Algerian Scientific Journal Platform (ASJP) through text mining techniques, specifically LSA.

This way, article information, including keywords, was collected from 133 journals on ASJP By 11/07/2023 based on two criteria. To be in the scope and

classified as "C" or "B"[2]. Journals are categorized into 29 different fields. Each field contains subfields. For the aim of this study, we have selected only three fields with an attachment to Economic sciences, Business, and Management Sciences. As presented in Table 1, the first field, "Business, Management, and Accounting," contains ten subfields. The second field, "Economics, Econometrics, and Finance," contains three subfields. Furthermore, the last field that seems to be attached to the scope is "Administrative Sciences and Public Management." It includes seven subfields.

Table 1. Algerian Scientific Journal Platform classification of scientific journals

domain	Economic Sciences, Business, and Management Sciences		
field	Business, Management, and Accounting	Economics, Econometrics, and Finance	Administrative Sciences and Public Management
subfield	1. Business, Management, and Accounting 2. Accounting 3. Business and International Management 4. Management Information Systems 5. Management of Technology and Innovation 6. Marketing 7. Organizational Behavior and Human Resource Management 8. Strategy and Management 9. Tourism, Leisure, and Hospitality Management 10. Industrial relations	1. Economics, Econometrics, and Finance 2. Economics and Econometrics 3. Finance	1. Public management 2. Administrative science 3. Public governance 4. Public economy 5. Administrative information systems 6. institutional communication 7. Organizational sciences

Source: adapted by the authors from ASJP

[2] These classifications are published by the General Direction of Scientific Research. All the review "C" are national and without international indexation. For journals classified "B", they are indexed in international database.

The retrieved outcome was constrained to these scholarly articles. Sixty-eight thousand nine hundred nine scientific papers were identified, comprising the initial selection of papers. The spreadsheet datasets were created by extracting keywords from 68,909 articles, each period having its dataset. As mentioned earlier, the datasets were utilized to conduct data analysis by applying latent semantic analysis.

3.2.Data Analysis

The present study utilizes a text-mining analysis technique. The Latent Semantic Analysis (LSA) technique is applied to a dataset of 68,909 published articles on the ASJP. Latent Semantic Analysis (LSA) is a text analytics technique to unveil conceptual information embedded inside unstructured data. The Latent Semantic Analysis (LSA) methodology is predicated on the fundamental premise that words with similar meanings will tend to appear in proximate sections of text (Dumais et al., 1988; Hutchison et al., 2023; Kulkarni et al., 2014). As previously indicated, this methodology is better suited for identifying emerging patterns and analyzing a significant dataset. The following will delineate the algorithmic technique employed in this investigation.

Pre-Processing Stage: Punctuation, numerals, non-alphabetical and special letters, and stop words are all removed from the data during pre-processing. “Stop words” relate to frequently occurring words that have no relevance to the content of a text, such as “the” or “and.” More than 2,000 “stop words” in Arabic, French, and English are excluded from this analysis. The data is tokenized for the ensuing tasks. This process divides the text into units (tokens) such as phrases, words, and other meaningful entities. In this case, the text corpus is segmented by words.

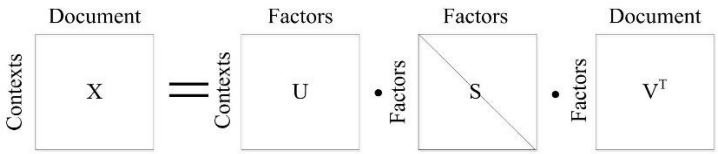
Transformation:

Term Frequency Matrix Transformation: The subsequent stage was converting the collection of words and documents into a matrix representing the frequency of

terms. Each matrix cell corresponds to the frequency of a given keyword appearing in a particular research publication. The matrix values were transformed using the term frequency-inverse document frequency (TF-IDF) weighting approach (Deerwester et al., 1990; Dumais et al., 1988). The employed weighting strategy enhances the significance of infrequent keywords while diminishing the significance of popular words, prioritizing the distinctiveness of each keyword and text above their common occurrence.

Singular Value Decomposition: During this step, singular value decomposition (SVD) technique is employed on the TF-IDF weighted matrix to decompose it into three separate matrices: the matrix that represents the association between terms and factors, the matrix that contains the square roots of the eigenvalues, referred to as the singular value matrix, and the matrix that represents the association between documents and factors (García-Jurado et al., 2021; Parr & Lu, 2010). The matrix of factor loadings exhibits the coefficients indicating the extent to which keywords are associated with a particular latent component. The matrix representing the relationship between documents and factors depicts the loadings of the manuscript onto a specific latent factor. The singular values, which correspond to the square roots of the eigenvalues, indicate the importance of particular elements.

Fig.1. Singular Value Decomposition (SVD)



Source: (Hutchison, Plummer, & George, 2018)

Identification of theme: The interpretation of the results obtained by Latent Semantic Analysis (LSA) was conducted in a manner consistent with the conventional approach employed in exploratory factor analysis. Therefore, the

interpretation process is facilitated by associating each latent factor with its highly weighted keywords and manuscripts. A table was generated, which included high-loading keywords and phrases.

One potential drawback of this approach is its reliance on the assumption that linked text portions contain similar terms. However, it is essential to acknowledge the potential challenges posed by synonyms and the conversion of human perception of similarity between individual terms, word groups, and phrases (Hutchison et al., 2023).

4. RESULTS AND DISCUSSION

To uncover dominant thematic patterns in our dataset of scholarly works, a careful analysis of the most common phrases has unearthed several compelling comparisons and contrasts. These comparisons underscore the nuanced interplay of concepts while providing insights into the different dimensions researchers explore in this corpus.

The keyword analysis in Table 2 below highlights terms and their frequencies used in the articles published on the ASJP platform. These terms are ranked in descending order according to their number of appearances. It is possible to note that the terms "الجزائر", "التنمية المستدام", "الأداء", "النمو الاقتصادي" ,"المالية, management" etc. However, since it is impossible to integrate all terms in descending order in this table, it shows only the 60 most important terms in order of decrease.

Table 2. Top Terms by Count

Term	Count	Term	Count	Term	Count
الجزائر	3180	public	1178	المعلومات	985
المالية	2957	الاستثمار	1172	العربية	975
financial	1807	الاقتصادي	1165	المعرفة	954
النمو الاقتصادي	1741	البيئة	1147	التمويل	947
الأداء	1723	المؤسسة	1144	الأمن	914
التنمية المستدامة	1633	development	1117	international	911
management	1474	algerian	1112	العامة	896
التنمية	1454	الاقتصاد	1109	النظام	880
المالي	1442	التسويق	1086	quality	872
performance	1440	economic	1086	islamic	863
الدولية	1323	algérie	1079	العمومية	859
إدارة	1317	الإسلامية	1067	développement	859
الجزائرية	1292	جودة	1061	العام	839
algeria	1242	التعليم	1044	المسؤولية الاجتماعية	830
الاقتصادية	1238	السياحة	1040	التنظيمي	822
نموذج	1231	الإدارة	1039	الالكترونية	820
نظام	1230	marketing	1032	القطاع	811
المؤسسات	1214	information	1008	تنمية	806
العمل	1197	الاجتماعية	1004	system	802
الجزائري	1196	social	991	الإلكترونية	792

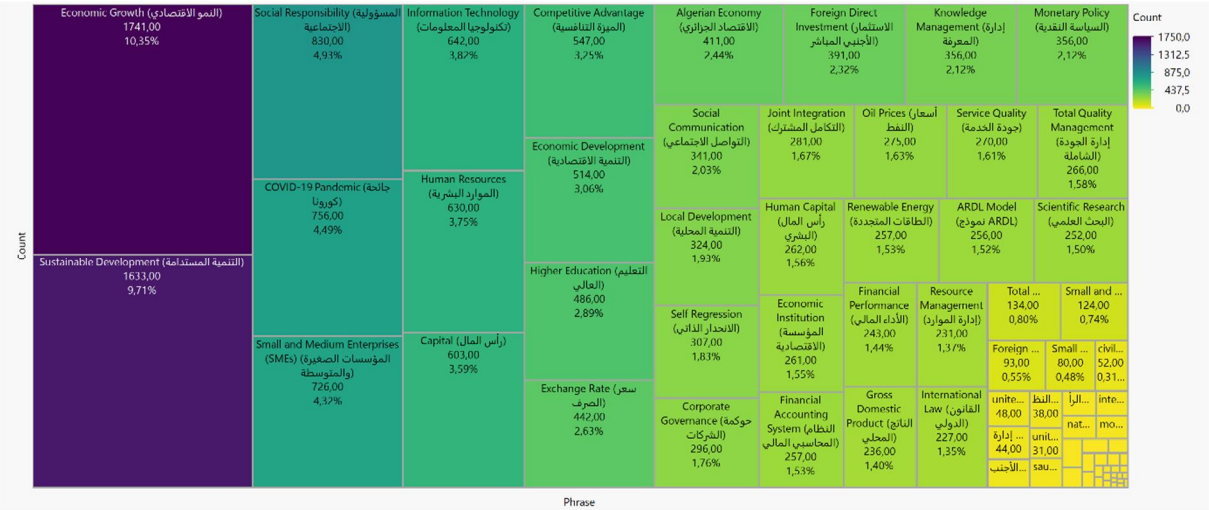
Source: results of the analysis

These results testify to the great interest of academic research in Algeria to address their interest in the national context. In addition, issues related to finance are the core of these studies. Other studies also focus on economic growth and sustainable development.

Nevertheless, terms containing a single word were isolated to highlight the most important keywords. Therefore, it is only the terms more significant than a word that is recurring have been retained. The figure below presents them in order of importance regarding frequency of occurrence and percentage. The keywords “economic growth” appear first, followed by “sustainable development”. These two keywords have been widely used by articles published in economics, business and

management sciences. Other important keywords were also discussed, for example, “social responsibility,” “COVID-19”, and “Small and medium-sized enterprises”.

Fig.2. Top keywords by Count and Percent

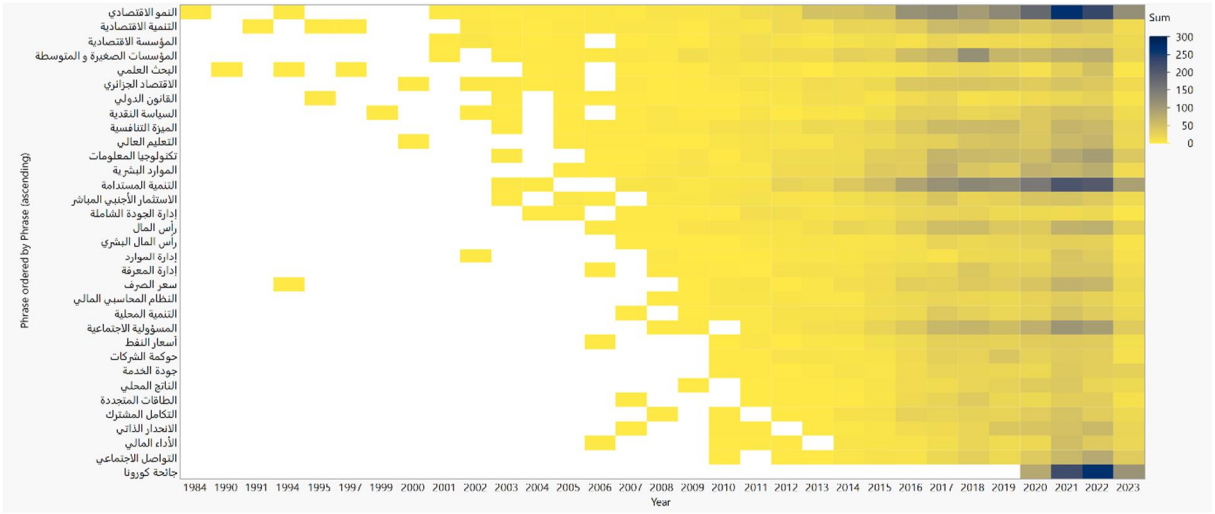


Source: Results of the Analysis

Nevertheless, if we want to know the precise evolution of keywords over time, we must refer to Figure 3 below. This considers all the sentences that have been presented in Figure 2 to represent their evolution as well as their importance over time. It is possible to note that “economic growth” has long been the subject of significant interest by researchers since 1984. This is also the case with the keyword “economic development” but also “scientific research”.

However, important new keywords appeared in the 2000s. Notably, for “competitive advantage,” “information technology,” “sustainable development”, and “foreign direct investment”, it is from the year 2002 that they appeared. However, it was not until 2006 that they appeared for many keywords.

Fig.3. Phrase evolution per year



Source: Results of the Analysis

The articles published on the ASJP platform focused on at least 30 keywords. Surprisingly, the keyword “COVID-19” has appeared recently since 2020 but has been strongly considered. In terms of importance, it is in fourth position after the other most important keywords. This indicates that many researchers have been interested in studying the impact or effect of COVID-19 in economics, business and management sciences. The number of published articles with this keyword is more numerous; they have gone beyond long-standing topics, such as “foreign direct investment”.

Further analysis shows the emergence of 14 themes related to economics, business and management sciences. The first theme is “economic growth”. Suppose we refer to “high loading terms”, a good correlation indicator between these terms and emerging themes. In that case, it is possible to see that the theme “economic growth” is related to inflation, and currency, and is often analyzed using the ARDL method.

The second theme is “economic development”. The research published in this direction has focused on economic development in Algeria concerning the market, companies, and governance.

The third theme is “entrepreneurship”. Studies in this area have explored various aspects such as credit, culture, and management. In particular, several research endeavors have investigated the subject in connection with the “National Agency for the Management of Micro-credit in Algeria” (ANGEM). In contrast, others have looked at it with the “National Agency for Assistance and Development of Entrepreneurship” (ANSEJ). Notably, recent investigations have highlighted the emergence of “startups” as a keyword in the context of entrepreneurship. This trend indicates a growing research focus on the topic and the various policy and governmental efforts in this domain.

The fourth theme is “accounting and financial system”. This considers accounting and financial standards, audit operations, and applied standards.

The 5th, “Islamic finance” is one of the themes that did not emerge among the keywords previously presented in Figures 3 and 4. However, the “LSA” method used made it possible to highlight this. This theme includes banking, Islamic, financing, risk, and Basel.

Theme 6 is “Competitive Advantages”. Research has addressed this theme with cost, business behavior, and knowledge.

Another theme, “volume returns,” was about finance, particularly with financial markets, stock exchanges, and equities.

The articles dealt with Facebook, social networks, and the internet for social communication.

There are also Topics such as “Marketing Strategies”, “Organizational Behavior”, “Tourism Development”, “Renewable Energy” treating specifically on solar and wind energy, “Tax Evasion”, and lastly, “Foreign Direct Investment”.

Table 3. Topical factors related to the Economic Sciences, Business, and Management Sciences domain

Topic label	High-loading terms
Economic Growth (النمو الاقتصادي)	rate, exchange, الانحدار الذاتي, model, النمو الاقتصادي, ardl, oil, inflation, نموذج, سعر الصرف, monetary, التضخم, prices, autoregressive, الموزعة, policy
Economic Development (التنمية الاقتصادية)	développement, algérie, économique, ressources, gestion, système, marché, entreprises, enseignement, entreprise, humaines, politique, travail, résultats, économie, gouvernance
Entrepreneurship (المقاولاتية)	لتسيير, entrepreneurial, المصغر, spss, الوكالة, agency, القرض, nationale, agence, مقاولاتية, entrepreneurs, culture, الدراسة, المقاولاتية, وطنية
Financial Accounting System (النظام المحاسبي المالي)	accounting, standards, المحاسبية, المحاسبة, معايير, القوائم, statements, المعايير, المحاسبي, disclosure, النظام المحاسبي المالي, الدولية, financial, التدقيق, الحسابات
Islamic Finance (المالية الإسلامية)	islamic, banks, banking, الإسلامية, bank, financial, بنك, البنوك, risk, بازل, basel, التمويل, المالية, finance
Competitive Advantage (الميزة التنافسية)	management, human, competitive, advantage, performance, cost, small, enterprises, الأداء, strategic, medium, resources, التكلفة, knowledge, التكاليف, balanced
volume returns (عوائد الحجم)	الحجم, envelopment, المتغيرة, عوائد, مغلف, returns, scale, efficiency, الثابتة, البيانات, dea, data, variable, الكفاءة
Social Communication (التواصل الاجتماعي)	electronic, التواصل الاجتماعي, digital, media, communication, مواقع, social, information, technology, internet, الإلكتروني, الالكترونية, facebook, signature, الإلكترونية, الالكتروني
Marketing Strategies (استراتيجيات التسويق)	brand, consumer, للعلامة, العلامة, image, المستهلك, التجارية, ولاء, marketing, الذهنية, customer, التسويق, loyalty, equity, الصورة
Organizational Behavior (السلوك التنظيمي)	organizational, التنظيمي, work, job, الوظيفي, quality, العمل, empowerment, التنظيمية, management, public, leadership, commitment, health, administrative, القيادة

Tourism Development (التنمية السياحية)	development, tourism, investment, السياحية, السياحة, التوجيهي, القطاع, الاستثمار, sector, estate, السياحي, التنمية, local, للتهيئة, المخطط
Renewable Energy (الطاقات المتجددة)	renewable, energy, الطاقة, energies, المتجددة, solar, الشمسية, الطاقات المتجددة, الرياح, طاقة, التنمية المستدامة
Tax Evasion (التهرب الضريبي)	tax, الضريبي, التهرب, evasion, الجبائية, الجباية, المكلف, الضريبة, المحلية, fiscal, الضريبية, الجبائي, budget, بالضريبة
Foreign Direct Investment (الاستثمار الأجنبي المباشر)	اقتصادي, استثمار, نمو, مباشر, أجنبي, مالية, مالي, تنمية, مشترك, تكامل, مؤسسات, صغيرة, مستدامة, ومتوسطة, اقتصادية

Source: results of the analysis

Other themes have also emerged but have not been taken into consideration in the context of this research because it does not belong to the field of economics, business and management sciences but rather to the field of law or education since, on the one hand, there may be a relationship between these fields, and on the other hand, some journals accept articles that fall within this framework.

These findings may help others to find new ways or topics of research.

5. CONCLUSION

The main goal of the current study was to determine the main research themes in Economic Sciences, Business, and Management Sciences through the analysis of published papers on ASJP.

The results of this investigation show that “economic growth”, “sustainable development”, and, more recently, “covid-19” appear significantly as keywords in the published papers. Moreover, there are 3 phases in the search. The first was between 1984 and 2005. The second, between 2006 and 2012/13. It was during this period that new themes were tackled. In the third period from 2013/14 to the present day, research has intensified, but on themes largely covered during the last three decades.

The findings of this study suggest that even if new themes are tackled, they are of lesser importance than the large number of works that fall within the scope of the keywords mentioned above.

The understanding gained here should help researchers investigate new areas of research, specifically those retained by the General Direction of Scientific Research throughout the National Framework of Priority Research Areas (Dgrsdt, 2021; Décret exécutif n° 21-89, 2021). The National Council for Scientific Research and Technology defines the broad outlines of national scientific research and technological development policy (Loi n° 15-21, 2015/2020; Loi n° 20-01, 2020/2022). The advancement of nations is interrelated with their level of investment in advanced research and reliance on the outcomes of scientific research disseminated across diverse domains of progress (Lamraoui & Tamrabet, 2022).

This is the first study that has examined the main research themes in Economic Sciences, Business, and Management Sciences in the Algerian context, from 1984 to 2023. However, several limitations need to be noted regarding the present study. Some studies do not have keywords, or the keywords are both in Arabic and English. Fortunately, the LSA method overcomes this limitation. Some scientific journals are misclassified, or their domain contains only one subfield in their scope and figures in the list of scientific journals. (E.g, El-Tawassol" التواصل"). Moreover, some scientific journals have a vast scope and integrate all the subfields. Nevertheless, their number is limited.

Further research can consider Investigating the apparition of these keywords by field or subfield, or only on a few specific journals. Other methods can be used to examine data, such as Latent Dirichlet Allocation (LDA). This analysis can be conducted on abstracts and titles to compare or extend results.

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