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# SCIENTOMETRIC ANALYSIS IN ENTREPRENEURIAL ORIENTATION AND CURIOSITY

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## SUMMARY

Studies regarding various factors involved in both the corporate and academic realms have been scrutinized and analyzed over the past four decades, amplifying their relevance in the current period. This is specified within the framework of research concepts such as entrepreneurial orientation and curiosity through a scientometric analysis, aiming to describe the bibliometric indicators of scientific development in this field from the earliest records in the Web of Science online database dating back to 1975 to 2023, identifying

authors, countries, publications, citations, journals, and institutions. In general terms, the results revealed a growing development of publications related to the thematic vector, increasing in recent years and showing a geographical concentration associated with the United States region. The findings demonstrate that greater contributions provide an updated insight into research on entrepreneurial orientation and curiosity and their development through standards-based measurements and evidence.

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## Introduction

 Within the framework of scientometric analyses with bibliometric techniques applied to science (Vanti, 2000), research is conducted, focusing on documents as empirical material, regarding the construct

called entrepreneurial orientation, in relation to the construct of curiosity. Entrepreneurial orientation refers to an organization's ability to identify and exploit market opportunities, developing innovative products and services with a long-term vision, establishing itself as a strategic mindset focused on identifying market opportunities and the company's

ability to exploit those opportunities (Miller, 2011). Empirically, applications of the scale for measuring entrepreneurial orientation have been developed (Boada-Grau *et al.*, 2016), driving a line of research in entrepreneurial orientation (Covin and Slevin, 1989; Lumpkin and Dess, 1996; Wiklund and Shepherd, 2003). In this sense, entrepreneurial

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orientation can be understood as a dynamic ability that allows companies to adapt to changes and maintain their long-term competitive advantage by seizing market opportunities (Lumpkin and Dess, 1996; Teece *et al.*, 1997; Wiklund and Shepherd, 2003). In this framework, it has been evidenced that psychological processes have significant influences on entrepreneurial behavior, with psychological capital being significant predictors of business success and entrepreneur well-being (Baluku *et al.*, 2016; Baron *et al.*, 2016). In this context, curiosity is taken as a relevant psychological component, understood as a feeling of deprivation that reflects uncertainty and mental tension, which motivates information-seeking behavior and problem-solving (Litman and Jimerson, 2004), which relates to the concept of entrepreneurial orientation in the sense of exploring market opportunities (Miller, 2011).

In this context, the present research describes attributes of the scientific community, identifying association links supported by: co-authorships in publications, the degree of impact of institutions and authors, cooperation among regions, common references, common keywords, among other factors to identify the characteristics of scientific production associated with the research vector.

### *Theoretical Framework*

The construct of entrepreneurial orientation is an organizational strategy associated with performance, focusing on identifying and exploiting market opportunities, founded on different dimensions subject to constant discussion (Covin and Slevin, 1989; Lumpkin and Dess, 1996; Wiklund and Shepherd, 2003; Miller, 2011; Cho and Lee, 2018). This concept refers to an approach that centers management on identifying and exploiting market opportunities, concerning the long-term success of the company, within the context of changes and maintaining competitive advantage. In this sense, it is how the company perceives and responds to its business environment. The dimensions incorporated into the construct of entrepreneurial orientation consist of innovation, which refers to the capacity to generate new ideas and solutions; proactivity, referring to the ability to respond to and anticipate market changes; and risk-taking, referring to an organization's ability to take calculated risks to seize market opportunities; later, autonomy and competitive aggressiveness are added to these dimensions. In this regard, this construct is aimed at substantiating competitive advantages, allowing for the comparison of

organizational behavior among different companies, and also within a company at different time periods.

In this context, it is possible to relate entrepreneurial orientation to psychological processes, due to the influences of these mental operations on business activities and performance (Baluku *et al.*, 2016; Baron *et al.*, 2016; Boada-Grau *et al.*, 2016; Cho and Lee, 2018). Particularly, curiosity as a feeling of deprivation, reflecting uncertainty and psychological tension, which drives information-seeking behavior (Litman and Jimerson, 2004; Grossnickle, 2016), related to the construct of entrepreneurial orientation due to the need to seize market opportunities. In this sense, curiosity is defined as the desire to acquire new knowledge, understood through two typologies, namely perceptual curiosity, which is understood from the perception of stimuli evoked by visual, auditory, or tactile stimulation, which is activated by extraordinary situations, events, factors, developments affecting the sense organs, hearing, life, taste, temperature, and epistemic curiosity, defined as an epistemological impulse for knowledge, stemming from information, in the sense of the desire for knowledge that motivates individuals to learn new ideas, bridging information gaps and problem-solving, being an exclusively human impulse for knowledge, underlying intellectual and academic development (Litman and Spielberger, 2003; Litman, 2008; Altun, 2018). In this field, research on curiosity has presented waves of activity, in which in the 1960s it mainly focused on the psychological foundations of curiosity, and in the 1970s and 1980s, it was characterized by attempts to measure curiosity and assess its dimensions, aimed at explaining why people voluntarily seek curiosity and what the determinants of curiosity are (Loewenstein, 1994). In this framework, the relationship between entrepreneurial orientation and curiosity has been argued that curiosity is an important factor in the process of identifying market opportunities, with more curious entrepreneurs being able to identify more new opportunities, being an important personality trait for individuals driving the entrepreneurial process.

### **Methodology**

The methodology employed integrates both bibliometric and scientometric analyses. Bibliometric analysis is a mathematical and statistical approach that examines patterns in the publication and usage of documents (Diodato, 1994). Scientometric analysis, a subset of

bibliometric techniques, focuses specifically on scientific literature to understand the globalization of knowledge production and its geographic distribution (Frenken *et al.*, 2009; Vanti, 2000).

The data for this study were collected from the Web of Science (WoS) database, covering the period from 1975 to 2020. This extensive timespan includes publications in various disciplines such as pure and applied sciences, medical and social sciences, as well as arts and humanities (Vanti, 2000).

The study explores structural aspects of the scientific community by examining collaborations in publications, common references, and shared keywords. The search targeted the concepts of "Entrepreneurial Orientation" and "Curiosity" in multiple languages, resulting in the identification of 3,815 articles that have been cited 86,787 times.

Several bibliometric indicators were used in the analysis, including the number of articles, citations, journals, institutions, authors, and countries. A bibliometric map was created to visualize key concepts and clusters, utilizing VOSviewer version 1.6.15.

The detailed search query in WoS up to December 2023 was as follows: TS=("Entrepreneurial orientation" or "Entrepreneurial intention" and "curiosity") AND DOCUMENT TYPES:(Article) Indexes=SCI-EXPANDED, SSCI, A&HCI, ESCI Timespan=1975-2023.

### **Results**

#### *Articles and citations in the field of study*

3,815 articles on "entrepreneurial orientation" and "curiosity" were identified between 1975 and 2023, with publications ranging from 1993 to 2020. The first article, by Kavil Ramachandran and Subramaniam Ramnarayan, dates back to 1993, indicating that previous ones are not in indexed WoS journals. Table I shows the citation rate with a total of 76,392 citations. It is observed that 234 articles (9.64%) have not been cited, 1,862 (76.69%) have fewer than 50 citations, 183 (7.54%) have between 50 and 100 citations, 116 (4.78%) have between 100 and 300 citations, 22 (0.91%) have between 300 and 700 citations, 10 (0.41%) have between 700 and 1,500 citations, and 1 (0.04%) exceeds 3,000 citations.

Of the 3,815 articles reported by WoS (2021), the Hirsch index (h-index) (Bornmann and Hans-Dieter, 2013) stands out. Among the 123 articles with more than 123 citations, the article by G. Tom Lumpkin and Gregory G.

TABLE I  
GENERAL CITATION STRUCTURE

Citation	Number	(%)
More than 1500 quotes	1	0.04
More than 700 quotes less than 1500	10	0.41
More than 300 quotes less than 700	22	0.91
More than 100 less than 300	116	4.78
More than 50 less than 100	183	7.54
Less than 50	1,862	76.69
0 quotes	234	9.64
Total	2,428	100.00

Source: Own elaboration based on Web of Science Data (2023).

Dess (1996) accounts for 5.17% of the total with 3,955 citations, published in the *Academy of Management Review* (Q1) by Acad Management. It proposes to clarify the nature of entrepreneurial orientation (EO) and presents a contingency framework for investigating the relationship between EO and firm outcomes. The second most cited article is

by Andreas Rauch, *et al.* (2009), with 1,321 citations (1.73% of the total), published in *Entrepreneurship Theory and Practice* (Q1). It conducts a meta-analysis on the relationship between entrepreneurial orientation and performance, evaluating potential moderators. Table II details the 10 most influential articles, each with at least 750 citations per article.

Top Authors

Of the 2,428 articles according to WoS (2021) on entrepreneurial orientation and curiosity, 15,842 authors are identified. The distribution is not highly concentrated, evidenced by the low percentage of citations (6.63%) from the top 10 most influential authors. The most prominent author is G. Tom Lumpkin from the University of Oklahoma, with 17 articles and 7,355 citations (9.63% of the total), maintaining 12 articles among the 123 most influential by the h-index. Johan Wiklund from Syracuse University is the second most influential author, with 10 articles, 5,058 citations, and 8 articles among the 123 most influential. Additional details of the 8 most influential authors are found in Table III.

G. Tom Lumpkin is a recognized scholar in the field of entrepreneurial orientation. He has significantly contributed to understanding this concept and its relationship with curiosity and innovation. According to Lumpkin,

TABLE II  
ARTICLES WITH THE HIGHEST CITATIONS IN SCIENTIFIC PRODUCTION

R	Authors	Year	Qualification	Publisher	TC
1	Lumpkin GT and Dess GG	1996	Clarifying the entrepreneurial orientation construct and linking it to performance	Acad Management	3955
2	Rauch A, Wiklund J, Lumpkin G, Frese M	2009	Entrepreneurial Orientation and Business Performance: An Assessment of Past Research and Suggestions for the Future	Sage Publications Inc	1321
3	Wiklund J and Shepherd D	2005	Entrepreneurial orientation and small business performance: a configurational approach	Elsevier	1287
4	Lumpkin G and Dess GG	2001	Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle	Elsevier Science Bv	1255
5	Wiklund J and Shepherd D	2003	Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses	John Wiley & Sons Ltd	1157
6	Hult GTM, Hurley RF, Knight GA	2004	Innovativeness: Its antecedents and impact on business performance	Elsevier Science Inc	1010
7	Lee C; Lee K, Pennings JM	2001	Internal capabilities, external networks, and performance: A study on technology-based ventures	John Wiley & Sons Ltd	1008
8	Berrone P, Cross C, Gomez-Mejia LR	2012	Socioemotional Wealth in Family Firms: Theoretical Dimensions, Assessment Approaches, and Agenda for Future Research	Sage Publications Inc	904
9	Zhou KZ, Yim CK, Tse DK	2005	The effects of strategic orientations on technology- and market-based breakthrough innovations	Sage Publications Inc	875
10	Rosenbusch N, Brinckmann J, Bausch A	2011	Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs	Elsevier	761

R: ranking, TC: total citations Source: Own elaboration based on Web of Science data (2023).

TABLE III  
MOST INFLUENTIAL AUTHORS IN ENTREPRENEURIAL ORIENTATION AND CURIOSITY

R	Author	Institution	TA-EC	TC-EC	(%)	HA	TP	TC	T123
1	Lumpkin GT	University of Oklahoma System	17	7,355	9.63	15	48	9,887	12
2	Wiklund J	Syracuse University	10	5,058	6.62	10	50	8,982	8
3	Covin Jeffrey G.	Indiana University System	16	2,350	3.08	15	75	12,094	6
4	Wales WJ.	State University of New York	17	1,524	1.99	12	24	1,838	7
5	Kraus S	University of Exeter	33	1,269	1.66	21	213	5,081	2
6	Hughes M	Loughborough University	16	1,193	1.56	12	65	2,350	3
7	Short JC	University of North Texas Denton	14	1,180	1.54	13	79	5,010	4
8	Miller D	Hec Montreal	7	1,061	1.39	7	147	23,334	5
9	Li Y	Xi'an Jiaotong University	15	605	0.79	10	8	309	3
10	Payne GT	Texas Tech. University	13	953	1.25	11	55	2,203	3

R: author ranking, TA-EC: total articles by the author in business orientation and curiosity, TC-EC: total author citations of articles on business orientation and curiosity, HA: h- author index, TP: total articles by the author, TC: total citations per author, T123: Total articles by the author that are among the 123 most influential articles published of all time. Source: Own elaboration based on Web of Science data (2023)..

entrepreneurial orientation is a strategic choice or orientation towards a dynamic process of seeking new opportunities for business creation. It refers to the methods, practices, and decision-making styles that companies use to identify and pursue new business ventures. Lumpkin and Dess (1996) identified five key dimensions of entrepreneurial orientation: a) Autonomy: The tendency to bring forth ideas and see them through to completion; b) Competitive Aggressiveness: The tendency to challenge rivals intensely and directly rather than trying to avoid competition; c) Innovativeness: The tendency to pursue novel ideas, creative processes, and experimentation. d) Proactiveness: The tendency to anticipate and act on future opportunities rather than relying solely on existing products and services. e) Risk-taking:

The tendency to take bold actions rather than being cautious. These dimensions are crucial in entrepreneurial behavior and represent the "process" aspects of the entrepreneurial phenomenon. Curiosity plays an important role in this context as it drives the search for new opportunities and the exploration of innovative ideas. In summary, entrepreneurial orientation is a strategic approach that involves developing entrepreneurial activities, and curiosity is a key driver of this process.

The quantity of articles developed and published is a key metric for assessing authors' contributions to the knowledge on entrepreneurial orientation and curiosity. Table IV presents authors with at least 15 articles on this topic, highlighting the number of articles, total citations, average citations, percentage of

total articles, h-index, and total publications and citations in WoS up to October 2021. This approach acknowledges the importance of authors in various scenarios and perspectives, even if they are not always recognized as the most influential.

Table IV highlights 9 authors who have published at least 15 articles on entrepreneurial orientation and curiosity. Surprisingly, 6 out of these 9 authors are among the most influential in terms of citations, despite the total presence of 15,842 authors in this field. G. Tom Lumpkin from the University of Oklahoma stands out, ranking second in the number of articles (17) but leading in citations, with 12 of his articles among the top 123 most influential of all time. Figure 1 presents a co-authorship graph among authors related to entrepreneurial

TABLE IV  
MOST PRODUCTIVE AUTHORS

R	Author	University	TA-EC	TC-EC	PC-EC	% Tt	HA	TP-A	TC-A
1	Kraus S	University of Exeter	33	1,269	38.45	1.36	21	213	5,081
2	Lumpkin GT	University of Oklahoma System	17	7,355	432.65	0.70	15	48	9,887
3	WalesWJ	State University of New York	17	1,524	89.65	0.70	12	24	1,838
4	Covin JG	Indiana University System	16	2,350	146.88	0.66	15	75	12,094
5	Hughes M	Loughborough University	16	1,193	74.56	0.66	12	65	2,350
6	Adomako S	University of Bradford	16	259	16.19	0.66	10	49	517
7	Hernandez-Perlines F	Castilla-La Mancha University	16	225	14.06	0.66	9	38	354
8	Li Y	Xi'an Jiaotong University	15	605	42.93	0.62	10	8	309
9	Eggers F	Menlo College	15	461	30.73	0.62	12	3.4	846
	Total		134	13,267	99.01	6.69	43	554	33,276

R: author ranking, TA-EC: total of articles by the author considering the search vectors, TC-EC: total citations of the author's articles in the search vectors, PC-EC: Citations per article in the search vectors, % Tt : percentage of the total articles on the search vectors, HA: h- author index , TP-A: total articles by the author, TC-A: total citations per author. Source: Own elaboration based on Web of Science data (2023).

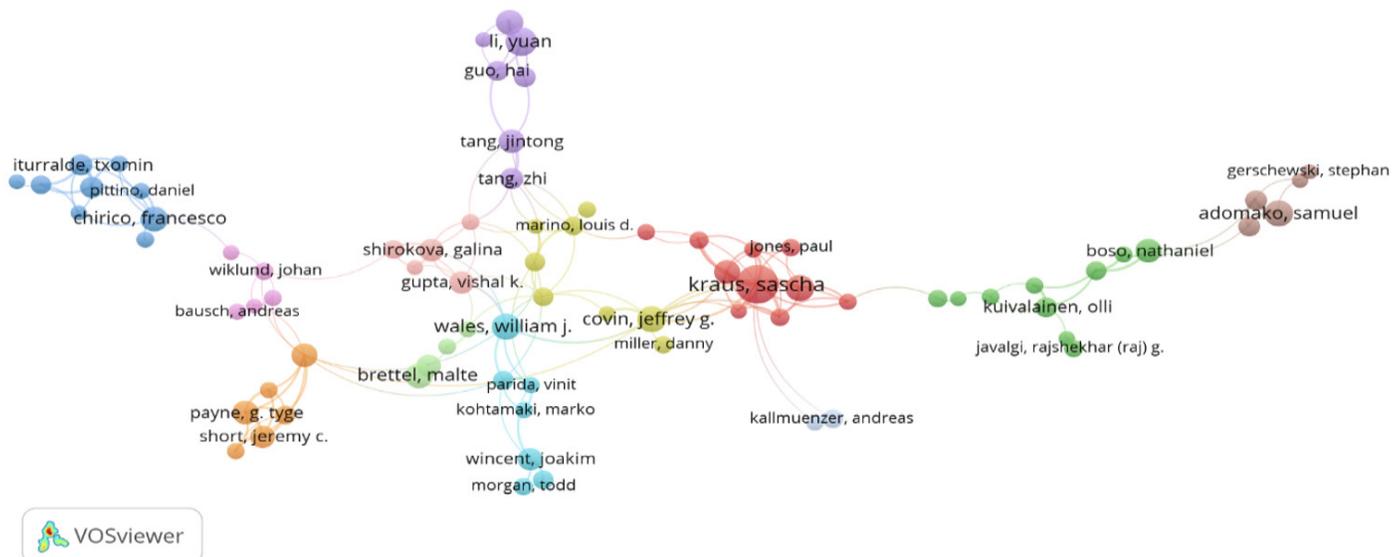


Figure 1. Co-authorship graph among authors related to entrepreneurial orientation and Source: Own elaboration using VOSviewer Software.

orientation and curiosity. The articles were analyzed with VOSviewer, which groups authors into clusters, detailed in Table V.

#### Top Journals

Of the 2,428 articles analyzed, they were published in 566 journals indexed in WoS, with a moderate level of concentration. The top 10 journals contribute 23.4% of the total

publications on this topic, totaling 569 articles with an average of 53.2 citations per article. The set of these journals accumulates 30,268 citations and an h-index of 82. Table VI details the top 10 journals with at least 33 records, ordered by the number of articles and total citations as the second criterion.

The analysis from Table VI highlights the Journal of Business Research by Elsevier Science Inc. (United

States) as the journal with the highest number of articles (99). However, the most influential journal is Entrepreneurship Theory and Practice by Sage Publications Inc. (United States), with the highest number of citations (7,847 out of 30,268), the highest h-index (38), the highest average citations, and the highest 5-year impact factor (15.732). Additionally, Journal of Business Venturing by Elsevier (Netherlands) leads

TABLE V  
CO-AUTHORSHIP CLUSTERS FOR SCIENTIFIC PRODUCTION

Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6
Bouncker RB	Bos N	Arzubiaga U	Anderson BS	Gou H	Anokhin S
Chang M-L	Cadogan JW	Bauweraerts J	Covin JG	L Y	Kohtamaki M
Eggers F	Ciravegna L	Chirico Fo	Kreiser PM	Liu H	Morgan T
Filser M	Fellnhofer K	Iturralde, T	Marino LD	Liu Y	Parida V
Hughes M	Javalgi R( raj )G	Kotlar J	Mcdowell WC	Su Z	Patel PC
Jones P	Kauivalainen O	Maseda A	Miller D	Tang J	Wales WJ
Kraus S	PuumalainenK	Pittino DI	Slevin DP	Tang Z	Wincent J
Niemand T	Saarenketo S	Sanchez-Famoso V	Weaver KM		
Rigtering JPC	Story VM	Sciascia S			
Stoekmann C	Sundqvist S				
Cluster 7	Cluster 8	Cluster 9	Cluster 10	Cluster 11	Cluster 12
Brigham KH	Adomako S	Baush A	Beliaeva T	Baum M	Kallmuenzer A
Lumpkin GT	Amankwah-Amoah J	Frese M	Gupta VK	Brettel M	Peters M
McKenny AF	Danso A	Nordqvist M	Marino LD	Engelen A	
MossTW	Gerschewski S	Rauch A	Shirokova G	Schwens C	
Payne GT	Khan Z	Wiklund J	Wales W		
Short JC					

Source: Data from Web of Science (2023) conducted with VOSviewer Software.

TABLE VI  
WEB OF SCIENCE JOURNALS IN WHICH SCIENTIFIC PRODUCTION IS GENERATED

R	Sources (Journals)	N	% Tt	PC-EC	H-EC	TC-EC	IF 5Y	Q
1	<i>Journal Business Research</i>	99	4.08	34.6	32	3,425	8,488	Q1
2	<i>Journal of Small Business Management</i>	71	2.92	38.8	30	2,757	6,799	Q2
3	<i>Sustainability</i>	67	2.76	8.94	15	599	3,473	Q2
4	<i>Entrepreneurship Theory and Practice</i>	65	2.68	120.72	38	7,847	15,191	Q1
5	<i>International Entrepreneurship and Management Journal</i>	65	2.68	18.86	20	1,226	6,458	Q2
6	<i>Industrial Marketing Management</i>	51	2.10	58.29	25	2,973	8,698	Q1
7	<i>International Small Business Journal Researching Entrepreneurship</i>	48	1.98	47.31	25	2,271	7.22	Q2
8	<i>Management Decision</i>	37	1.52	22.59	16	836	4,816	Q2
9	<i>Journal of Business Venturing</i>	33	1.36	237.76	29	7,846	15,732	Q1
10	<i>International Journal of Entrepreneurial Behavior Research</i>	33	1.36	13.82	13	456	4,996	Q2
Summary		569	23.43	53.2	82	30,268		

R: ranking, N: total of articles only with business orientation and curiosity in the journal, %Tt : percentage of articles out of the total articles on business orientation and curiosity, PC-EC: Average citations per article in the search vectors, H-EC: h-index with search vectors only, TC-EC total citations only with the search vectors, IF Y5: impact factor of the journal in the last 5 years, Q: quartile in the category. Source: Own based on Web of Science data (2023).

in impact factor, serving as a quality measure for these journals.

#### WoS Categories

Similarly, concerning the main WoS categories, the 2,428 articles studied have been published in journals affiliated with 80 WoS categories, some of which are published in different categories concurrently. This set of 10 categories maintains an h-index reaching 123 with a total of 74,931 citations and 34.47 citations per article that have been referenced 32,357 times by other articles. This information is detailed in Table VII.

From Table VII, it can be inferred that the largest contribution is generated in the Business category with 54.2%, which also maintains the highest h-index reaching 113, as well as the highest number of citations with 58,791 times and the highest number of references by other articles with 25,900. It is worth noting the Applied Psychology category, which with only 43 articles obtains the highest average number of citations with 53.88 citations per article.

#### Institutions

Regarding the main affiliation organizations, scientists have

generated this knowledge with a high institutional concentration, affiliating with 1,993 organizations based on the 2,428 articles. Of these, 10 institutions contribute with at least 27 articles related to the analyzed theme. Table VIII, ordered by influence in the topic (measured through the number of articles, h-index, average citations, total citations, and number of articles citing them around the search vector of entrepreneurial orientation and curiosity), details the analysis of these institutions.

From Table VIII, it is evident that the 10 institutions that have published at least 27 articles related to

TABLE VII  
WEB OF SCIENCE CATEGORIES ASSOCIATED WITH SCIENTIFIC PRODUCTION

R	Web of Science Categories	N	% Tt	H-EC	PC-EC	TC-EC	AC
1	Business	1,316	54.20	113	44.67	58,791	25,900
2	Management	1,195	49.22	84	32.56	38,912	21,360
3	Economics	174	7.17	23	16.22	2,822	2,431
4	Environmental Studies	109	4.49	22	14.4	1,570	1,377
5	Green Sustainable Science Technology	85	3.50	19	11.59	985	885
6	Environmental Sciences	81	3.34	19	20.07	1,626	1,526
7	Industrial Engineering	80	3.29	29	34.1	2,728	2,448
8	Hospitality Leisure Sport Tourism	51	2.10	19	20.76	1,059	823
9	Psychology Applied	43	1.77	21	53.88	2,317	2,027
10	Operations Research Management Science	43	1.77	24	43.47	1,869	1,752
Summary		2,164	89.13	123	34.47	74,931	32,357

R: ranking, N: total of articles only on business orientation and curiosity in the journal, % Tt : percentage of article over the total articles on the search vectors, PC-EC: Average citations per article in the search vectors, H-EC: h-index with entrepreneurial orientation and curiosity, TC-EC: total citations in business orientation and curiosity, AC: Number of articles in which it is cited. Source: Web of Science data (2023).

TABLE VIII  
WEB OF SCIENCE CATEGORIES ASSOCIATED WITH SCIENTIFIC PRODUCTION

R	Institutions	Country	N	% Tt	H-EC	PC-EC	TC-EC	AC
1	Xi An Jiaotong University	China	46	1.89	22	33	1,518	1,312
2	University of Valencia	Spain	38	1.57	11	18.39	699	637
3	Castilla-La Mancha University	Spain	38	1.57	15	15.05	572	464
4	Lappeenranta University of Technology	Finland	35	1.44	18	44.17	1,546	1,271
5	University of North Carolina	USA	3. 4	1.40	14	21.59	734	679
6	State University System of Florida	USA	32	1.32	16	80.84	2,587	2,531
7	Indiana University System	USA	31	1.28	24	111.03	3,442	2,170
8	Indiana University Bloomington	USA	29	1.19	24	118.21	3,428	2,156
9	Jönköping University	Sweden	27	1.11	21	227.3	6,137	4,091
10	IU Kelley School of Business	USA	27	1.11	22	122.07	3,296	2,091
Total			269	13.88	59	62.52	16,819	9,630

R: ranking, N: total articles with only business orientation and curiosity, % Tt : percentage of article out of the total articles of business orientation and curiosity, H-EC: h-index with search vectors only, PC-EC: average citations per article for the search vectors, TC-EC: total citations only with the search vectors, AC: number of articles in which it is cited. Source: Web of Science data (2023).

the search concepts account for 13.9% of the total articles on the topic. Together, these institutions maintain an h-index of 59, with an average of 62.52 citations and a total of 16,819 citations. Additionally, these institutions are cited in 9,630 articles.

Xi'an Jiaotong University of China stands out as the most productive institution with 46 articles. However, Jönköping University of Sweden emerges as the most influential institution by maintaining the highest number of citations (6,137), the highest average citations (227.3), and the highest number of articles citing it (4,091). On the other hand, Indiana University System and Indiana University Bloomington have the highest h-index with 24, indicating that at least 24 of its articles have been cited 24 times or more.

A bibliometric analysis of citations related to these institutions reveals the existence of 7 clusters, considering a minimum of 12 documents per organization. These clusters are detailed in Table IX, and the graph in Figure 2 shows the connections between the different institutions, with different colors for each of the 7 clusters.

#### Countries

Regarding the main affiliation countries, based on the analysis of 2,428 articles, scientists have produced this knowledge with a high geographical concentration, as 59.8% of the articles are concentrated in 5 countries out of a total of 100 that have generated at least one article related to the search concept.

Table X details the 10 countries that have developed and published at least 95 articles related to entrepreneurial orientation and curiosity. These 10 countries collectively obtain an h-index of 118 with an average of 42.4 citations per article, a total of 66,135 citations, and the number of articles citing this set of countries is 29,513 articles.

Based on the data shown in Table X we can conclude that the United States is the most productive country, as it has generated 548 articles related to entrepreneurial orientation and curiosity. It is also the most influential country, maintaining the highest number of citations with 38,154 citations, as well as possessing the highest h-index with 87 and being cited in 19,392 articles. It is noteworthy to highlight Sweden, which, with 95 articles, maintains the highest average number of citations per article, reaching 92.1 citations per article.

#### Bibliometric analysis of keywords

Out of the 4,520 author keywords (AK) included in the articles published in Web of Science, 209 appear more than 7 times, and they are used concurrently as depicted in Figure 3. This accounts for 12 clusters, composed as detailed below in Table XI.

Table XI is where the clusters are grouped, recognizing the various emphases around which the studied articles are developed. In the graph, each cluster is assigned a color for identification purposes. Among the analysis of the graph, the keyword "Entrepreneurial orientation" is the most used with 833

occurrences corresponding to cluster 2, followed by "Innovation" with 170 occurrences corresponding to cluster 1, and in third position, the keyword "performance" with 168 occurrences corresponding to cluster 11. These three keywords maintain different interconnections with the majority of the keywords. Table XII provides a detailed list of the top 10 keywords with the highest occurrences.

#### Discussion

The bibliometric and scientometric analyses reveal a comprehensive picture of the scholarly landscape concerning entrepreneurial orientation and curiosity from 1975 to 2023. The identified 3,815 articles signify a substantial body of work, but the distribution of citations indicates a wide variance in impact. The fact that 76.69% of these articles have fewer than 50 citations underscores the concentrated influence of a select few key papers, notably the seminal work by Lumpkin and Dess (1996), which alone accounts for 5.17% of the total citations.

The analysis highlights the pivotal role of high-impact articles in shaping the discourse. Lumpkin and Dess's (1996) foundational article, with its 3,955 citations, is a cornerstone in understanding entrepreneurial orientation (EO). Its focus on delineating EO and its contingency framework for assessing the EO-performance relationship has profoundly influenced subsequent research. Similarly, Rauch *et al.* (2009) meta-analysis, with 1,321 citations, provides critical insights into the EO-performance

TABLE IX  
CITATION GRAPH AMONG INSTITUTIONS

Cluster 1	Cluster 2	Cluster 3	Cluster 4
Aalto University	Jonkoping Int Business Sch	Cardiff University	Brock University
Athens University of Economics and Business	Northeastern University	De Montfort University	Renmin China University
Erasmus University	Texas Tech University	Lappeenranta University Technol	Rochester Inst Technol
James Madison University	University of Innsbruck	Loughborough University	Shanghai Jiao Tong University
Lulea University of Technology	University Lancaster	University Bradford	St. Louis University
Qatar University	University Mississippi	University Ghana	University of Alabama University of Tennessee
Syracuse University	University of North Carolina	University of Granada	Xi'an Jiao Tong University
University Interior Beira	University of Oklahoma	University Kent	
University of Glasgow	University of Seville	University Leeds	
University of Illinois	University St Gallen	University Nottingham	
University Jaume 1	WHU – Otto Beisheim School of Management		
University of Nebraska			
University Sains Malaysia			
University Tehran			
University Tutara Malaysia			
University of Vaasa			
Cluster 5	Cluster 6	Cluster 7	
Menlo College	RWTH Aachen University	Indiana University	
Tomas Bata University Zlin	Univ Castilla La Mancha	State University of New York at Albany	
University Bayreuth	Univ Valencia	University of Witwatersrand	
University of Liechtenstein			
University of Utrecht			

Source: Web of Science data (2023) generated with VOSviewer Software.

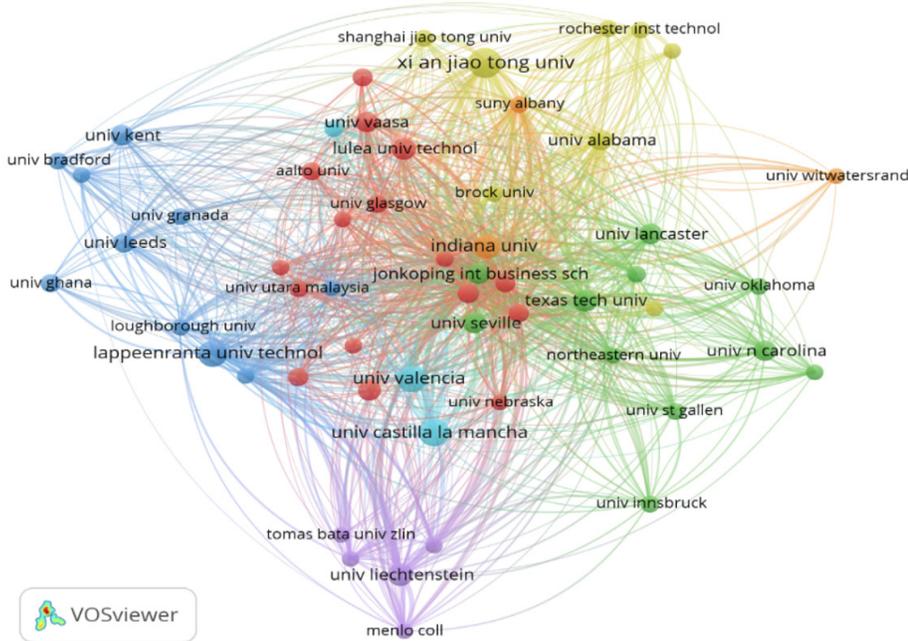


Figure 2. Connections between the different institutions. Source: Own elaboration using VOSviewer Software.

nexus and potential moderating factors. These highly cited works illustrate the crucial contributions of pioneering studies in establishing research trajectories and methodologies.

The bibliometric data identifies G. Tom Lumpkin as the most influential author, reflecting his significant contributions with 7,355 citations across 17 articles. Lumpkin's work, particularly in collaboration with Dess, has been instrumental in defining and expanding the theoretical underpinnings of EO. Johan Wiklund, with 10 articles and 5,058 citations, emerges as another key figure, further cementing the importance of prolific authors in advancing the field.

The analysis of journals reveals a moderate level of concentration, with the top 10 journals accounting for 23.4% of the total publications. Notably, the Journal of Business Research and Entrepreneurship Theory and Practice are prominent publication outlets, with the latter being the most influential based on citation metrics and impact factors. This concentration in high-impact journals



TABLE XI  
CO-OCCURRENCE CLUSTERS IN AUTHOR KEYWORDS USAGE

Cluster 1 31 items (red)	Academic Entrepreneurship – Ambidexterity – Capabilities – Developing Countries – Entrepreneur – Entrepreneurial Orientation ( Eo ) – Entrepreneurial University – Entrepreneurship – Firm Growth – Fsqca – Higher Education – Innovation – Innovation Orientation – Institutions – Intrapreneurship – Knowledge Management – Knowledge Transfer – Leadership – Marketing – Networks – Organizational Learning – Resource-Based View – Social Capital – Social Networks – Spain – Strategic Learning – Strategic Planning – Structural Equation Modeling – Technology Transfer – Transformational Leadership – University Epin-Offs
Cluster 2 27 items (green)	Competitive Advantage – Dynamic Capabilities – Emerging Economies – Entrepreneurial Marketing – Entrepreneurial Orientation – Entrepreneurship Orientation – Environmental Turbulence – Firm Size – India – Innovation Capabilities – Knowledge Creation – Learning Orientation – Market Orientation – Marketing Capability – Marketing Performance. Opportunity Recognition – Organizational Performance – Pakistan – Process Innovation – Product Innovation- Radical Innovation – Social Enterprise – Social Entrepreneurship – Strategic Orientation – Sustainable Development – Sustainable Entrepreneurship – Value Creation
Cluster 3 24 items (blue)	Absorptive Capacity – Case Study – Corporate Entrepreneurship – Corporate Venturing – Environment – Family Business – Family Businesses – Family Firm – Family Firms – Family Involvement – Firm Performance – Growth – Innovation Capability – International Entrepreneurial Orientation – International Performance – Literature Review – Moderation Effect – Networking Capability – New Product Development – Pls – Pls-Sem – Socioemotional Wealth – Sustainable Entrepreneurial Orientation – Top Management Team
Cluster 4 21 items (yellow)	Business Strategy – Competitive Strategy – Entrepreneurial Behavior – Entrepreneurialism – Entrepreneurs – Environmental Uncertainty – Financial Performance – Hospitality – Learning – Long-Term Orientation – Manufacturing – Motivation – New Ventures – Operational Performance – Organizational Capabilities – Organizational Culture – Small and Medium Enterprises – Strategic Management – Supply Chain Management – Sustainability – Training
Cluster 5 18 items (purple)	Born Global – Born Globals – Business Environment – Cluster Analysis – Developing Country – Emerging Economy – Exports – Human Capital – International Business – International Entrepreneurship – International New Ventures – Internationalization – Internationalization – Network – Resource Orchestration – Resource-Based Theory – Small To Medium -Sized Enterprises – Sme
Cluster 6 17 items (sky blue)	Brans Orientation – Business Model Innovation – China – Effectuation – Emerging Market – Emerging Markets – Environmental Dynamism – Innovative Performance – Institutional Theory – Knowledge – Malaysia – Networking – New Venture Performance – Russia – Sme Performance – Strategic Orientations – Strategic Posture
Cluster 7 16 items (Orange tree)	Business Ties – Competitive Intensity – Configurational Approach – Csr – Developing Economy – Exploitative Innovation – Exploratory Innovation – Firm Innovativeness – Ghana – Institutional Environment – Market Turbulence. Marketing Capabilities – New Product Performance – Political Ties – Smes – Technology Orientation
Cluster 8 16 items (coffee)	Corporate Social Responsibility – Customer Orientation – Dynamic Capability – Export Performance – Green Entrepreneurial Orientation – Hotel Industry – Innovation Performance – Intangible Resources – Intellectual Capital – Knowledge Sharing – Organizational Ambidexterity – Service Innovation – South Africa – Sustainable Competitive – Total Quality Management – Vietnam
Cluster 9 13 items (pink)	Autonomy – Business Performance – Competitive Aggressiveness – Competitiveness – Entrepreneurial Intention – Entrepreneurship Education – Gender – Individual Entrepreneurial Orientation – Innovativeness – Proactiveness – Risk Taking – Risk-Taking – Trust
Cluster 10 13 items (burgundy)	Content Analysis – Contingency Theory – Culture – Environmental Hostility – Eo – Franchising – Market Performance – National Culture – Small Business – Small Firms – Strategic Alliances – Strategy – Structural Equation Modeling
Cluster 11 10 items (light red)	Exploitation – Exploration – Knowledge Acquisition – Knowledge-Based View – Meta-Analysis – Open Innovation – Performance – Resources – Small and Medium -Sized Enterprises – Strategic Entrepreneurship
Cluster 12 3 items (Light Blue)	Creativity – Mediation – Self-Efficacy

Source: Data from Web of Science (2021).

highlights the influential works and trends, providing a foundation for future research directions that can further enrich our understanding of this critical area in entrepreneurship studies.

### Conclusion

The characterization of the quantity of scientific articles published between 1975 and 2020 reveals the

evolution of research on the concepts of entrepreneurial orientation and curiosity, describing the research trend of weak linear growth from 1993 to 2014, with an exponential acceleration in knowledge

production in the last 6 years of the study period, with a strong increase that doubles in 2015, reaching its peak scientific production in 2020, evidencing the increase in critical mass in the thematic research vector. It is worth noting the article written by G. Tom Lumpkin and Gregory G. Dess (1996), which concentrates 5.17% of the total citations on the subject with 3,955 citations, published by *Academy of Management Review* (Q1) from Acad Management. The article aims to clarify the nature of the entrepreneurial orientation (EO) construct and propose a contingency framework for investigating the relationship between entrepreneurial orientation and firm performance; using examples from the literature related to EO, alternative models are suggested to test this relationship. The second most cited article corresponds to Andreas Rauch, *et al.*, published in 2009, with 1,321 citations, concentrating 1.73% of the total citations, published by *Entrepreneurship Theory And Practice* (Q1), noting that entrepreneurial orientation has recently received attention, as it represents one of the few areas of research that addresses entrepreneurship; the article develops a meta-analysis exploring the magnitude of the relationship between entrepreneurial orientation and performance, as well as evaluating possible moderators affecting this relationship.

Regarding the main countries of affiliation, based on the 2,428 articles analyzed, scientists have produced this knowledge with a high geographical concentration, as 59.8% of the articles are concentrated in 5 countries out of a total of 100 countries that have generated at least one article related to the search concept. Table X details the 10 countries that have developed and published at least 95 articles related to entrepreneurial orientation and curiosity. These 10 countries collectively obtain an h-index of 118 with an average of 42.4 citations per article, a total of 66,135 citations, and the number of articles citing this set of countries is 29,513 articles. In this context, the inclusion of scientific research for bibliometric review was guided by the criterion of having indexing in WoS, and was carried out without considering quality control filters in the articles, generating the situation that it is not possible to exercise specific control over the contents of the analyzed articles, due to this being an initial and exhaustive review, with the purpose of developing a general overview of scientific production on entrepreneurial orientation and perseverance, in the context of scientific articles indexed in WoS.

In this sense, it is possible to establish that this thematic field is

in a growing development. Given this, the need arises to understand the studies that have been developed on the subject, since scientific production cannot advance without the support of preceding works. With this purpose, a scientometric analysis was carried out, based on analysis based on bibliometric laws that support scientometrics as a scientific activity. The main contribution of this research is to synthesize knowledge and offer an updated discussion on research conducted on entrepreneurial orientation and perseverance, within the framework of the most important journals, the most cited articles, the amount of production according to geography, among other bibliometric variables, to support future research, and in this sense, through the work carried out, guidelines are established for future researchers, establishing criteria to make the work of academics efficient. In this sense, global research in this field allows us to show that a broad research space has been built, evidenced by 75,696 citations. In this context, the need to develop a thematic systematization of the review of specialized scientific literature arises, so that current works constitute the basis for future publications. With this purpose, this set of articles published in relation to the thematic vector was analyzed, based on bibliometric laws that support the scientometrics of scientific activity (Price, 1976; Bulick, 1978; Morse and Leimkuhler, 1979; Pontigo and Lancaster, 1986; Vega and Romero, 2006; Cleber-Da-Silva *et al.*, 2014; Severino-González and Gaete-Quezada, 2019). This is justified because scientometrics has been extended and established as a relevant methodological technique for the evaluation of scientific production and all phenomena linked to the communication of science. In this sense, the bibliometric analysis carried out in the results is descriptive, allowing structural aspects within the scientific community to be studied.

Therefore, it can be concluded that the topic is an area in development with potential lines of research, such as organizational performance, organizational strategy, organizational success, and family organizations. However, within the framework of this scientometric research, there are limitations to bibliometrics due to inaccuracies and considering only the possibility of quantitative measurements, with reduced qualitative contributions and interpretation of the quality of the analyzed research. Given this, a future line of research could consider the possibility of a systematic review of the scientific literature, understood as research with the purpose of objectively and systematically integrating the results of empirical

studies on a specific research problem, to determine the state of the art in that field of study. Despite the comprehensive nature of this bibliometric analysis, the study has several limitations. Firstly, the reliance on Web of Science as the sole database may exclude relevant articles indexed in other databases, potentially skewing the analysis. Additionally, the study does not apply quality control filters, which means that the analysis includes articles of varying quality and significance. This approach limits the ability to assess the qualitative impact of the research accurately. Moreover, the use of bibliometric methods inherently focuses on quantitative metrics, which may not fully capture the nuanced contributions and contextual importance of individual studies. Future research could benefit from a systematic review approach, integrating qualitative assessments to provide a more holistic understanding of the field's development and identify emerging research trends and gaps.

## REFERENCES

- Altun A (2018) Trajectory of curiosity towards historical figures in primary and secondary schools and a study on historical curiosity. *Education and Science* 43: 4210 <https://doi.org/10.15390/eb.2018.4210>
- Baron RA, Franklin RJ, Hmieleski KM (2016) Why entrepreneurs often experience low, not high, levels of stress: The joint effects of selection and psychological capital. *Journal of Management* 42: 742-768. <https://doi.org/10.1177/0149206313495411>
- Borrmann L, Hans-Dieter D (2013) Full-Text Citation Analysis: A New Method to Enhance. *Journal of the American Society for Information Science and Technology* 64: 1852-1863. <https://doi.org/10.1002/asi.22883>
- Berrone P, Cruz C, Gomez-Mejia LR (2012) Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review* 25: 258-279. <https://doi.org/10.1177/0894486511435355>
- Boada-Grau J, Sánchez-García JC, Viardot E, Boada-Cuerva M, Vigil-Colet A (2016) Entrepreneurial orientation scale: adaptation to Spanish. *The Spanish Journal of Psychology* 19: E47. <https://doi.org/10.1017/sjp.2016.19>
- Baluku MM, Kikooma JF, Kibanja GM (2016) Psychological capital and the startup capital-entrepreneurial success relationship. *Journal of Small Business & Entrepreneurship* 28: 27-54. <https://doi.org/10.1080/08276331.2015.1132512>
- Cho YH, Lee JH (2018) Entrepreneurial orientation, entrepreneurial education and performance. *Asia Pacific Journal of Innovation and Entrepreneurship* 12: 124-134. <https://doi.org/10.1108/APJIE-05-2018-0028>
- Covin JG, Slevin DP (1989) Strategic management of small firms in hostile and benign environments. *Strategic Management Journal* 10: 75-87. <https://doi.org/10.1002/smj.4250100107>

- Diodato DM (1994) *A compendium of fracture flow models*. United States. <https://doi.org/10.2172/110769>
- Frenken K, Hardeman S, Hoekman J (2009) Spatial scientometrics: Towards a cumulative research program. *Journal of Informetrics* 3: 222-232. <https://doi.org/10.1016/j.joi.2009.03.005>
- Grossnickle EM (2016) Disentangling curiosity: Dimensionality, definitions, and distinctions from interest in educational contexts. *Educational Psychology Review* 28: 23-60. <https://doi.org/10.1007/s10648-014-9294-y>
- Hult GTM, Hurley RF, Knight GA (2004) Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management* 33: 429-438. <https://doi.org/10.1016/j.indmarman.2003.08.015>
- Litman JA (2008) Interest and deprivation factors of epistemic curiosity. *Personality and Individual Differences* 44: 1585-1595. <https://doi.org/10.1016/j.paid.2008.01.014>
- Litman JA, Jimerson TL (2004) The measurement of curiosity as a feeling of deprivation. *Journal of Personality Assessment* 82: 147-157. [https://doi.org/10.1207/s15327752jpa8202\\_3](https://doi.org/10.1207/s15327752jpa8202_3)
- Litman JA, Spielberger CD (2003) Measuring epistemic curiosity and its diverse and specific components. *Journal of Personality Assessment* 80: 75-86. [https://doi.org/10.1207/S15327752JPA8001\\_16](https://doi.org/10.1207/S15327752JPA8001_16)
- Lumpkin GT, Dess GG (1996) Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review* 21: 135-172. <https://doi.org/10.2307/258632>
- Lumpkin GT, Dess GG (2001) Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing* 16: 429-451. [https://doi.org/10.1016/S0883-9026\(00\)00048-3](https://doi.org/10.1016/S0883-9026(00)00048-3)
- Lee C, Lee K, Pennings JM (2001) Internal capabilities, external networks, and performance: a study on technology-based ventures. *Strategic Management Journal* 22: 615-640. <https://doi.org/10.1002/smj.181>
- Loewenstein G (1994) The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin* 116: 75-98. <https://doi.org/10.1037/0033-2909.116.1.75>
- Miller D (2011) Miller (1983) revisited: A reflection on EO research and some suggestions for the future. *Entrepreneurship Theory and Practice* 35: 873-894. <https://doi.org/10.1111/j.1540-6520.2011.00457.x>
- Rauch A, Wiklund J, Lumpkin GT, Frese M (2009) Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice* 33: 761-787. <https://doi.org/10.1111/j.1540-6520.2009.00308.x>
- Ramachandran K, Ramnarayan S (1993) Entrepreneurial orientation and networking: Some Indian evidence. *Journal of Business Venturing* 8: 513-524. [https://doi.org/10.1016/0883-9026\(93\)90036-5](https://doi.org/10.1016/0883-9026(93)90036-5)
- Rosenbusch N, Brinckmann J, Bausch A (2011) Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of Business Venturing* 26: 441-457. <https://doi.org/10.1016/j.jbusvent.2009.12.002>
- Teece DJ, Pisano G, Shuen A (1997) Dynamic capabilities and strategic management. *Strategic Management Journal* 18: 509-533. [https://doi.org/10.1002/\(sici\)1097-0266\(199708\)18:7<509::aid-smj882>3.0.co;2-z](https://doi.org/10.1002/(sici)1097-0266(199708)18:7<509::aid-smj882>3.0.co;2-z)
- Vanti N (2000) Métodos cuantitativos de evaluación de la ciencia: bibliometría, ciencia-metría e informetría. *Investigación Bibliotecológica: Archivonomía, Bibliotecología e Información* 14. <https://doi.org/10.22201/iibi.0187358xp.2000.29.3943>
- Vega-Muñoz A, Arjona-Fuentes JM, Ariza-Montes A, Han H, Law R (2020) In search of 'a research front' in cruise tourism studies. *International Journal of Hospitality Management* 85: 102353. <https://doi.org/10.1016/j.ijhm.2019.102353>
- Wiklund J, Shepherd D (2003) Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic Management Journal* 2: 1307-1314. <https://doi.org/10.1002/smj.360>
- Wiklund J, Shepherd D (2005) Entrepreneurial orientation and small business performance: a configurational approach. *Journal of Business Venturing* 20: 71-91. <https://doi.org/10.1016/j.jbusvent.2004.01.001>
- Zhou KZ, Yim CK, Tse DK (2005) The effects of strategic orientations on technology-and market-based breakthrough innovations. *Journal of Marketing* 69: 42-60. <https://doi.org/10.1509/jmkg.69.2.42.60756>

## ANÁLISIS CIENCIOMÉTRICO SOBRE ORIENTACIÓN EMPRENDEDORA Y CURIOSIDAD

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### RESUMEN

Se han examinado y analizado estudios sobre diversos factores involucrados tanto en el ámbito corporativo como académico durante las últimas cuatro décadas, amplificando su relevancia en el período actual. Esto se especifica dentro del marco de conceptos de investigación como la orientación emprendedora y la curiosidad a través de un análisis cuantitativo, con el objetivo de describir los indicadores bibliométricos del desarrollo científico en este campo desde los primeros registros en la base de datos en línea Web of Science que datan de 1975 hasta 2023,

identificando autores, países, publicaciones, citas, revistas e instituciones. En términos generales, los resultados revelaron un creciente desarrollo de publicaciones relacionadas con el vector temático, aumentando en los últimos años y mostrando una concentración geográfica asociada con la región de Estados Unidos. Los hallazgos demuestran que mayores contribuciones proporcionan una visión actualizada sobre la investigación en orientación emprendedora y curiosidad y su desarrollo a través de mediciones y evidencia basadas en estándares.

## ANÁLISE CIENTOMÉTRICA NA ORIENTAÇÃO EMPRENDEDORA E CURIOSIDADE

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### RESUMO

Estudos sobre diversos fatores envolvidos tanto no âmbito corporativo quanto acadêmico foram examinados e analisados nas últimas quatro décadas, amplificando sua relevância no período atual. Isso é especificado dentro do contexto de conceitos de pesquisa como orientação empreendedora e curiosidade através de uma análise cuantitativa, com o objetivo de descrever os indicadores bibliométricos do desenvolvimento científico neste campo desde os primeiros registros na base de dados online Web of Science que datam de 1975 até 2023, identifican-

do autores, países, publicações, citações, periódicos e instituições. Em termos gerais, os resultados revelaram um desenvolvimento crescente de publicações relacionadas ao vetor temático, aumentando nos últimos anos e mostrando uma concentração geográfica associada à região dos Estados Unidos. Os achados demonstram que maiores contribuições fornecem uma visão atualizada sobre a pesquisa em orientação empreendedora e curiosidade e seu desenvolvimento através de medições e evidências baseadas em padrões.