

## Entrepreneurial Orientation In The Last Decade: A Systematic Review

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### ABSTRACT

**Submitted:** **Purpose of the study** — This study aims to review the development of entrepreneurial orientation (EO) research from 2012 to 2021 by examining publication trends, geographical distribution, article types, data collection methods, and dominant research themes within a selected publisher / platform corpus.  
10-23, 2025

**Accepted:** **Research method**—This study employed a targeted systematic review approach using the Systematic Quantitative Assessment Technique (SQAT) supported by PRISMA-based reporting procedures. Articles were identified through Google Scholar Advanced Search using the exact phrase “entrepreneurial orientation” in the article title and were limited to peer-reviewed English journal articles published between 2012 and 2021. The final corpus consisted of 100 articles from six selected publisher/platform sources: Sage, Springer, Elsevier, Emerald, Taylor & Francis, and Wiley. The articles were analyzed using descriptive classification and thematic synthesis.  
12-27, 2025

**Published:** **Result**—The findings show that EO research was actively published during the review period, with the highest number of articles appearing in 2019. The United States, Spain, and China were the most represented countries, while Europe had the highest continental representation. Of the 100 reviewed articles, 93 were empirical and 7 were conceptual. Survey was the most frequently used data collection method, followed by interview, secondary data, and observation. The thematic analysis identified three dominant themes: EO magnitude, consequences of EO, and EO mechanisms, with EO magnitude being the most explored theme.  
06-11, 2026

**Conclusion**— This review indicates that EO research is empirically rich but remains uneven in terms of geographical coverage, conceptual development, and methodological diversity. Future studies should expand EO research into

underrepresented contexts, strengthen conceptual contributions, apply more qualitative and mixed-method approaches, and examine EO consequences and mechanisms more deeply.

**Keywords:** *Entrepreneurial Orientation; Systematic Review; SQAT; PRISMA; Entrepreneurship Research.*



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## INTRODUCTION

Entrepreneurial orientation (EO) has become one of the most important concepts in entrepreneurship and strategic management because it explains how firms behave entrepreneurially in identifying opportunities, developing innovation, taking risks, and responding proactively to market change. EO is commonly understood as a strategic posture that reflects the processes, practices, and decision-making styles through which firms pursue entrepreneurial actions (Rauch et al., 2009; Wiklund & Shepherd, 2005). In the entrepreneurship literature, EO is generally associated with several core dimensions, including innovativeness, proactiveness, risk-taking, autonomy, and competitive aggressiveness (Lumpkin & Dess, 1996). These dimensions are important because they help firms adapt to environmental uncertainty, compete in dynamic markets, and create superior value through entrepreneurial behavior.

The growing importance of EO is reflected in the increasing number of studies that examine its role in various organizational and industrial contexts. Previous studies have linked EO with firm performance, innovation capability, internationalization, market orientation, customer satisfaction, family business performance, and small and medium-sized enterprise development (Arunachalam et al., 2018; Cuevas-Vargas et al., 2019; Hernández-Perlines et al., 2019; Jin et al., 2017; Kraus et al., 2012). These studies show that EO is not only relevant for large organizations but also for SMEs, service firms, technology-based firms, family businesses, and firms operating in emerging economies. As a result, EO has become a broad and multidisciplinary topic that attracts scholars from entrepreneurship, marketing, innovation, strategic management, and organizational studies.

However, the expansion of EO studies also creates a need for systematic mapping. The literature has grown across different countries, sectors, methodologies, and theoretical perspectives, making it difficult to understand how EO research has developed over time and where important knowledge gaps remain. Some studies focus on the direct effect of EO on performance, while others examine mediating or moderating mechanisms such as marketing capability, absorptive capacity, environmental dynamism, stakeholder integration, or organizational learning. At the same time, EO research is not evenly distributed across regions and methods. Many studies are empirical and survey-based, while fewer studies employ qualitative, mixed-method, observational, or conceptual approaches. This uneven development

suggests that EO literature requires a transparent review that can organize prior studies, identify dominant patterns, and formulate a more focused agenda for future research.

A systematic review is useful for this purpose because it allows researchers to synthesize existing knowledge through explicit, transparent, and replicable procedures. Nevertheless, the credibility of a review depends on how clearly the review process is reported. A review that claims to be systematic should clearly explain its search strategy, eligibility criteria, screening process, full-text assessment, data extraction, coding rules, and analytical procedures. Without these elements, the review findings may be difficult to verify and may lead to inconsistent classification of article types, methods, themes, or geographical coverage. Therefore, this study positions itself as a revised and protocol-driven systematic review of EO literature by applying transparent search, screening, eligibility, and coding procedures.

This study reviews peer-reviewed journal articles on entrepreneurial orientation published between 2012 and 2021. The review focuses on five main questions. First, how were EO articles distributed across publication years during the period of review? Second, how were EO articles distributed geographically across countries and continents? Third, what types of articles dominated EO research, particularly empirical and conceptual articles? Fourth, what data collection methods were used in empirical EO studies? Fifth, what major themes were developed in EO research, and what future research directions can be derived from those themes? These questions are important because they do not only summarize the quantity of EO publications but also clarify the methodological and thematic structure of EO scholarship.

The novelty of this study lies in its effort to provide a structured and transparent mapping of EO research in the last decade. Unlike individual empirical studies that examine specific relationships between EO and organizational outcomes, this review offers a broader synthesis of EO scholarship by combining publication trend analysis, geographical mapping, article type classification, methodological profiling, and thematic categorization. In addition, this study strengthens the review process by making the classification rules more visible, especially regarding article type, data collection methods, and thematic coding. This is important to reduce ambiguity in classification and to improve the trustworthiness of the findings.

The contribution of this study is threefold. First, it contributes to EO literature by showing how EO research developed from 2012 to 2021 in terms of time distribution, geographical distribution, article type, data collection method, and thematic orientation. Second, it contributes methodologically by presenting a more transparent review procedure that supports replicability and consistency in literature classification. Third, it provides future research directions by identifying underexplored methodological and thematic areas, particularly the need for more conceptual work, qualitative and mixed-method approaches, and deeper investigation of EO consequences and mechanisms. Therefore, this review is expected to help researchers understand the current structure of EO literature and design future studies that are more theoretically grounded, methodologically diverse, and contextually relevant.

## **LITERATURE REVIEW AND REVIEW QUESTION DEVELOPMENT**

### **A. LITERATURE REVIEW**

Entrepreneurial orientation (EO) is a central concept in entrepreneurship and strategic management literature because it explains how firms behave entrepreneurially when facing market opportunities, competition, uncertainty, and environmental change. EO is generally understood as a strategic posture that reflects a firm's tendency to innovate, act proactively, take risks, and compete aggressively in order to achieve superior performance. In this sense, EO is not merely an individual trait but an organizational-level orientation embedded in managerial practices, strategic decision-making, and organizational routines. Rauch et al. (2009) and Wiklund and Shepherd (2005) explain that EO represents a firm's ability to innovate, take risks, and proactively pursue market opportunities. This view shows that EO is closely related to how firms formulate strategies and convert entrepreneurial intentions into organizational actions.

Previous studies have conceptualized EO through several core dimensions. Anderson and Eshima (2017) highlight innovativeness, proactiveness, risk-taking, autonomy, and competitive aggressiveness as important aspects of EO. Innovativeness refers to a firm's tendency to support new ideas, experimentation, creativity, and technological or product development. Proactiveness reflects the firm's ability to anticipate future market needs and act before competitors. Risk-taking describes the willingness of firms to allocate resources to uncertain projects, markets, or innovations. Autonomy refers to the degree to which individuals or teams within the organization are given freedom to initiate entrepreneurial actions. Competitive aggressiveness reflects the firm's intensity in challenging competitors and strengthening its market position. These dimensions indicate that EO is a multidimensional construct that captures how firms pursue entrepreneurial behavior in different strategic contexts.

EO has been widely examined in relation to firm performance, innovation, internationalization, competitive advantage, and organizational capability. For example, Arunachalam et al. (2018) discuss the role of EO in supporting innovation pathways to profitability through marketing capabilities. Jin et al. (2017) examine how EO contributes to internationalization and performance among small and medium-sized enterprises through marketing capability. Hughes et al. (2018) show that the EO–performance relationship can be explained through intermediate capabilities such as absorptive capacity and improvisation, especially in emerging economies. Kiyabo and Isaga (2020) also connect EO with competitive advantage and SME performance. These studies indicate that EO is often treated as an important antecedent of firm-level outcomes, although the strength and direction of its effect may depend on contextual and organizational conditions.

In addition to firm performance, EO has also been studied in relation to specific organizational and sectoral contexts. Studies have examined EO in SMEs, family firms, technology-based firms, hospitality, education, healthcare, finance, and other service industries. For instance, Hernández-Perlines et al. (2019) examine EO in family businesses, while Bujan (2020) links EO with socioemotional dimensions in small family hotels. Guo et al. (2020) investigate green entrepreneurial orientation and green innovation, showing that EO literature has expanded into sustainability-related topics. Meanwhile, Criado-Gomis et al. (2018) and Criado-Gomis et al. (2020) connect EO with sustainability and customer value creation. These studies demonstrate that EO is no longer limited to conventional entrepreneurship research but has developed across broader domains such as sustainability, service management, family business, innovation, and customer value.

The development of EO literature also shows methodological diversity, although empirical survey-based research remains dominant. Many EO studies use quantitative survey designs to test relationships between EO and outcomes such as performance, innovation, satisfaction, or competitiveness. Survey methods are useful because they allow researchers to measure EO dimensions and test statistical relationships across firms or respondents. However, the dominance of survey research may limit deeper understanding of how EO is formed, practiced, and interpreted in different organizational contexts. Qualitative and mixed-method studies are therefore important to explain the mechanisms, processes, and contextual meanings behind EO. Interviews, observations, secondary data analysis, and mixed-method approaches can complement survey-based findings by providing richer insights into entrepreneurial processes and organizational practices.

From a review perspective, EO literature can be mapped into several major themes. First, many studies focus on EO magnitude, namely the extent to which EO is present or varies across firms, sectors, or contexts. This theme commonly discusses EO dimensions and their relationship with other organizational orientations, such as market orientation, customer orientation, learning orientation, and innovation orientation. Second, some studies focus on the consequences of EO, particularly its effects on performance, innovation, competitive advantage, customer satisfaction, and internationalization. Third, another group of studies examines EO mechanisms, including mediating and moderating variables that explain how and when EO influences organizational outcomes. These mechanisms are important because EO may not always produce direct effects; its impact can be strengthened or weakened by internal capabilities, environmental conditions, resource access, organizational learning, or managerial practices.

Despite the richness of EO literature, several gaps remain. First, EO studies are not evenly distributed across geographical regions. Existing research tends to be concentrated in certain countries and continents, while other regions remain underrepresented. This creates an opportunity for more cross-country and context-sensitive studies to examine whether EO operates similarly across different institutional, cultural, and economic environments. Second, EO research is heavily dominated by empirical studies, while conceptual and theoretical contributions remain relatively limited. More conceptual studies are needed to refine EO dimensions, clarify theoretical boundaries, and develop new integrative frameworks. Third, the methodological profile of EO research remains strongly survey-oriented. Future studies may benefit from qualitative and mixed-method approaches to better capture the processes and mechanisms through which EO is developed and implemented. Fourth, EO mechanisms and consequences need deeper investigation because they can explain the conditions under which EO contributes to sustainable organizational outcomes.

Based on these considerations, this review positions EO as a mature but still developing research field. The increasing number of studies indicates strong scholarly interest, while the variation in themes, methods, countries, and sectors shows that EO remains open for further theoretical and methodological development. Therefore, a systematic mapping of EO literature is needed to clarify publication trends, geographical distribution, article types, data collection methods, and thematic patterns. Such mapping is important not only to summarize existing knowledge but also to identify research gaps and guide future EO studies in a more focused and transparent manner.

## **B. REVIEW QUESTION DEVELOPMENT**

Since this study is designed as a systematic literature review rather than a quantitative causal study, it does not develop statistical hypotheses. Hypotheses are commonly used in empirical studies that test relationships between variables using primary or secondary data. In contrast, this review aims to synthesize and classify existing EO studies based on publication trends, geographical distribution, article type, data collection methods, and thematic focus. Therefore, the hypothesis development section is adapted into review question development. This adjustment is necessary to ensure that the research design, research objectives, method, and findings remain consistent.

The first review question concerns the time distribution of EO studies. EO has gained increasing attention in entrepreneurship and strategic management literature, but the pattern of publication over time needs to be mapped more clearly. Identifying publication trends helps explain whether EO research has grown consistently,

experienced fluctuation, or reached peak attention in certain years. Therefore, the first review question is formulated as follows:

***RQ1: How were entrepreneurial orientation articles distributed across publication years from 2012 to 2021?***

The second review question focuses on geographical distribution. EO is expected to have different meanings and implications across countries because firms operate in different institutional, economic, cultural, and competitive environments. However, prior studies may be concentrated in certain regions, creating geographical imbalance in the literature. Mapping countries and continents is important to identify dominant and underrepresented research contexts. Therefore, the second review question is formulated as follows:

***RQ2: How were entrepreneurial orientation articles distributed across countries and continents during the review period?***

The third review question relates to article type. EO literature includes both empirical and conceptual studies. Empirical studies are important because they test EO relationships in real organizational contexts, while conceptual studies are needed to refine theories, propose frameworks, and clarify construct development. Understanding the balance between empirical and conceptual articles helps evaluate the theoretical maturity of EO literature. Therefore, the third review question is formulated as follows:

***RQ3: What types of entrepreneurial orientation articles dominated the literature, particularly empirical and conceptual studies?***

The fourth review question addresses data collection methods. Methodological choices influence the type of knowledge produced in EO research. Survey methods may dominate because EO is often measured through structured instruments, but interviews, observations, secondary data, and mixed-method approaches can provide different forms of insight. Mapping data collection methods helps identify methodological strengths and limitations in the EO literature. Therefore, the fourth review question is formulated as follows:

***RQ4: What data collection methods were used in empirical entrepreneurial orientation studies?***

The fifth review question focuses on EO themes. EO research has developed across different thematic directions, including EO magnitude, consequences of EO, and EO mechanisms. Thematic classification is important because it helps identify which

areas have received substantial attention and which areas require further investigation.

Therefore, the fifth review question is formulated as follows:

***RQ5: What major themes were developed in entrepreneurial orientation research, and what future research directions can be derived from those themes?***

These review questions provide the analytical basis for this study. They guide the search, screening, coding, classification, and synthesis of the reviewed articles. By using review questions rather than statistical hypotheses, this study maintains consistency with its systematic review design and provides a transparent structure for presenting the results and discussion.

## **METHOD**

This study employed a targeted systematic review design using the Systematic Quantitative Assessment Technique (SQAT) supported by PRISMA-based reporting procedures. The method was revised to improve transparency, replicability, and consistency in article selection, classification, and synthesis. The review focused on peer-reviewed journal articles on entrepreneurial orientation (EO) published between 2012 and 2021. The purpose of the method was not to test statistical hypotheses, but to identify, classify, and synthesize EO studies based on publication year, geographical distribution, article type, data collection method, and research theme.

The search was conducted using Google Scholar Advanced Search and selected publisher platforms. The search used the exact phrase “entrepreneurial orientation” in the article title to ensure that the reviewed articles explicitly focused on EO as the main topic. The publication period was limited from January 1, 2012, to November 13, 2021. The publisher platforms examined were Sage, Springer, Elsevier, Emerald, Taylor & Francis, and Wiley. These sources were treated as publisher platforms rather than academic databases to avoid overclaiming the scope of the review. Therefore, the findings of this study should be interpreted as a targeted systematic mapping of EO studies within the selected corpus, rather than as a complete representation of all EO publications worldwide.

The inclusion criteria were as follows. First, the article had to be a peer-reviewed journal article. Second, the article had to be written in English. Third, the article had to be published between 2012 and 2021. Fourth, the phrase “entrepreneurial orientation” had to appear in the article title. Fifth, the article had to be either empirical or conceptual and directly related to EO. Articles were excluded if they were book chapters, conference proceedings, theses, dissertations, editorials, commentaries, non-English publications, duplicate records, or articles that mentioned EO only marginally without making it the main focus of the study.

The screening process was conducted in three stages. In the first stage, records were identified through the selected search strategy and publisher platforms. Duplicate records across publisher platforms were removed. In the second stage, titles and abstracts were screened to determine whether the articles met the inclusion criteria. In the third stage, the full

texts of potentially eligible articles were assessed to confirm their relevance, article type, research method, country or study context, and thematic category. Articles were included only when the full text confirmed that EO was a central focus of the study. The final corpus consisted of 100 peer-reviewed journal articles. The article selection process was reported using a PRISMA flow diagram covering identification, screening, eligibility, and inclusion stages.

Data were extracted using a structured review matrix. The matrix included the following information: author(s), year of publication, article title, journal name, publisher platform, country of study, continent, article type, research design, data collection method, sector or industry, EO theme, and key finding. For empirical articles, the country was coded based on the empirical research setting. For conceptual articles, the country was coded based on the first author's institutional affiliation. When an article involved more than one country, all relevant countries were recorded in the dataset, while the article was counted once in the total corpus. This procedure was used to prevent double counting at the article level while still capturing multi-country representation.

The coding process was guided by explicit classification rules. Article type was classified into two categories: empirical and conceptual. Empirical articles were defined as studies that collected or analyzed primary or secondary data to examine EO. Conceptual articles were defined as studies that developed arguments, frameworks, propositions, or theoretical discussions without collecting empirical data.

Data collection methods were coded into four categories: survey, interview, secondary data, and observation. Survey referred to studies that used questionnaires or structured instruments to collect data from respondents. Interview referred to studies that used structured, semi-structured, or unstructured interviews. Secondary data referred to studies that used archival data, published reports, databases, financial records, or other existing datasets. Observation referred to studies that collected data through direct observation, field notes, or systematic observation of organizational practices. Multiple coding was allowed because one article could use more than one data collection method. Therefore, the total number of data collection methods may exceed the number of empirical articles. Articles using more than one data collection method were additionally flagged as multi-method studies.

EO themes were coded into three main categories: EO magnitude, consequences of EO, and EO mechanisms. EO magnitude referred to studies that examined the level, dimensions, measurement, or presence of EO in firms, sectors, or contexts. Consequences of EO referred to studies that examined the outcomes of EO, such as firm performance, innovation, internationalization, customer satisfaction, competitive advantage, or sustainability. EO mechanisms referred to studies that examined mediating, moderating, or process-based explanations of how and under what conditions EO influences organizational outcomes. Each article was assigned one dominant theme based on its primary research objective.

To improve coding consistency, the articles were coded using a structured coding sheet. The coding sheet contained article identity, bibliographic information, methodological profile, and thematic classification. Coding disagreements were resolved through discussion and

rechecking of the full text. The final dataset was audited to ensure that all classifications were consistent across tables, figures, and narrative explanations. The reviewed article list was also prepared as an appendix containing, at minimum, title, year, journal, country, article type, method, data source, and EO theme.

A number audit was conducted before the analysis to ensure consistency across the manuscript. The total number of reviewed articles was 100. Of these, 93 articles were empirical and 7 articles were conceptual. Data collection methods were analyzed only for the 93 empirical articles because conceptual articles did not involve data collection. Because multiple coding was allowed for data collection methods, the number of method occurrences could exceed 93. Theme classification was conducted for all 100 articles. All tables, figures, and narrative statements were checked to ensure that the reported numbers were consistent or clearly explained when they referred to a specific subset.

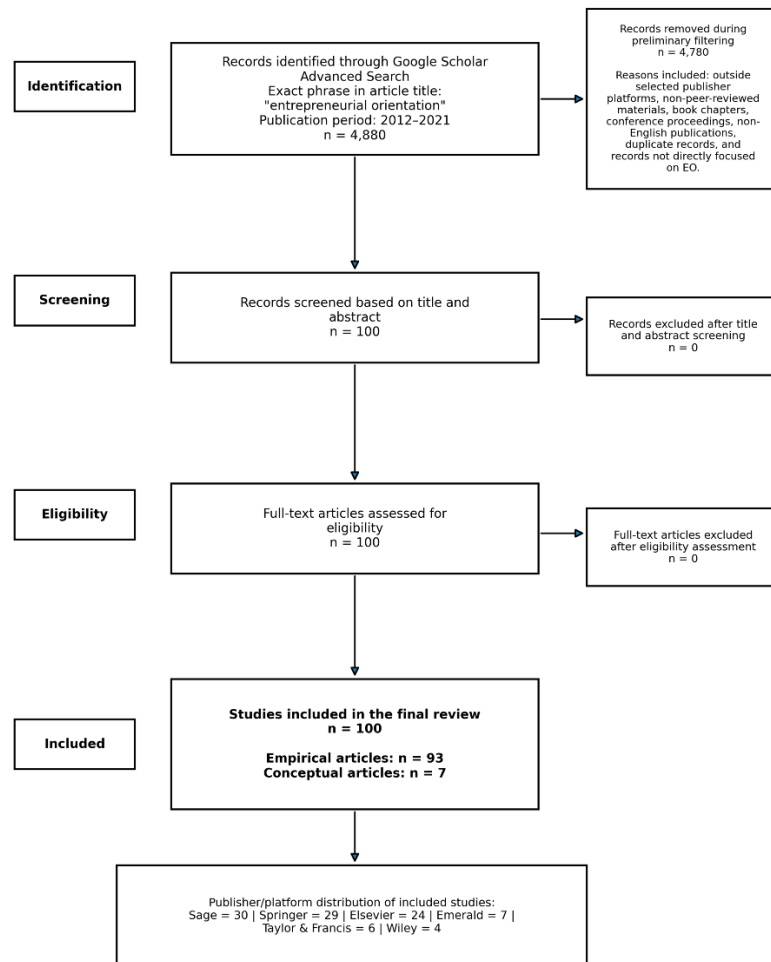
The data were analyzed using descriptive and thematic synthesis. Descriptive analysis was used to present frequencies and percentages related to publication year, country, continent, article type, and data collection method. Thematic synthesis was used to classify EO studies into EO magnitude, consequences of EO, and EO mechanisms. The analysis did not conduct a meta-analysis because the reviewed articles varied in research objectives, variables, sectors, measurements, and analytical techniques. Therefore, the synthesis focused on mapping research patterns, identifying dominant trends, and formulating future research directions based on the reviewed corpus.

This study has several methodological limitations. First, the search strategy focused on articles containing the exact phrase “entrepreneurial orientation” in the title, which may exclude relevant articles that discuss EO in the abstract, keywords, or body of the manuscript. Second, the review was limited to English-language peer-reviewed journal articles, excluding potentially relevant non-English publications, book chapters, and conference papers. Third, the review was based on selected publisher platforms; therefore, the findings should be interpreted within the boundaries of the selected corpus. These limitations were acknowledged to avoid overgeneralization and to provide a transparent basis for future reviews using broader databases such as Scopus, Web of Science, or EBSCO.

## **RESULTS AND DISCUSSION**

### **A. RESULTS**

This section presents the findings of the targeted systematic review of entrepreneurial orientation (EO) articles published between 2012 and 2021. The results are organized based on the review questions: article selection process, publisher/platform distribution, publication year, geographical distribution, article type, data collection method, and EO themes. To address reporting consistency, this section also includes a number audit explaining the basis of each reported number.



**Figure 1.** PRISMA Flow Diagram of Article Selection

Source: Authors' Review

The PRISMA flow diagram explains the identification, screening, eligibility, and inclusion stages of the review. The initial search through Google Scholar Advanced Search using the exact phrase “entrepreneurial orientation” in the article title identified 4,880 records published between 2012 and 2021. After preliminary filtering, 4,780 records were removed because they did not meet the targeted review criteria. These removed records included materials outside the selected publisher platforms, non-peer-reviewed documents, book chapters, conference proceedings, non-English publications, duplicate records, and records not directly focused on EO as the main topic. A total of 100 articles were then screened and assessed for eligibility through full-text checking. The final review included 100 peer-reviewed journal articles. Table 1

presents the number audit used in this review. This audit was conducted to ensure that all figures, tables, and narrative explanations use consistent numbers.

Table 1: Number Audit of the Reviewed Articles

Category	Number	Explanation
Initial records identified	4,880	Records identified through Google Scholar Advanced Search using the exact phrase “entrepreneurial orientation” in the article title
Records removed during preliminary filtering	4,780	Records removed because they did not meet the targeted review criteria
Articles included in final review	100	Final corpus of peer-reviewed EO journal articles
Empirical articles	93	Articles using primary or secondary empirical data
Conceptual articles	7	Articles without empirical data collection
Articles analyzed for data collection methods	93	Only empirical articles were included in method analysis
EO themes analyzed	100	All articles were coded into one dominant EO theme
Multi-method empirical articles	31	Empirical articles using more than one data collection method

Source: Authors’ Review

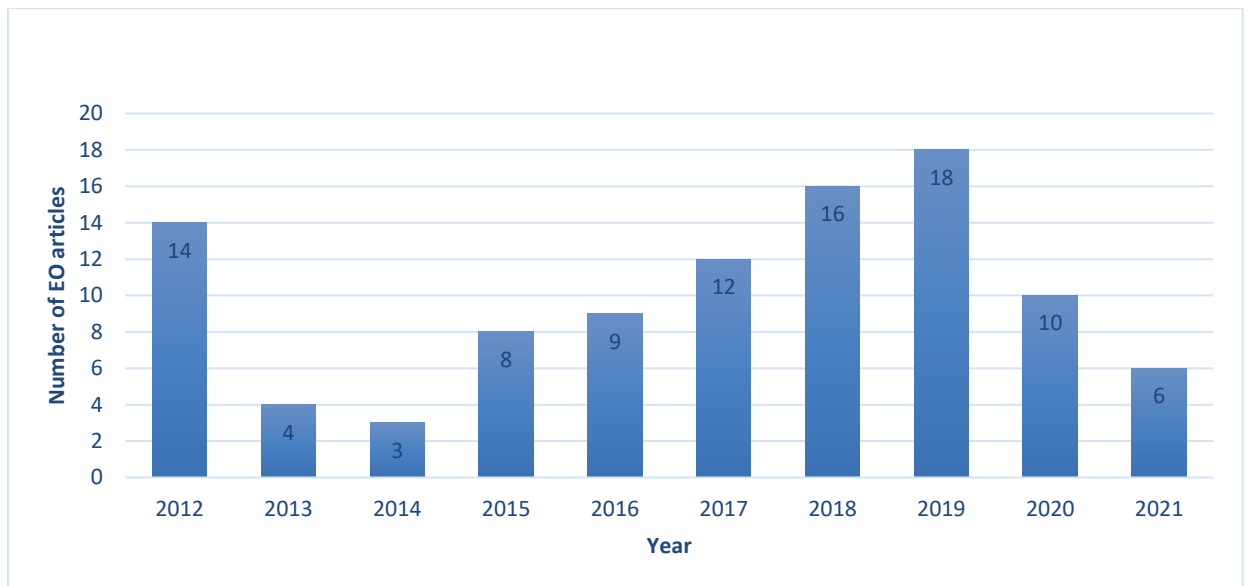
The final corpus consisted of 100 EO articles from six selected publisher/platforms. Sage contributed the highest number of articles with 30 publications, followed by Springer with 29 articles, Elsevier with 24 articles, Emerald with 7 articles, Taylor & Francis with 6 articles, and Wiley with 4 articles. These numbers confirm that the review is based on a selected publisher/platform corpus. Therefore, the findings should be interpreted within this selected scope rather than as a complete representation of all EO articles worldwide.

Table 2: EO Articles Reviewed by Publisher/Platform

Publisher/Platform	Number of Articles
Sage	30
Springer	29
Elsevier	24

Publisher/Platform	Number of Articles
Emerald	7
Taylor & Francis	6
Wiley	4
Total	100

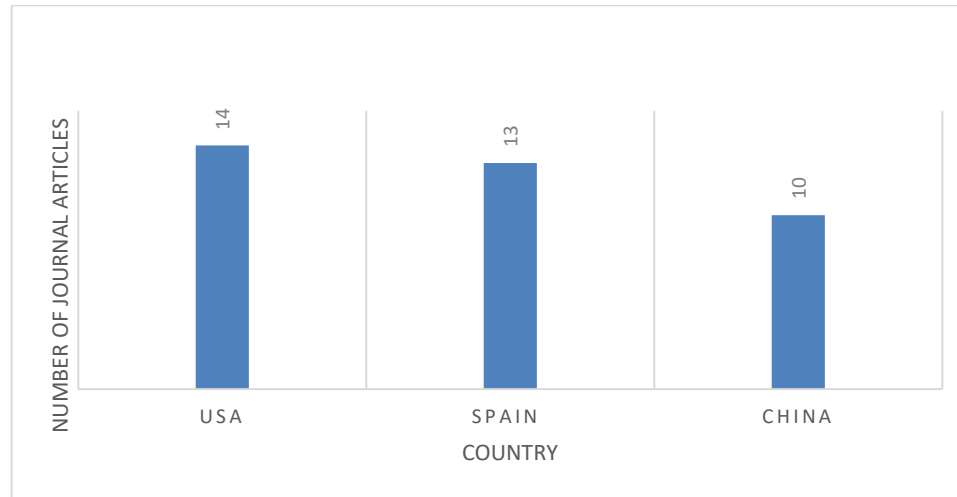
Source: Authors' Review



**Figure 2. Time Distribution of EO Articles**

Source: Authors' Review

The publication year analysis shows that EO articles were published throughout the review period. The number of articles fluctuated across years, with 14 articles in 2012, 4 in 2013, 3 in 2014, 8 in 2015, 9 in 2016, 12 in 2017, 16 in 2018, 18 in 2019, 10 in 2020, and 6 in 2021. The highest number of publications appeared in 2019, with 18 articles, while the lowest number appeared in 2014, with 3 articles. This indicates that scholarly attention to EO increased toward the middle and later years of the decade, although the pattern was not fully linear.



**Figure 3.** Countries with the Maximum EO Articles

Source: Authors' Review

The country distribution shows that the United States, Spain, and China were the three most represented countries in the reviewed EO literature. The United States had the highest number of EO articles, with 14 publications. Spain followed with 13 articles, while China contributed 10 articles. This pattern indicates that EO studies in the selected corpus were strongly represented by these three countries.

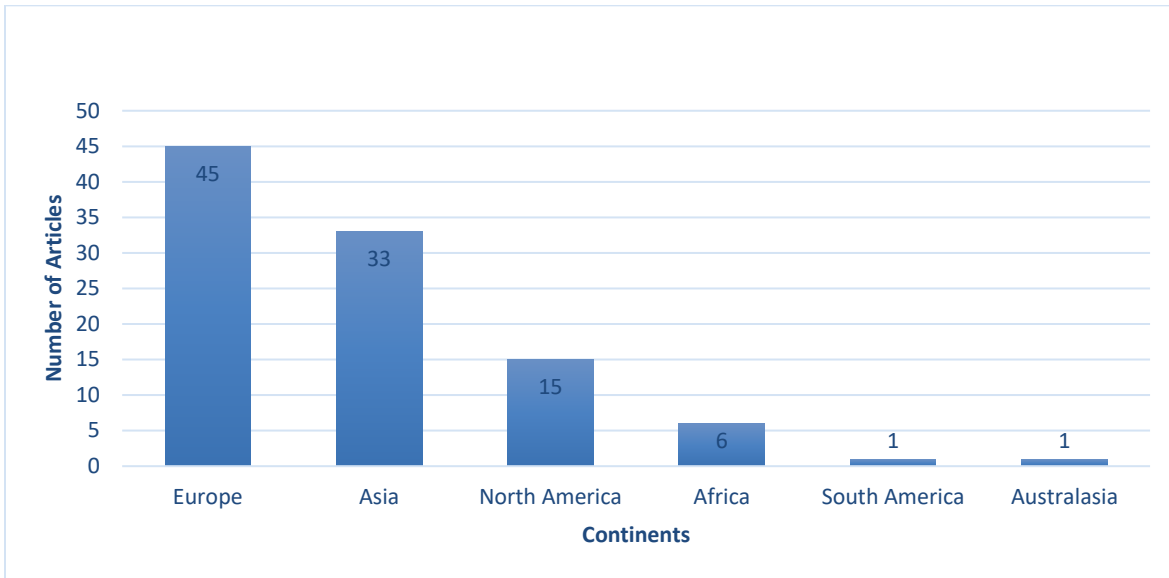
Table 3 summarizes the other reported countries in the corpus after the three leading countries. To ensure consistency, the table is labelled as the remaining 30 reported countries, following the number of countries explicitly listed in the original dataset table. The full article-level coding matrix should be attached as an appendix to verify all country classifications.

**Table 3.** Remaining Reported Countries and Number of EO Articles

No.	Country	Number of Articles
1	Malaysia	6
2	India	5
3	Netherlands	4
4	Portugal	4
5	Sweden	4
6	Italy	3
7	Germany	3
8	Switzerland	2
9	Turkey	2
10	Finland	2
11	Pakistan	2

<b>No.</b>	<b>Country</b>	<b>Number of Articles</b>
12	United Kingdom	2
13	South Africa	2
14	Tanzania	2
15	France	2
16	Canada	1
17	Hungary	1
18	UAE	1
19	Austria	1
20	Egypt	1
21	Taiwan	1
22	Indonesia	1
23	Iran	1
24	Australia	1
25	Chile	1
26	Croatia	1
27	Bangladesh	1
28	Poland	1
29	Jordan	1
30	Ghana	1

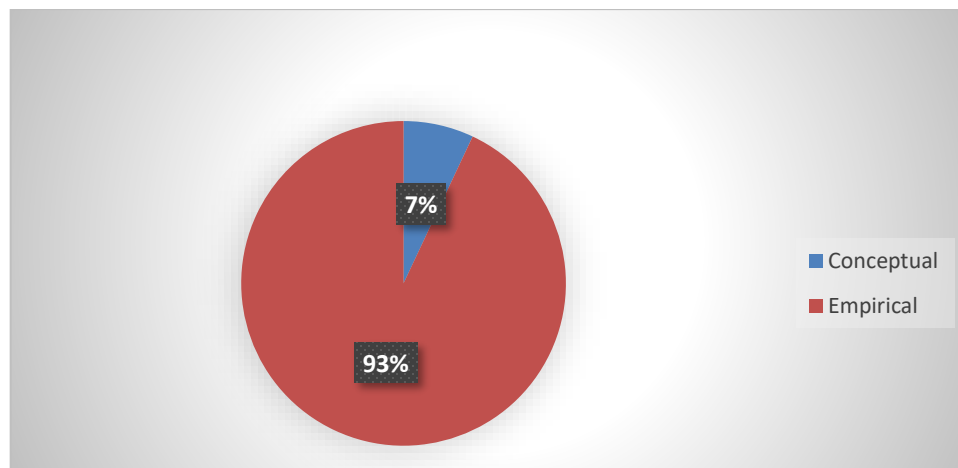
Source: Authors' Review



**Figure 4.** EO Articles by Continent

Source: Authors' Review

The continental distribution shows that Europe had the highest representation, with 45 article occurrences, followed by Asia with 33, North America with 15, Africa with 6, South America with 1, and Australasia with 1. The total continental occurrence is 101, not 100, because one article involved two countries and two continents. Therefore, the article-level corpus remains 100, while the continent-level coding produces 101 occurrences due to multiple-country coding. This distinction is important to maintain consistency between article-level counting and geographical occurrence counting.



**Figure 5.** EO Article Types

Source: Authors' Review

The classification of article types shows that EO research in the selected corpus was dominated by empirical studies. Out of 100 reviewed articles, 93 were empirical articles and 7 were conceptual articles. Empirical articles represented 93% of the corpus, while conceptual articles represented only 7%. This result indicates that EO scholarship during the period was largely oriented toward empirical testing, measurement, and application rather than conceptual or theoretical development.

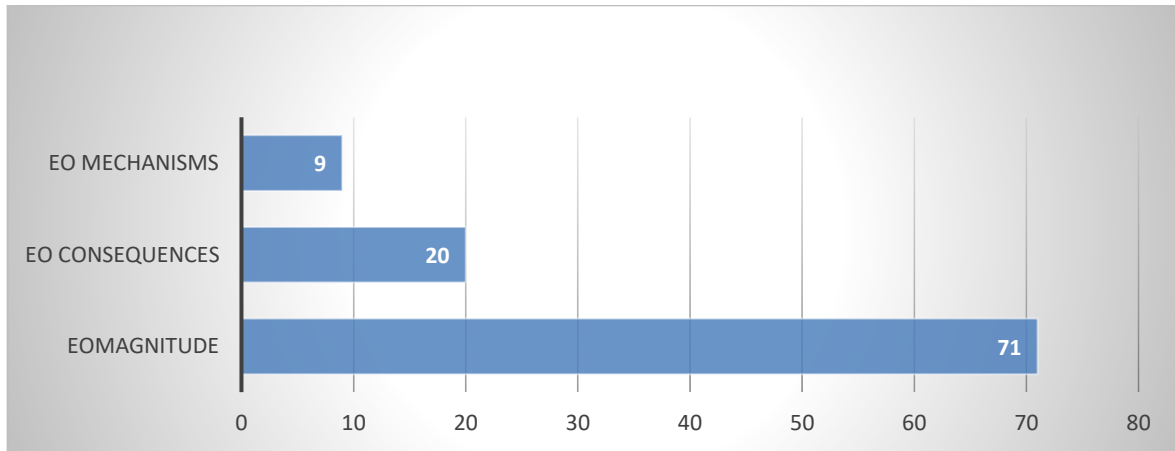


**Figure 6.** EO Data Collection Methods

Source: Authors' Review

Data collection methods were analyzed only for the 93 empirical articles because the 7 conceptual articles did not involve empirical data collection. Four categories of data collection methods were identified: survey, interview, secondary data, and observation. Survey was the most frequently used method, appearing in 86 empirical articles. Interview was used in 28 articles, secondary data in 15 articles, and observation in 11 articles.

The total number of method occurrences exceeds 93 because multiple coding was allowed. This means that one empirical article could be coded into more than one data collection method when it used more than one source of data. In total, 31 empirical articles used more than one data collection method. This coding rule explains why the sum of survey, interview, secondary data, and observation is greater than the number of empirical articles.



**Figure 7. EO Themes**

Source: Authors' Review

The thematic analysis classified all 100 articles into three dominant EO themes: EO magnitude, consequences of EO, and EO mechanisms. EO magnitude was the most frequently examined theme, with 71 articles. This theme included studies that focused on the level, dimensions, measurement, and relationship of EO with related constructs such as market orientation, customer orientation, organizational commitment, and employee satisfaction. The second theme was consequences of EO, with 20 articles. This theme included studies examining the effects of EO on outcomes such as firm performance, innovation, internationalization, competitive advantage, and customer satisfaction. The third theme was EO mechanisms, with 9 articles. This theme included studies that examined mediating, moderating, or process-based explanations of how EO influences organizational outcomes.

Table 4 summarizes the main findings of the review based on the corrected number audit. The table uses 100 articles as the total corpus, 93 empirical articles for data collection method analysis, and 7 conceptual articles for article type classification.

**Table 4. Summary of Findings of the Reviewed EO Articles**

No.	Category	Key Findings	Implication
1	Time distribution	EO articles were published across the 2012–2021 period. The highest number was published in 2019, while the lowest number appeared in 2014.	EO remained an active research topic during the review period, although publication intensity fluctuated across years.
2	Publisher/platform distribution	The final corpus consisted of 100 articles from Sage, Springer, Elsevier, Emerald, Taylor & Francis, and Wiley.	The review findings should be interpreted within the selected publisher/platform corpus.
3	Geographical	The United States, Spain, and	EO research is geographically

No.	Category	Key Findings	Implication
	distribution	China were the three most represented countries. Europe had the highest continental representation, followed by Asia and North America.	concentrated, indicating the need for more context-sensitive and cross-country studies.
4	Article type	Of the 100 reviewed articles, 93 were empirical and 7 were conceptual.	EO literature is strongly empirical, while conceptual development remains relatively limited.
5	Data collection methods	Survey was the most frequently used method, followed by interview, secondary data, and observation. Multiple coding was allowed because some articles used more than one method.	EO research is dominated by survey-based studies, but qualitative and mixed-method approaches are needed to enrich process-based understanding.
6	EO themes	EO magnitude was the dominant theme, followed by consequences of EO and EO mechanisms.	Future studies should give greater attention to EO consequences and mechanisms, especially mediating, moderating, and process-based explanations.

Source: Authors' Review

## **B. DISCUSSION**

The findings show that entrepreneurial orientation has remained an active research topic during the 2012–2021 period. The number of reviewed articles fluctuated over time, with the highest publication frequency in 2019. This trend suggests that EO continued to attract scholarly attention, particularly in studies examining firm behavior, innovation, performance, and competitiveness. However, the fluctuation also indicates that EO publication activity in the selected corpus did not grow in a strictly linear pattern. Therefore, the result should be interpreted as a publication pattern within the selected publisher/platform corpus rather than as a complete global trend of EO research.

The geographical findings indicate that EO studies were concentrated in several dominant countries and regions. The United States, Spain, and China were the three most represented countries, while Europe was the most represented continent. Asia and North America also showed substantial representation, whereas Africa, South America, and Australasia were less represented in the reviewed corpus. This finding suggests the need for broader geographical

coverage in future EO research. However, this review avoids making broad policy claims that are not directly supported by the reviewed data. The main implication is not that EO programs will automatically improve regional development, but that EO theory requires further testing across diverse institutional, cultural, and economic environments. More cross-country and context-sensitive studies are needed to understand whether EO dimensions operate similarly across different business systems.

The dominance of empirical articles indicates that EO scholarship has been strongly oriented toward testing relationships between EO and organizational outcomes. This is valuable because empirical studies provide evidence on how EO is associated with performance, innovation, internationalization, competitiveness, and customer-related outcomes. However, the small number of conceptual articles shows that theoretical development remains limited in the selected corpus. EO is a mature construct, but its boundaries, dimensions, and mechanisms still need further conceptual refinement. Future conceptual studies can contribute by clarifying how EO differs from related constructs such as market orientation, innovation orientation, learning orientation, and strategic flexibility.

The methodological findings show that survey was the dominant method in EO research. This is understandable because EO is commonly measured through structured instruments and tested using quantitative models. Survey-based research allows researchers to examine EO across large samples and compare firms, sectors, or countries. Nevertheless, the dominance of surveys also creates limitations. Survey studies may explain whether EO is related to certain outcomes, but they are less able to explain how EO emerges, how it is practiced inside organizations, and why its effects differ across contexts. Therefore, future EO studies should increase the use of interviews, observations, secondary data, and mixed-method designs. Qualitative approaches can provide deeper insight into managerial interpretation, entrepreneurial processes, and organizational routines. Mixed-method designs can combine statistical testing with contextual explanation.

The review also shows that EO magnitude was the most dominant theme. This indicates that many studies focused on measuring EO, identifying its dimensions, or examining its association with other organizational orientations. While this theme remains important, the literature needs greater attention to the consequences and mechanisms of EO. Consequence-based studies are needed to clarify the specific outcomes of EO, such as innovation performance, sustainable performance, customer value, international growth, and competitive advantage. Mechanism-based studies are also important because EO may not always influence outcomes directly. Its effect may depend on mediating and moderating factors such as marketing capability, absorptive capacity, organizational learning, environmental dynamism, access to finance, stakeholder integration, and managerial capability.

The corrected number audit strengthens the trustworthiness of the review. The total reviewed corpus is 100 articles, consisting of 93 empirical and 7 conceptual articles. Data collection methods are analyzed only for the 93 empirical articles, while thematic classification is based on all 100 articles. The method count exceeds 93 because some studies used more than one data collection method. The geographical count also requires careful interpretation because one article may involve more than one country or continent. By making these rules explicit, the review becomes more transparent and replicable.

Overall, the findings suggest that EO research has developed as an empirically rich field, but it still offers opportunities for theoretical, methodological, and contextual advancement. Future studies should expand EO research into underrepresented regions, develop stronger conceptual frameworks, apply more diverse methods, and examine EO mechanisms more deeply. For review-based studies, future researchers are encouraged to use broader academic databases, provide full search strings, conduct full-text eligibility assessment, report PRISMA flow diagrams, and attach coding datasets as appendices. These steps will improve the credibility, transparency, and replicability of EO literature reviews.

## **CONCLUSION**

This study reviewed entrepreneurial orientation (EO) articles published between 2012 and 2021 using a targeted systematic review approach supported by SQAT and PRISMA-based reporting procedures. The final corpus consisted of 100 peer-reviewed journal articles selected from six publisher/platform sources. The findings show that EO remained an active topic in entrepreneurship and management research during the review period, with the highest number of publications appearing in 2019. Geographically, EO studies were concentrated in several countries, particularly the United States, Spain, and China, while Europe had the highest continental representation.

The review also found that EO research was dominated by empirical studies. Of the 100 reviewed articles, 93 were empirical articles and 7 were conceptual articles. This indicates that EO scholarship has largely emphasized empirical testing and practical application, while conceptual and theoretical development remains relatively limited. In terms of data collection methods, survey was the most frequently used method, followed by interview, secondary data, and observation. Since several empirical articles used more than one method, multiple coding was applied in the analysis. This confirms that EO research is still strongly survey-oriented, although some studies have begun to adopt multi-method approaches.

The thematic analysis identified three dominant EO themes: EO magnitude, consequences of EO, and EO mechanisms. EO magnitude was the most investigated theme, indicating that many studies focused on measuring EO, examining its dimensions, and linking EO with related organizational orientations. However, fewer studies focused on the consequences and mechanisms of EO. This suggests that future research should pay more

attention to how EO influences organizational outcomes and under what conditions EO becomes more or less effective.

The study has several limitations. First, the review was limited to articles containing the exact phrase “entrepreneurial orientation” in the title. As a result, relevant articles that discussed EO in abstracts, keywords, or full texts may have been excluded. Second, the review focused only on English-language peer-reviewed journal articles, excluding non-English publications, books, book chapters, and conference proceedings. Third, the review was based on selected publisher/platform sources; therefore, the findings should be interpreted within the boundaries of the selected corpus rather than as a complete global representation of all EO studies.

Future studies are recommended to use broader academic databases such as Scopus, Web of Science, EBSCO, or ProQuest to improve coverage and replicability. Future reviews should also provide complete search strings, search dates, exclusion reasons, full-text eligibility procedures, PRISMA flow diagrams, and article-level coding datasets as appendices. Substantively, future EO research should expand conceptual studies, apply more qualitative and mixed-method approaches, explore underrepresented geographical contexts, and examine EO consequences and mechanisms in greater depth. These improvements can strengthen the theoretical, methodological, and contextual development of entrepreneurial orientation research.

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