

## Review Article

# Influence of Cultural Factors on Organizational Performance of Multinational Corporations: A Bibliometric Review from 1983 to 2020

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Cultural factors play an important role that affects the organizational performance of, especially, the multinational corporations operating across countries and cultures. This study aims to investigate the scientific information related to this research area. The metadata from 856 scientific documents published from 1983 to 2020 in 195 journals indexed on the Web of Science has been analyzed. This study provides deeper insights on: (i) productivity and performance in the contents of the research area; (ii) the most influential countries and regions, journals, authors, and citations contributing to this research area; (iii) most frequent keywords and their direction for future research.

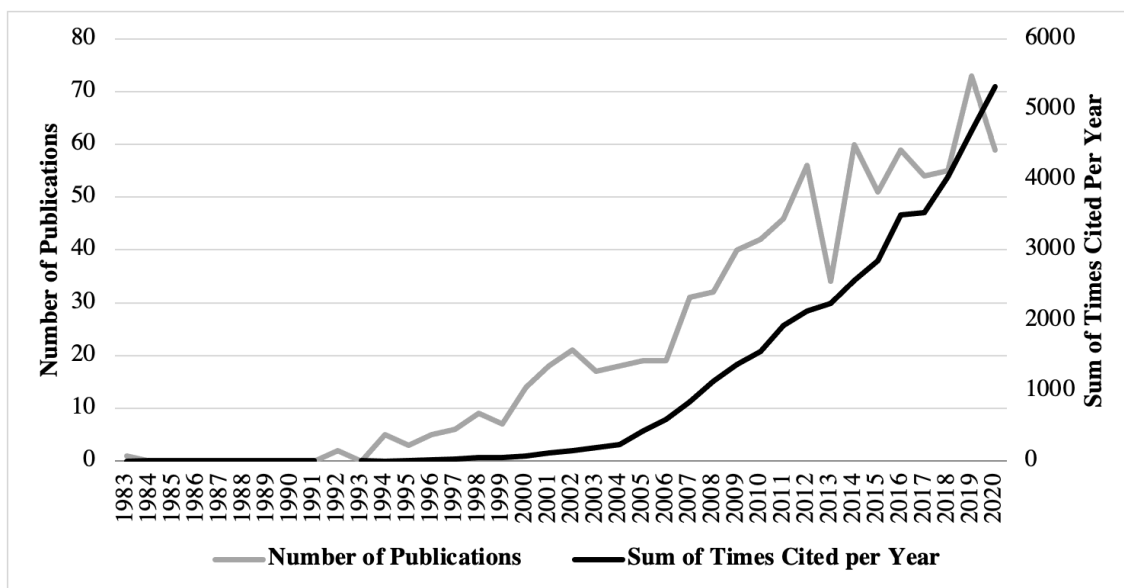
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## 1. Introduction

The importance and rise of culture as a variable in international business suggest that it is a ‘star’ issue justifying a more thorough exploration of how different elements of culture interact (Littrell, 2012). Literature on culture as an explanatory variable of behavioral tendencies, stemming from increasing demands for guidance due to globalization and liberalization of markets. A large body of research utilizes frameworks such as those provided by Hofstede (1980; 2001) and Hofstede et al. (2010) to move towards a more detailed appreciation of culture.

The growing interest in studying the cultural influence on organizational performance in the multinational corporations` context is evident in academic literature as can be seen in Figure 3 which shows the distribution of publications during the past 38 years (1983-2020). As suggested by Anand et al.

(2020) and Cerchione and Esposito (2017), in order to produce a broad sample to investigate recent development in the research field, a threshold point is usually taken as a proxy in a bibliometric dataset where the scientific documents were seen to ‘spike’ in a given period. As shown in Figure 1, a distinct growth point is observed in the year 2002 (threshold of 20), with the expansion of this trend, it reached 73 publications by 2019. As regard citations, the references to this theme began to appear in 1984 even while the frequency of publications was always at a low level through to 2004 (233 citations). Since then, the number of citations in the area of research has been doubling each year. By 2020, the number of citations reached 5,324.



**Figure 1.** Distribution of Bibliographic Records in the Field of Research on Web of ScienceSource: Self-elaboration

Scholars and practitioners have questioned the applicability of western management practices in developing countries (e.g., Selmer, 2004), and many of them have called to investigate the phenomena of cultural factors in different contexts particularly in non-western nations (e.g., Mujeeb et al., 2011), and re-exam of corporate soft factors such as organizational culture on corporate development (e.g., Pascale & Athos, 1982; Cui et al., 2018). In addition, organizational culture has been proven a key factor to promote organizational effectiveness and organizational performance (Gregory et al., 2009). Especially, it plays a positive role in the knowledge management process of international joint ventures (e.g., Tsui et al., 2007; Welch et al., 2011) and promotes the development of the market-entry strategy of multinational

corporations (e.g., Shenkar, 2005; Tihanyi et al., 2005; Gomez-Mejoa et al., 2010), which is vital in leading to their performance and survival (Rozkwitalska, 2012).

Moreover, Linnenluecke et al., (2020) assert that researchers in business, management, and related disciplines continue to rely on cursory and narrative reviews that lack systematic studies of the extant literature. While a bibliometric analysis enables the researchers to investigate the emergence, origin, development, and evolution of a given research field using data and conducting a comprehensive analysis of the field (Hérubel, 1999).

The overall purpose for this study is to understand the direction and development tendency of the literature related to the relevance of the influence of cultural factors on organizational performance in the multinational corporations` context, as well as the development enthusiasm of each country or region for this topic. Based on a systematic review of 856 scientific documents collected from the Web of Science, a categorized bibliometric analysis for the 1983 – 2020 period is presented. By combining the statistical analysis, bibliometric coupling analysis, and co-occurrence analysis, this study provides a deeper insight into the area of research through multiple dimensions that positions current contributions and enlighten the directions for future research.

This paper is organized into four sections. The second section introduces the data and methods, as well as the tools for conducting the bibliometric reviews. The third section presents the study`s results and discusses the findings through four aspects: (i) countries and regions; (ii) organization; (iii) authors, citations, and evolution of journal; (vi) evolution of keywords and tendency of future research. Finally, the conclusions and limitations of this study are shown.

## **2. Materials and Methods**

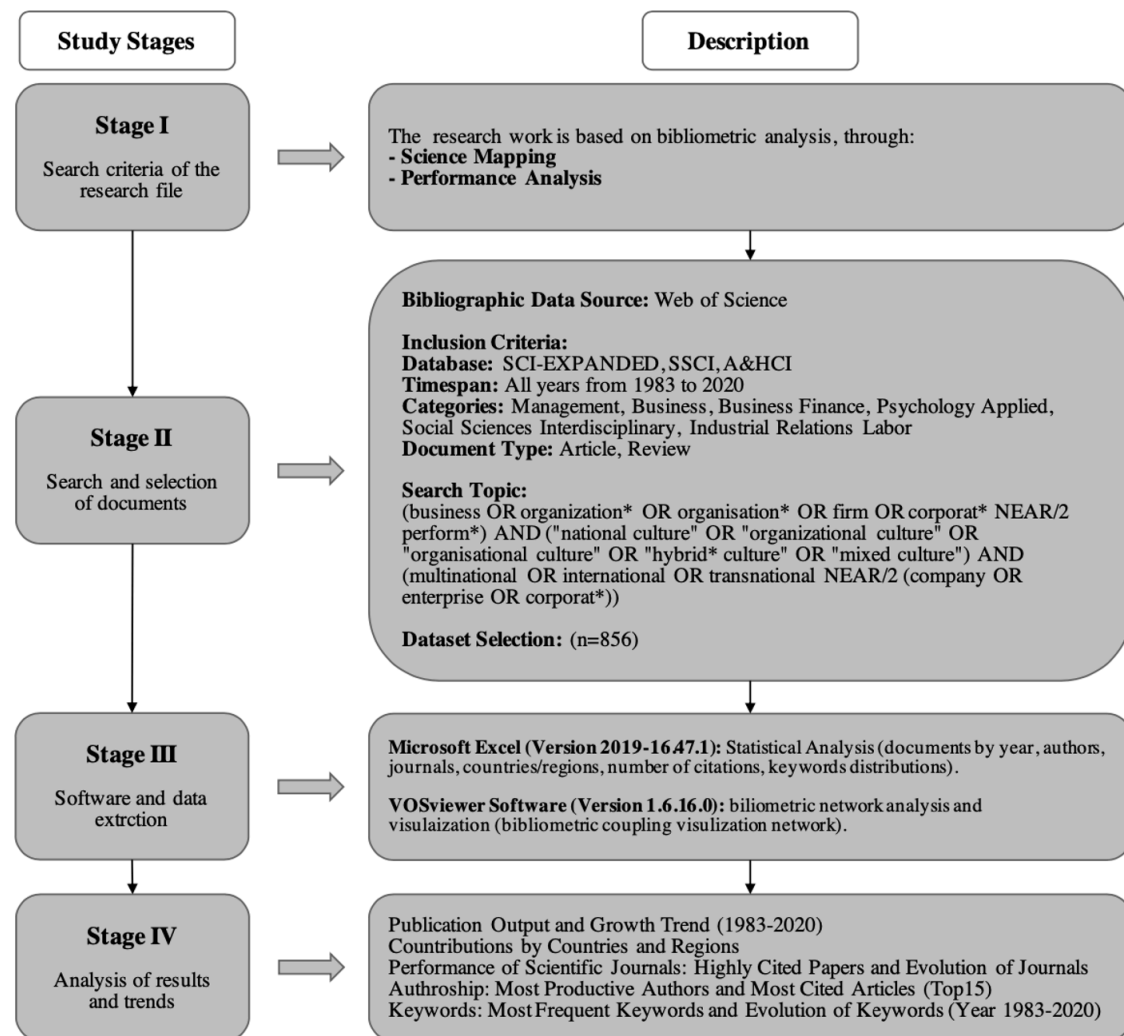
Bibliometrics as a useful tool to measure scientific activities was led by the significant growth of scientific production in recent decades and its collection in bibliographic databases (Sancho, 1990; Sánchez, 2017), this measurement is based on a statistical analysis of quantitative data provided by the scientific literature.

This study presents a step-by-step methodology of a systematic literature review following the suggestions of Tranfield et al. (2003) and Herrera-Franco et al. (2020). We applied a variant version of four-stage method developed by Herrera-Franco et al. (2020) applying the bibliometrics methodology,

and the stages were synthesized in Figure 1, those are: *search criteria of the research file, search and selection of documents, software and data extraction, analysis of results.*

**Stage One: Search criteria of the research field.** Two aspects in the bibliometric analysis were combined to evaluate the conceptual evolution of the research topic, namely: (a) Performance Analysis and (b) Science Mapping. Performance analysis focuses on the essential characteristics of scientific publications. Activity indicators such as authors, countries/regions, organizations, year of publication, number of citations, and other indicators that influence the scientific productivities such as the *H*-index of the journals are considered. Science mapping allows graphical representation of research (del Río et al., 2020; Montalván-Burbano et al., 2020). In the meanwhile, science mapping allows graphical representation of research fields and subfields by visualizing and identifying relationships or links between them (Van Eck & Waltman, 2014; Hallinger & Suriyankietkaew, 2018).

**Stage Two: Search and selection of documents.** To extract the literature, the Web of Science (WoS) was adopted. The search was refined using the categories shown in Figure 1. 'Psychology applied', 'social sciences interdisciplinary', and 'industrial relations labor' were included due to the social science nature of the studies that are usually distributed in journals under these categories. The period crosses from the year 1983 to 2020. The analysis begins with the year 1983 which has the first publication reflecting this field. Following Thyer (2008) and Adams et al. (2017), academic journals and reviews were selected meanwhile conference papers, book chapters, and books were omitted from the search. The Science Citation Index Expanded (SCI-EXPANDED), the Social Sciences Citation Index (SSCI), and the Arts & Humanities Citation Index (A & HCI) were used as citation indexes to make the sample more comprehensive. The search was conducted using Boolean logical operators as can be seen in Figure 2. A total of 856 scientific documents obtained were used in the pre-established bibliometric analysis.



**Figure 2.** Four-Stage Method for Bibliometric Analysis Source: self-elaboration from Herrera-Franco et al., (2020). Note: Date of Extraction: April 5, 2021.

**Stage Three: Software and data extraction.** The bibliographic information of the verified 856 scientific documents was downloaded in comma-separated values (CSV) which included the data of authors, titles, sources, affiliations of the authors, keywords, year of publication, and information of the citations. The downloaded bibliographic dataset was first transferred to Microsoft Excel of Office 365 for deduction of aberrant data or missing information. During the analysis, the same amount of data was confirmed valid at the time of download. Secondly, the VOSviewer software (version 1.6.16.0) was used for bibliometric network construction and visualization. The descriptive statistics are summarized in Table 1 which

illustrate that the selected scientific documents are of high academic quality through the perspective of citations.

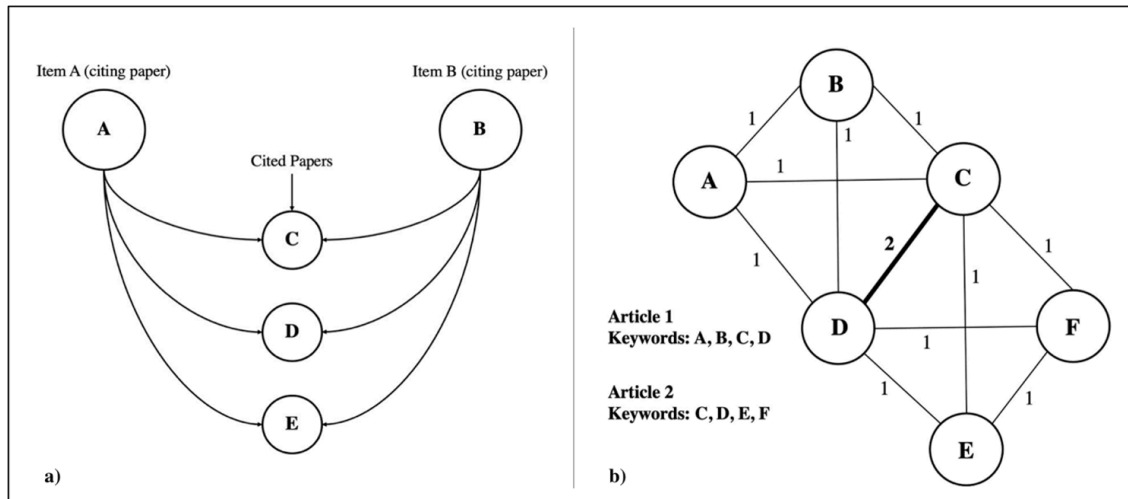
Indicators	#
Search result	856
Source <i>h</i> -index	104
Average citations per item	47.61
Sum of times cited	40,752
Sum of times cited without self-citation	38,327
Citing articles	26,262
Citing articles without self-citations	25,648

**Table 1.** Descriptive Statistics

**Stage Four: Analysis of results.** There were two steps for analyzing the bibliographic data identified in the previous stages. The first step was to obtain an analysis of the evolution of annual publication output and growth trend, most productive authors, most cited documents, and most frequent keywords with corresponding evolutions in the past nearly 40 years.

In the second step, the VOSviewer software was used to generate the bibliometric coupling network of visualization and co-occurrence network of keywords. In this study, the bibliographic coupling technique was mainly employed for the analyses of the top-ranking countries/regions, most productive documents, and the co-occurrence network was built for the analysis of keywords. Bibliographic coupling is a technique for measuring the similarity when two articles reference a common third article in their bibliographies, indicating that a probability exists that the two articles treat a related subject matter – the ‘coupling strength’ of two given articles is higher the more citations to other articles they share (Kessler, 1963). As indicated in Figure 3a, Paper A and Paper B are bibliographically coupled because they have cited papers C, D, and E in their reference list. In terms of a keyword co-occurrence network that is created by treating each keyword as a node and each co-occurrence of a pair of words as a link between those two

words, the number on the links indicate the weights with the thickness of the links shown proportionally to their weight as shown in Figure 3b (Radhakrishnan et al., 2017).



**Figure 3.** a) Bibliometric Coupling Technique (Source: Garfield, 2001); b) Keywords Co-occurrence Network (Source: Radhakrishnan et al., 2017)

### 3. Results and Discussions

#### 3.1. Countries/Regions

López- Illescas et al. (2009) and Anand et al. (2020) identified a publication from a country when at least one author is affiliated with an institution located in that country (or region). The total number of countries and regions in the field of our research interest is 70. Understanding where the scientific documents come from could aid researchers in concentrating on the geographical representation of concepts and contexts. Considering that this research is about MNCs, the geographic information may be more relevant.

According to the number of total citations, the top 10 countries are presented in Table 2. Among these top 10 countries, China (73 scientific documents with 3,794 citations) and South Korea (33 papers with 522 citations) are the only non-western countries, ranked in the fourth and ninth position respectively. In contrast, most articles have their origin in the English native-speaking countries: United States (344) with 23,096 total citations, England (132) with 4,747 total citations, Australia (76) with 2,919 total citations, and Canada (65) with 3,116 total citations. In addition, the European countries also take the leading

positions in the number of total citations, Germany (58) with 1,653 citations, the Netherlands (47) with 2,603 total citations, Spain (44) with 1,650 total citations, and France (30) with 1,437 total citations.

The statistics indicate the imbalance between western and non-western countries, especially the English-speaking countries versus non-English-speaking countries. However, as pointed out by Vogel et al. (2017) and Anand et al. (2020), the language advantages of the English native speaking scholars make it easier for them to publish scientific papers. Nevertheless, we cannot ignore the fact that scholars working at universities associated with these English-speaking countries are not necessarily native from those countries.

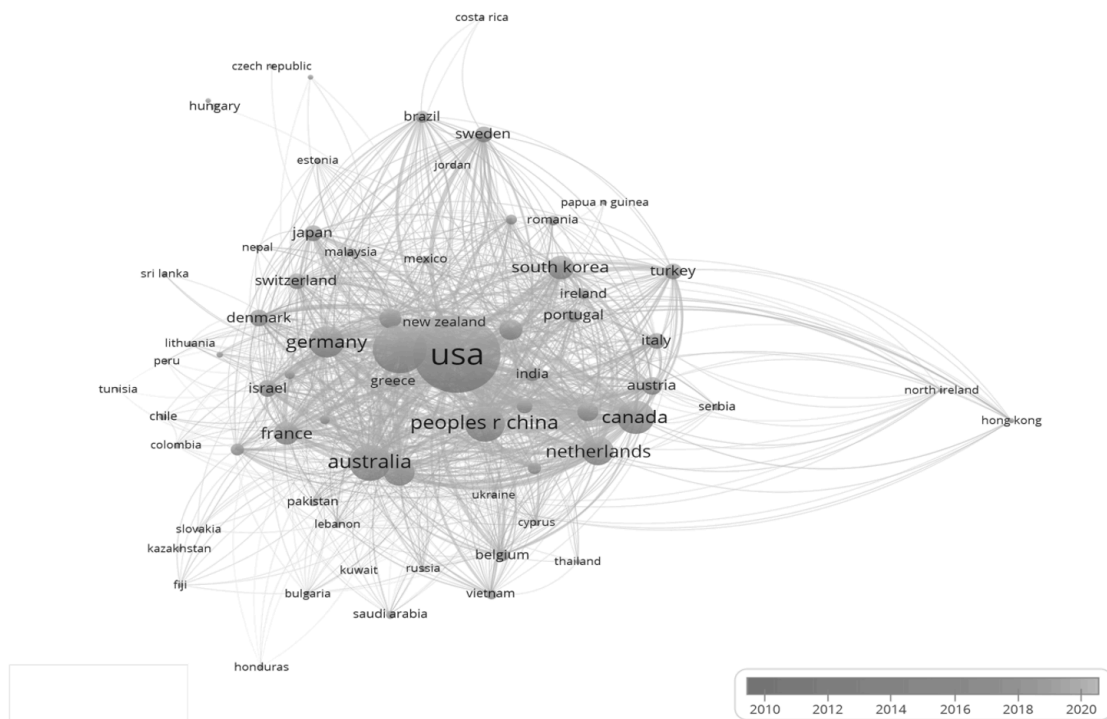
R <sup>1</sup>	Countries/Regions	Documents	TC <sup>2</sup>	APY <sup>3</sup>
1	United States	344	23,096	2011
2	England	132	4,747	2012
3	Australia	76	2,919	2014
4	China	73	3,794	2013
5	Canada	65	3,116	2012
6	Germany	58	1,653	2014
7	Netherlands	47	2,603	2012
8	Spain	44	1,650	2014
9	South Korea	33	522	2014
10	France	30	1,437	2012

**Table 2.** Ranking Order of Publications by Total Number of Citations

**Notes.** <sup>1</sup> Ranking orders by VOSviewer. <sup>2</sup> Total Citations. <sup>3</sup> Average Publication Year.

Source: Self-elaboration





**Figure 4.** Overlay Network of Bibliometric Coupling Analysis of Countries/Regions by Average Publication Years. The line between two points in the figure indicates that two countries/regions had established a similar relationship. Source: Self-elaboration

The overlay network of bibliographic coupling of the countries/regions is represented in Figure 4. In that figure, different shades of color show diverse clusters that were more frequently linked with each other meaning relevant studies originated from the countries or regions in the same cluster cite each other more frequently. Moreover, when considering the connection among the countries and regions, the time dimension should be considered. According to the average publication year by countries, the older the average year of publications, the color of each circle, and the connection line will be darker; on the contrary, the shorter the time the average year of publications, the lighter the color of each circle and the connection line.

Furthermore, as presented in Figure 4 the interest in the research on the cultural influence on organizational performance in the multinational corporations' context has been raised across the emerging or developing economies that are mainly located in three global regions, namely Eastern Europe (Hungary, Bulgaria), the Middle East and North Africa Region (Tunisia, Pakistan, Kuwait, Lebanon, Saudi Arabia), and Middle America (Colombia, Honduras).

### 3.2. Organizations

The capability to progress in a particular research field of an organization (university or institution) relies on the number of publications it produces and the h-index ranking that it owns (Huang, 2012; Cancion et al., 2017). The total number of organizations recorded on the Web of Science in the research field is 847. According to the total number of publications (see Table 3), 7 of the top 10 are American universities and the other three are in the Netherlands, UK, and Canada. As regards the number of citations of the organizations (see Table 4), 6 of the top 10 organizations are from the United States; and the remaining four are from the Netherlands, Canada, Hong Kong, and the UK.

R <sup>1</sup>	Organizations	Documents	TC <sup>2</sup>	Countries/Regions	AC <sup>3</sup>
1	Ohio State University	18	1740	United States	96.7
2	Michigan State University	15	1314	United States	87.6
3	University of Groningen	14	605	Netherlands	43.2
4	Georgia State University	13	1921	United States	147.8
5	University of Leeds	12	910	United Kingdom	75.8
6	University of Miami	11	1692	United States	153.8
7	University of Illinois	11	1000	United States	90.9
8	University of South Carolina	11	696	United States	63.3
9	University of North Carolina	11	591	United States	53.7
10	University of Western Ontario	10	997	Canada	99.7

**Table 3.** Ranking Order of Organizations by Total Number of Publishing Documents

**Notes.** <sup>1</sup> Ranking orders by VOSviewer. <sup>2</sup> Total Citations. <sup>3</sup> Average Citations.

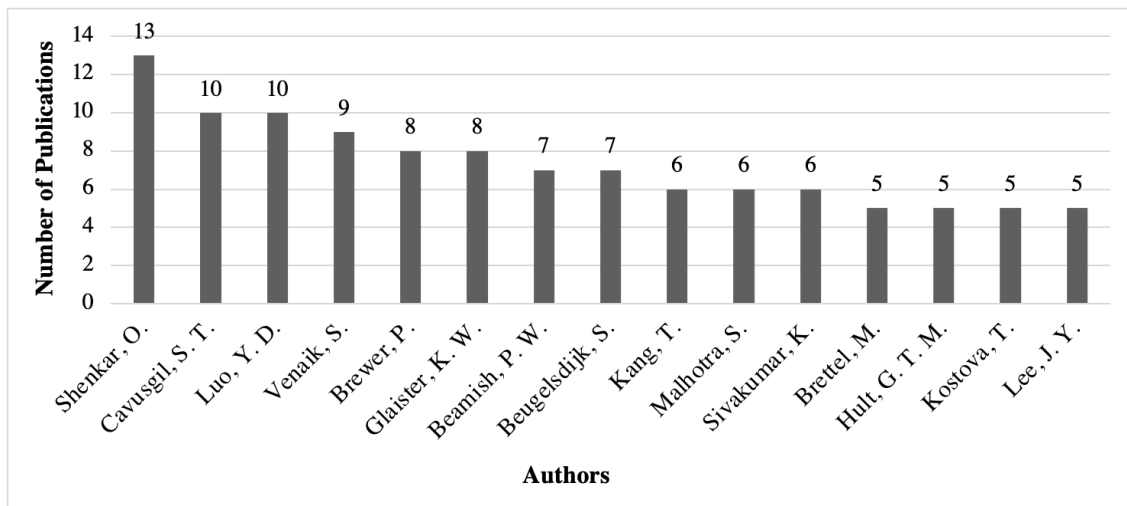
R <sup>1</sup>	Organizations	Documents	TC <sup>2</sup>	Countries/Regions	AC <sup>3</sup>
1	Georgia State University	13	1921	United States	147.8
2	Ohio State University	18	1740	United States	96.7
3	University of Miami	11	1692	United States	153.8
4	Michigan State University	15	1314	United States	87.6
5	Tilburg University	9	1232	Netherlands	136.9
6	Univ of Oklahoma	7	1048	United States	149.7
7	University of Illinois	11	1000	United States	90.9
8	University of Western Ontario	10	997	Canada	99.7
9	Chinese University of Hong Kong	9	923	Hong Kong SAR	102.6
10	University of Leeds	12	910	United Kingdom	75.8

**Table 4.** Ranking Order of Organizations by Total Number of Citations of Documents

**Notes.** <sup>1</sup> Ranking orders by VOSviewer. <sup>2</sup> Total Citations. <sup>3</sup> Average Citations.

### 3.3. Authors, Citations, and Evolution of Journals

Salgado-Barandela et al. (2017) referring to González de Dios et al. (1997), and Sanchez and Castellanos (2011) pointed out that the insights on how much a particular piece of research has influenced subsequent work might be observed by measuring the impact of work-based its citations. According to our sample, 1,817 authors are contributing to 856 scientific publications in the field of research interest. The 15 most productive authors recorded with the most publications in this area are presented in Figure 5. The number of publications of these most productive authors accounts for 12.5% of the total number of documents.



**Figure 5.** Number of Publications by the 15 Most Productive Authors on Web of ScienceSource: Self-elaboration

In analyzing the sources of the scientific documents, the 15 most productive journals are identified out of 195 journals recorded on the Web of Science based on the publications in the area of research interest (see Table 5). The identified top journals contain 426 scientific documents out of 856 accounting for 49.8% of the total.

R <sup>1</sup>	Source Titles	Documents	TC <sup>2</sup>	APY <sup>3</sup>	JIF <sup>4</sup>
1	<i>Journal of International Business Studies</i>	93	12,382	2009	9.158
2	<i>International Business Review</i>	56	1,964	2014	3.952
3	<i>International Journal of Human Resource Management</i>	34	853	2009	3.040
4	<i>Journal of World Business</i>	32	1,328	2013	5.194
5	<i>Journal of Business Ethics</i>	31	959	2012	4.141
6	<i>International Marketing Review</i>	31	947	2011	2.907
7	<i>Journal of Business Research</i>	25	1,024	2012	4.874
8	<i>Management International Review</i>	20	526	2014	2.015
9	<i>Journal of International Marketing</i>	17	778	2014	4.575
10	<i>Journal of International Management</i>	17	374	2011	3.821
11	<i>Cross Cultural &amp; Strategic Management</i>	17	103	2018	1.838
12	<i>Cross Cultural Management-An International Journal</i>	15	258	2012	1.800
13	<i>Journal of Management</i>	14	1486	2011	8.852
14	<i>European Journal of International Management</i>	13	71	2014	2.145
15	<i>Strategic Management Journal</i>	11	1432	2005	5.463

**Table 5. 15 Most Productive Journals in the Area of Research**

**Notes.** <sup>1</sup> Ranking orders by VOSviewer. <sup>2</sup> Total Citations. <sup>3</sup> Average Publication Year. <sup>4</sup> 2019-Journal Impact Factor. Source: Self-elaboration

Compared with the most cited articles (see Table 7), the productivity of the authors does not equally correspond to the influence of the publications. Among the top 15 more productive authors and 15 most cited scientific publications, Shenkar (2001) ranks first among the most productive authors and holds his masterpiece with 638 citations ranked in the second place of the most cited scientific documents.

As suggested by Salgado-Barandela et al. (2017), time durations and the average number of annual citations are worthy of comparison and analysis. In our sample, we establish four periods, 1995-2000, 2001-2005, 2006-2010, 2011-2015. In the 1995-2000 period, 5 publications out of the 15 most cited articles were identified and the highest average number of citations (66.50) was contributed by Zahra et al. (2000). In the second period, there were 6 publications, Leung et al. (2005) and Tihanyi et al. (2005) contributed a similar high average number of citations by 32.18 and 31.47 respectively. In the 2006-2010 period, three publications were located leading by Gomez-Mejia et al. (2010) with an average number of annual citations at 44.25. Welch et al. (2011) is the only record during the 2011-2015 period with 43.82 annual average citations.

Moreover, 9 top publications were published in the *Journal of International Business Studies*, followed by the *Journal of Management Studies* (2 publications), and the rest of the four most cited publications were distributed by the *Academy of Management Journal*, *Strategic Management Journal*, *Organization Science*, and the *Journal of Management*.

R <sup>1</sup>	Title	Authors	Journal <sup>2</sup>	TC <sup>3</sup>	ACY <sup>4</sup>
1	International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance	Zahra et al. (2000)	AMJ	1463	66.50
2	Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences	Shenkar (2001)	JIBS	647	30.81
3	Culture and international business: recent advances and their implications for future research	Leung et al. (2005)	JIBS	547	32.18
4	The effect of cultural distance on entry mode choice, international diversification, and MNE performance: a meta-analysis	Tihanyi et al. (2005)	JIBS	535	31.47
5	Diversification Decisions in Family-Controlled Firms	Gomez-Mejia et al. (2010)	JMS	531	44.25
6	Cross-national, cross-cultural organizational behavior research: Advances, gaps, and recommendations	Tsui et al. (2007)	JM	513	34.20
7	Culture and congruence: The fit between management practices and national culture	Newman & Nollen (1996)	JIBS	501	19.27
8	Theorising from case studies: Towards a pluralist future for international business research	Welch et al. (2011)	JIBS	482	43.82
9	Probing theoretically into Central and Eastern Europe: transactions, resources, and institutions	Meyer & Peng (2005)	JIBS	441	25.94
10	Analyzing foreign market entry strategies: Extending the internalization approach	Buckley & Casson (1998)	JIBS	401	16.71
11	The choice between joint venture and wholly owned subsidiary: An institutional perspective	Yiu & Makino (2002)	OS	387	19.35
12	What differences in the cultural backgrounds of partners are detrimental for international joint ventures?	Barkema & Vermeulen (1997)	JIBS	386	15.44
13	Conceptualizing and measuring cultures and their consequences: a comparative review of GLOBE's and Hofstede's approaches	Javidan et al. (2006)	JIBS	368	23.00

R <sup>1</sup>	Title	Authors	Journal <sup>2</sup>	TC <sup>3</sup>	ACY <sup>4</sup>
14	Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation	Vermeulen & Barkema (2002)	SMJ	353	17.65
15	Managing the post-acquisition integration process: How the human integration and task integration processes interact to foster value creation	Birkinshaw et al. (2000)	JMS	342	15.35

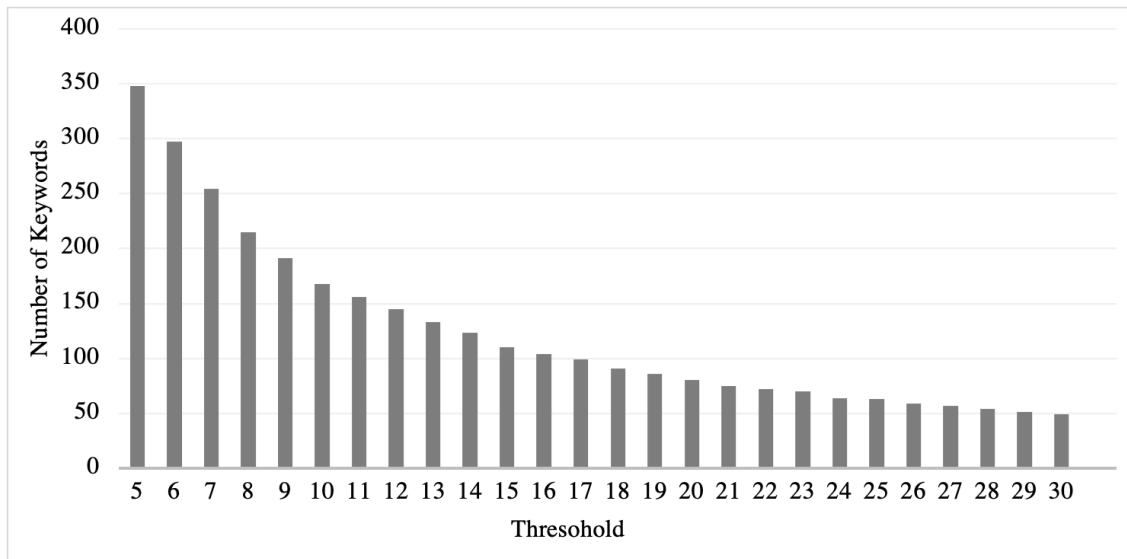
**Table 7.** Top 15 Most Cited Articles

**Notes.** <sup>1</sup> Ranking orders by Web of Science. Journals<sup>2</sup>: AMJ, Academy of Management Journal; JIBS, Journal of International Business Studies; JMS, Journal of Management Studies; JM, Journal of Management; OS, Organization Science; SMJ, Strategic Management Journal. <sup>3</sup> Total Citations. <sup>4</sup> Average Citations per Year. Source: Self-elaboration

### 3.4. Keyword Evolution and Co-occurrence Clustering

In this section, the unit of analysis for keywords is ‘all keywords’ determined by VOSviewer. After inserting the metadata consisting of 856 scientific documents, the VOSviewer identified a total of 3,586 keywords. Of these, 348 keywords met the co-occurrence threshold at 5 indicating that the minimum number of occurrences of these words is at least five, and 49 keywords met the co-occurrence threshold at 30 (see Figure 6).





**Figure 6.** Frequency of Keywords with Corresponding Minimum Number of OccurrencesSource: Self-elaboration

A threshold of the minimum number of occurrences was selected at 25 indicating the top 65 most frequent keywords. Moreover, in order to avoid analytical biases, irrelevant terms and keywords directly related to search queries were excluded manually upon visual inspections, such as ‘corporate’, ‘business’, ‘firm performance’, ‘culture’, ‘national culture’, ‘organizational culture’, ‘multinational corporations’, etc. After the exclusion, there were 40 keywords for further analysis (see Table 6). During the screening process, the extracted keywords did not significantly vary according to the evolution of time. As shown in Table 8, the keywords were distributed into six periods, for the 1983–1995 period, there were 11 documents with 46 extracted keywords, and there was only one keyword ‘forms’ (18%) with occurrences over ten percent. For the 1996–2000 period, a total of 41 documents with 203 keywords were identified, ‘choice’ (12%), ‘human resource management’ (10%), and ‘innovation’ (10%) were listed among the top three keywords. For the 2001–2005 period, 93 documents with 505 keywords were identified, the frequency of studies on ‘strategic alliances’(13%), ‘values’(13%), ‘model’(12%), and ‘joint ventures’ exceeded 10% for the first time. 164 documents with 903 keywords were found in the 2006–2010 period, the research on ‘knowledge’ (10%) and ‘trust’ (10%) has received remarkable attention. Finally, ‘cultural distance’ and ‘consequences’ took the major position for the 2011–2015 and 2016–2020 periods.

Clusters	Keywords
Cluster 1	Antecedents, behaviors, collectivism, commitment, consequences, dimensions, framework, GLOBE, Hofstede, human resource management, individualism, leadership, perceptions, perspective, systems, trust, values.
Cluster 2	Absorptive capacity, capabilities, competitive advantage, innovation, integration, international joint ventures, knowledge, knowledge transfer, market orientation, mergers, research and development, strategic alliances.
Cluster 3	Choice, corporate governance, cultural distance, determinants, distance, diversity, entry mode choice, foreign direct investment, ownership, psychic distance, strategy.

**Table 6.** Keywords Clustering

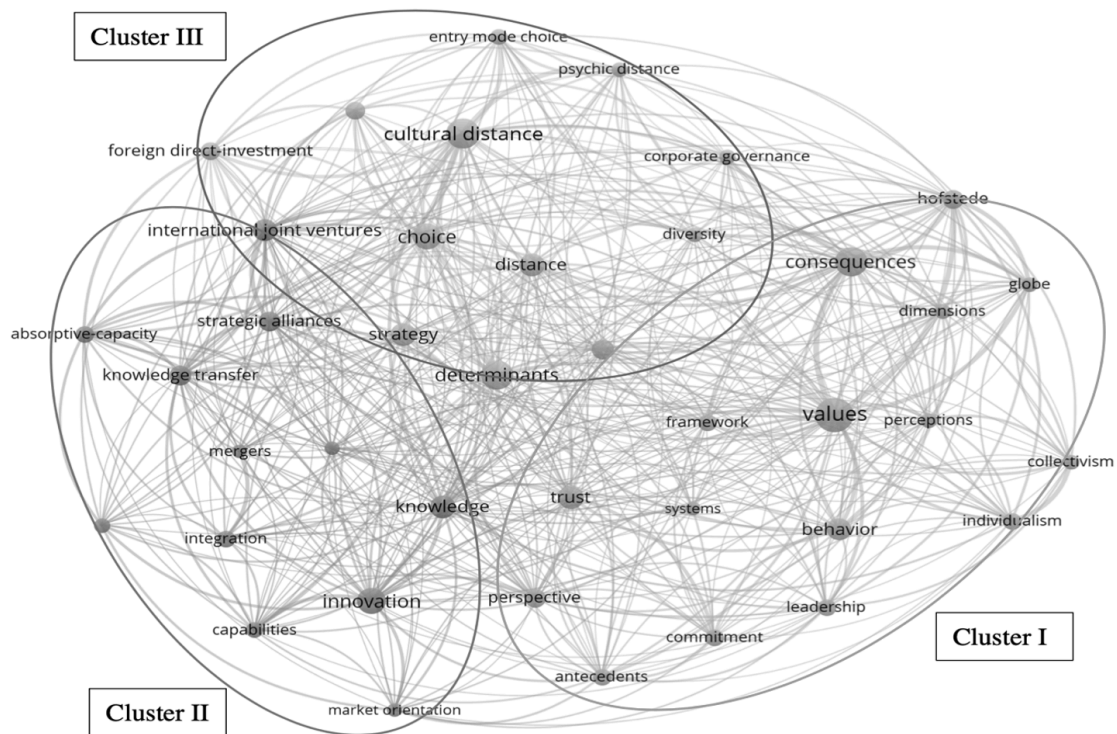
*Source: Self-elaboration*

R <sup>1</sup>	Keywords (1983-1995)	O <sup>2</sup>	K/P <sup>3</sup>	Keywords (1996-2000)	O <sup>2</sup>	K/P <sup>3</sup>	Keywords (2001-2005)	O <sup>2</sup>	K/P <sup>3</sup>
1	Forms	2	18%	Choice	5	12%	Strategic alliances	12	13%
2	Behavior	1	9%	Human resource management	4	10%	Values	12	13%
3	Choice	1	9%	Innovation	4	10%	Model	11	12%
4	Commitment	1	9%	Bargaining power	3	7%	Joint ventures	9	10%
5	Context	1	9%	Dimensions	3	7%	Choice	8	9%
6	Cooperation	1	9%	Direct investment	3	7%	Industry	8	9%
7	Cultural adjustment	1	9%	Foreign entry	3	7%	Innovation	8	9%
8	Diffusion	1	9%	International marketing	3	7%	International joint ventures	8	9%
9	Entry	1	9%	Investment	3	7%	Knowledge	8	9%
10	Entry mode	1	9%	Joint ventures	3	7%	Strategy	8	9%
R <sup>1</sup>	Keywords (2006-2010)	O <sup>2</sup>	K/P <sup>3</sup>	Keywords (2011-2015)	O <sup>2</sup>	K/P <sup>3</sup>	Keywords (2016-2020)	O <sup>2</sup>	K/P <sup>3</sup>
1	Values	21	13%	Cultural distance	27	11%	Cultural distance	35	12%
2	Joint ventrues	20	12%	Determinants	25	10%	Consequences	32	11%
3	Choice	17	10%	Consequences	24	10%	Values	30	10%
4	Knowledge	17	10%	Trust	20	8%	Determinants	27	9%
5	Trust	17	10%	Distance	17	7%	Innovation	25	8%
6	Determinants	15	9%	Choice	16	6%	Distance	24	8%
7	Ownership	15	9%	Individualism	15	6%	Behavior	20	7%
8	Cultural distance	14	9%	Innovation	15	6%	Knowledge transfer	20	7%
9	International joint ventures	14	9%	International joint ventures	15	6%	Model	20	7%
10	Consequences	13	8%	Joint ventures	15	6%	Strategy	19	6%

**Table 8.** Top 10 Keywords Distribution

**Notes.** <sup>1</sup>Ranking orders by VOSviewer. <sup>2</sup>Occurrences. <sup>3</sup>Keywords per Paper. Source: Self-elaboration.

Figure 7 shows the results in the form of a keyword co-occurrence network. The shade of color represents the co-occurrence of words grouped into clusters (Perianes-Rodriguez et al., 2016). The bigger the circles, the higher the term's occurrence scores; and the closer the circles are to one another, the more frequently the terms occurred together (Anand et al., 2020).



**Figure 7.** Keywords Co-occurrences Network

Source: Self-elaboration

**Cluster I: Cross-cultural management studies.** The structure or content of this field is interconnected such as HR management (cf. Birkinshaw et al., 2000), leadership (cf. Javidan et al., 2006), organizational behavior research (cf. Tsui et al., 2007); and conceptualizing and measuring cultures and their

consequences through the studies of GLOBE's (House et al., 2004) and Hofstede's approaches (cf. Newman & Nollen, 1996; Barkeman and Vermeulen, 1997; Javidan et al., 2006).

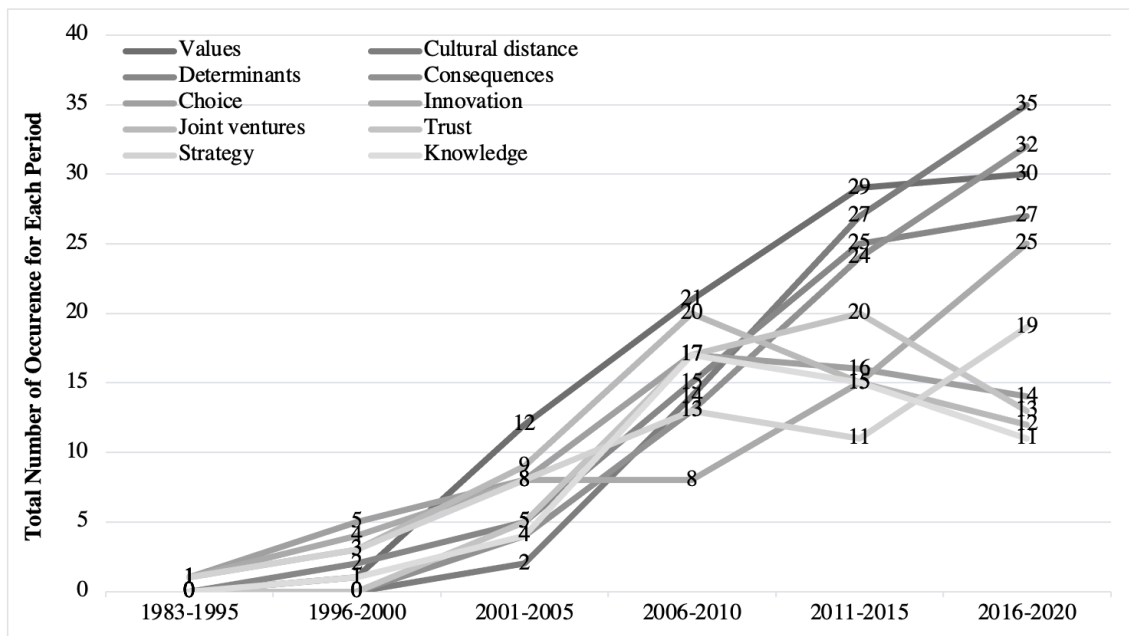
**Cluster II: Relationship between knowledge management and international joint ventures.** In references to citations of the most cited papers, the tendency of the research of the international management knowledge in the global business development (cf. Tsui et al., 2007) has been intensively discussed since the 2000s (cf. Welch et al., 2011); and the influence of multinational firm's capacity to absorb expansion or absorptive ability on firm performance (cf. Vermeulen & Barkema, 2002) as well as on building strategic alliances through international acquisitions and mergers (cf. Buckley & Casson, 1998; Birkinshaw et al., 2000) were significant. According to Simonin (1999) and Park (2011), the strategic alliances are built by the international joint ventures to gain competitive advantages by accessing the resources of their partners, and the international joint ventures drive the cross-border knowledge transfer that results in the improvement of innovative performance from a multinational level to the local level and vice-versa.

**Cluster III: Effect of cultural distance on market-entry choice/strategy and international diversification.** The process of international diversification has been raised on a basis of the cultural distance across cultures and countries (cf. Gomez-Meja et al., 2010). Tihanyi et al. (2005) point out that cultural distance is the differences between national cultures which is a significant determinant of organizational actions and performance. Cultural distance has been widely applied in the field of foreign investment expansion, entry mode choice and/or strategy, and the performance of foreign-invested affiliates (cf. Shenkar, 2005).

### *3.5. Development Tendency and Direction for Future Research*

Figure 8 depicts the time series of the occurrences of the top 10 keywords for all 856 scientific documents, i.e., times each keyword across the designated periods (1983-1995, 1996-2000, 2001-2005, 2006-2010, 2011-2015, 2016-2020). The keywords present a general increasing trend in their occurrences from past to present, which may be due to the general increase in the number of papers and keywords. Among the top 10 keywords, 'joint ventures' (i.e., Hara & Kanai, 1994), 'choice' (i.e., Madhok, 1995), 'innovation' (i.e., Abrahamson & Fombrun, 1994), 'strategy' (i.e., Calori et al. (1994) were originated during the 1983-1995 period. 'values' (i.e., Schuler & Rogovsky, 1998), 'determinants' (i.e., Pan, 1996; Glaister & Buckley, 1998), 'knowledge' (i.e., Zahra et al., 2000) mainly emerged during the 1996-2000 period. 'Cultural distance' (i.e., Tihanyi, 2005; Tsang, 2005), 'consequences' (i.e., Johnson et al., 2001; Bolton &

Myers, 2003; Gerhart & Fang, 2005; Dickson, 2006), ‘trust’ (i.e., Luo, 2001; 2004; 2005; Rodríguez, 2005; Homburg et al., 2005) were highly referred from 2001 to 2005. The keywords ‘values’, ‘determinants’ grew significantly from the 1996 to 2015 period, but not in the last five years (2016-2020). The keywords ‘choice’, ‘trust’, ‘joint ventures’, and ‘knowledge’ showed a steady growth trend from 2001 to 2010, and these keywords declined gradually from 2011 to 2020. It is predictable that in the next 5 to 10 years, the research on ‘cultural distance’, ‘consequences’, ‘values’, ‘cultural determinants’, ‘innovation’, and ‘strategy’ will maintain certain popularity and upward trend.

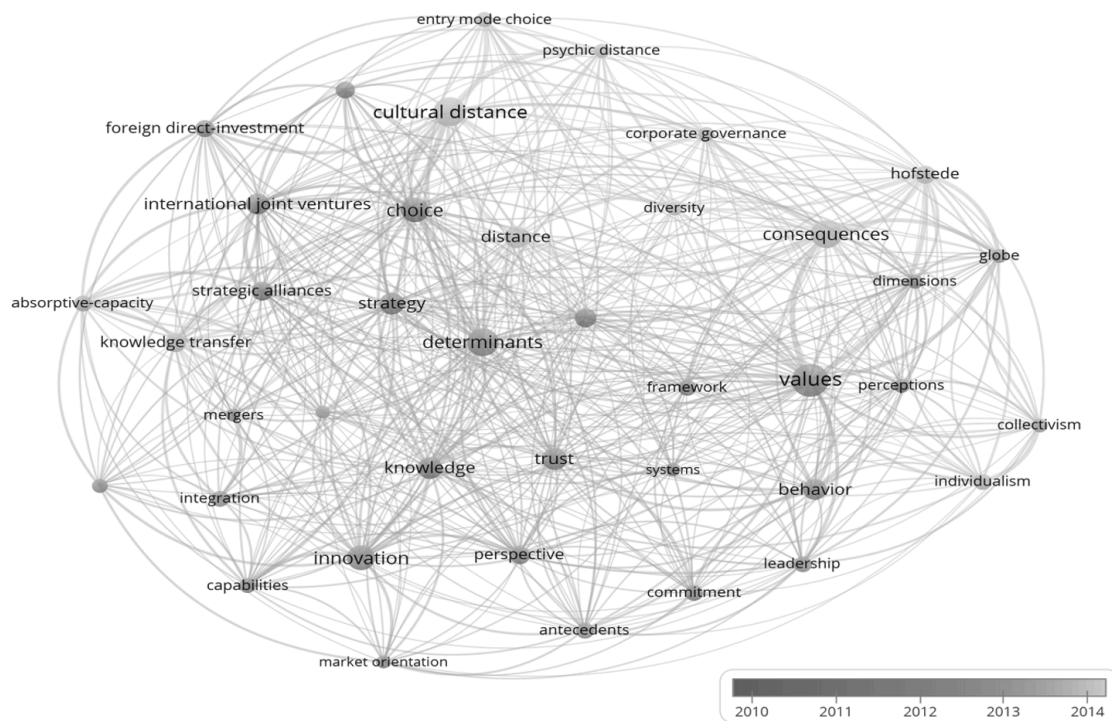


**Figure 8.** Total Number of Occurrences of Each of the Top 10 Keywords for Each Period

Source: Self-elaboration

The overlay network of keywords co-occurrences analysis by average years of recordings in the dataset is presented in Figure 8. As the same as the overlay network presented in Figure 4, according to the average year of recordings, the older the average year of the term, the color of each circle and the connection line will be darker; on the contrary, the shorter the time the average year of the term, the lighter the color of each circle and the connection line. As we can observe from Figure 9, the third cluster which focused on the studies on the effects of the cultural distance on market-entry choice and/or strategy and international diversification has been most recently and heavily published (the average year of recording is 2014). Furthermore, the studies on Hofstede’s cultural dimensions models (e.g., collectivism versus

individualism) in the first cluster and research on the approaches of international capacity and knowledge transfer in the second cluster are also topics appearing in the last years.



**Figure 9.** Overlay Network of Keywords Co-occurrences Analysis by Average Years of Recordings.

Cui et al. (2018) submitted that the research in the area of cultural studies on international business focused on the ideas and theories built in the past. Therefore, we conclude and suggest the following tendency and direction for future research in summary: 1) Research in this field will continue to show a rising and popular trend. 2) The research interests will be highly driven by the non-western or developing countries and regions. 3) For researchers and practitioners, high-quality journals categorized in business and management (e.g., *Journal of International Business Studies*) are still the sources of research and the targets for publications. 4) The research interest within the next 10 years would be concentrating on the 'cultural distance', 'cultural consequences', 'innovation', and 'strategy'. 5) With the deepening of global economic and business cooperation, the mainstream will be clarifying the effect of cultural distance on market-entry choice/strategy and international diversification.

## 4. Conclusions

The quantitative bibliometric analysis conducted in this study allowed the evaluation of scientific productions and provided an important reference for scholars to better understand the state of research stressing the extant literature on cultural influence on organizational performance in the context of multinational corporations (MNCs). Furthermore, this study provided comprehensive insights and analyses through its visualization with scientific production performance analysis, bibliometric coupling analysis, and keywords co-occurrence analysis with future research tendency, which facilitates the methodological knowledge of its structure and the development of this study area.

Specifically, this study made central theoretical contributions to the research area. The growing interest in the field was evident considering 856 scientific documents contributed by 1,817 authors and their research exhibited in 195 journals from 847 organizations across 70 countries and regions. According to the extracted scientific documents from the Web of Sciences database, the research on this topic began in 1983 with rapid growth after 2002. Thereafter, the annual output of publications on the topic increased nearly three times compared to 18 years ago.

The bibliometric analysis visualized the history and development of the area of research and enabled us to make the following conclusions. Firstly, in terms of specific countries and regions, the United States, England, Australia, and China were the four most productive countries in this field of research. The imbalance between western and non-western countries is significant and the English-speaking countries as the United States, England, Canada, and Australia hold advantages in producing scientific documents. The increasing interests in the area of research from the emerging or developing regions (Eastern Europe, Middle East, and North Africa, Middles America) have been located. Secondly, from the perspective of most productive organizations, most organizations were in the United States, and the Ohio State University was listed on the top three organizations both by the total number of publications and citations. Thirdly, the most productive journals revealed that Journal of International Business Studies, International Business Studies, International Journal of Human Resource Management are the top three journals that accept works in the area of research. While the journal Cross-Cultural & Strategic Management has been publishing more intensively in the last years (the average publication year is 2018). In terms of the research authors, the works contributed by Zahra et al. (2000), Shenkar (2001), and Leung et al. (2005) were the most cited and recognized by scholars per the research interest. The study of Welch



et al. (2011) submitted a theoretical direction of diversified international business research which was cited the most among the publications within 10 years.

The popular research topics and emerging trends in this area were discovered using VOSviewer to perform a keywords co-occurrence analysis. The results expounded that the research topics on 'cultural distance', 'cultural consequences', 'strategy', and 'innovation' might still maintain an upward trend for future research. The keywords in this research area were clustering into three fields: (i) Cross-cultural management studies; (ii) Relationship between knowledge and international joint venture; and (iii) Effect of cultural distance on market-entry choice and/or strategy and international diversification. The overlay network of keywords co-occurrence analysis illustrated that the direction of the area research will be still concentrating on the third cluster with some specific topics spreading in the first cluster (Hofstede's cultural models) and the second cluster (absorptive capability and knowledge transfer).

The limitations of research were concerned through the following aspects. Firstly, the systematic reviews are still not commonplace in management sciences (Tranfield et al., 2003), and management (and social sciences in general). They have not developed standard, agreed-upon protocols for collecting best-practice evidence. Management studies, even on the same or a similar topic, can vary in terms of their research questions, timeframes, sample selection, but also the methods employed (Linnenluecke et al., 2020). Secondly, we only selected peer-reviewed journal and reviews for our study, other scientific documents such as proceedings papers, book chapters, editorial materials were not included which led to a probable limitation. Thirdly, Web of Science was used as the only database for analyses in this study, the scope of this research thus may be limited; the data collected from Scopus, Google Scholar, and other scientific databases are suggested for future studies. What's more, it cannot be ignored that the retrieved metadata is always time-sensitive due to the updates of the bibliographic database meaning different results might be obtained by searching in the same way at different times.

## References

- Abrahamson, E., & Fombrun, C. J. (1994). Macrocultures: Determinants and consequences. *Academy of Management Review*, 19(4), 728-755.
- Adams, R. J., Smart, P., & Huff, A. S. (2017). Shades of grey: guidelines for working with the grey literature in systematic reviews for management and organizational studies. *International Journal of Management Reviews*, 19(4), 432-454.

- Anand, A., Kringelum, L. B., Madsen, C. Ø., & Selivanovskikh, L. (2020). Interorganizational learning: a bibliometric review and research agenda. *The Learning Organization*.
- Barkema, H. G., & Vermeulen, F. (1997). What differences in the cultural backgrounds of partners are detrimental for international joint ventures? *Journal of international business studies*, 28(4), 845-864.
- Birkinshaw, J., Bresman, H., & Håkanson, L. (2000). Managing the post-acquisition integration process: How the human integration and task integration processes interact to foster value creation. *Journal of management studies*, 37(3), 395-425.
- Buckley, P. J., & Casson, M. C. (1998). Analyzing foreign market entry strategies: Extending the internalization approach. *Journal of international business studies*, 29(3), 539-561.
- Calori, R., Lubatkin, M., & Very, P. (1994). Control mechanisms in cross-border acquisitions: An international comparison. *Organization studies*, 15(3), 361-379.
- Cancino, C. A., Merigó, J. M., & Coronado, F. C. (2017). A bibliometric analysis of leading universities in innovation research. *Journal of Innovation & Knowledge*, 2(3), 106-124.
- Cui, Y., Liu, Y., & Mou, J. (2018). Bibliometric analysis of organisational culture using CiteSpace. *South African Journal of Economic and Management Sciences*, 21(1), 1-12.
- del Río, M. D. L. C., Maldonado-Erazo, C. P., Álvarez-García, J., & Durán-Sánchez, A. (2020). Cultural and Natural Resources in Tourism Island: Bibliometric Mapping. *Sustainability*, 12(2), 1-26.
- Dickson, M. W., Den Hartog, D. N., & Mitchelson, J. K. (2003). Research on leadership in a cross-cultural context: Making progress, and raising new questions. *The leadership quarterly*, 14(6), 729-768.
- Gerhart, B., & Fang, M. (2005). National culture and human resource management: assumptions and evidence. *The International Journal of Human Resource Management*, 16(6), 971-986.
- Glaister, K. W., & Buckley, P. J. (1998). Measures of performance in UK international alliances. *Organization Studies*, 19(1), 89-118.
- Gomez-Mejia, L. R., Makri, M., & Kintana, M. L. (2010). Diversification decisions in family-controlled firms. *Journal of management studies*, 47(2), 223-252.
- Gregory, B. T., Harris, S. G., Armenakis, A. A., & Shook, C. L. (2009). Organizational culture and effectiveness: A study of values, attitudes, and organizational outcomes. *Journal of business research*, 62(7), 673-679.
- Hallinger, P., & Suriyankietkaew, S. (2018). Science mapping of the knowledge base on sustainable leadership, 1990-2018. *Sustainability*, 10(12), 4846.
- Hara, G., & Kanai, T. (1994). Entrepreneurial networks across oceans to promote international strategic alliances for small businesses. *Journal of Business Venturing*, 9(6), 489-507.

- Herrera-Franco, G., Montalván-Burbano, N., Carrión-Mero, P., Apolo-Masache, B., & Jaya-Montalvo, M. (2020). Research Trends in Geotourism: A Bibliometric Analysis Using the Scopus Database. *Geosciences*, 10(10), 379. <https://doi.org/10.3390/geosciences10100379>
- Hérubel, J. P. V. (1999). Historical bibliometrics: Its purpose and significance to the history of disciplines. *Libraries & Culture* 34(4), 380–388.
- Hofstede, G. (1980). Culture and organizations. *International Studies of Management & Organization*, 10(4), 15–41.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and. organizations across nations*. Sage publications.
- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations, software of the. mind. Intercultural cooperation and its importance for survival operational issues*. Wiley.
- Homburg, C., Kuester, S., Beutin, N., & Menon, A. (2005). Determinants of customer benefits in business-to-business markets: a cross-cultural comparison. *Journal of International Marketing*, 13(3), 1–31.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Sage publications.
- Huang, M. H. (2012). Exploring the h-index at the institutional level: A practical application in world university rankings. *Online Information Review*.
- Javidan, M., House, R. J., Dorfman, P. W., Hanges, P. J., & De Luque, M. S. (2006). Conceptualizing and measuring cultures and their consequences: a comparative review of GLOBE's and Hofstede's approaches. *Journal of international business studies*, 37(6), 897–914.
- Leung, K., Bhagat, R. S., Buchan, N. R., Erez, M., & Gibson, C. B. (2005). Culture and international business: Recent advances and their implications for future research. *Journal of international business studies*, 36(4), 357–378.
- Linnenluecke, M. K., Marrone, M., & Singh, A. K. (2020). Conducting systematic literature reviews and bibliometric analyses. *Australian Journal of Management*, 45(2), 175–194.
- Littrell, R. F. (2012). Cultural value dimension theories: Hofstede–A work in progress. *AIB Insights*, 12(4), 3–6.
- Luo, Y. (2001). Antecedents and consequences of personal attachment in cross-cultural cooperative ventures. *Administrative science quarterly*, 46(2), 177–201.
- Luo, Y. (2005). How important are shared perceptions of procedural justice in cooperative alliances? *Academy of Management Journal*, 48(4), 695–709.

- Luo, Y., & Park, S. H. (2004). Multiparty cooperation and performance in international equity joint ventures. *Journal of International Business Studies*, 35(2), 142-160.
- Madhok, A. (1995). Revisiting multinational firms' tolerance for joint ventures: A trust-based approach. *Journal of International Business Studies*, 26(1), 117-137.
- Meyer, K. E., & Peng, M. W. (2005). Probing theoretically into Central and Eastern Europe: Transactions, resources, and institutions. *Journal of international business studies*, 36(6), 600-621.
- Montalván-Burbano, N., Pérez-Valls, M., & Plaza-Úbeda, J. (2020). Analysis of scientific production on organizational innovation. *Cogent Business & Management*, 7(1), 1745043.
- Mujeeb, E. M., Masood, M. M., & Ahmad, M. A. (2011). Relationship between organizational culture and performance management practices: a case of university in Pakistan. *Journal of Competitiveness*, 3(4).
- Newman, K. L., & Nollen, S. D. (1996). Culture and congruence: The fit between management practices and national culture. *Journal of international business studies*, 27(4), 753-779.
- Pan, Y. (1996). Influences on foreign equity ownership level in joint ventures in China. *Journal of International Business Studies*, 27(1), 1-26.
- Park, B. I. (2011). Knowledge transfer capacity of multinational enterprises and technology acquisition in international joint ventures. *International Business Review*, 20(1), 75-87.
- Pascale, R. T., & Athos, A. G. (1981). The art of Japanese management. *Business Horizons*, 24(6), 83-85.
- Radhakrishnan, S., Erbis, S., Isaacs, J. A., & Kamarthi, S. (2017). Novel keyword co-occurrence network-based methods to foster systematic reviews of scientific literature. *PloS one*, 12(3), e0172778.
- Rodríguez, C. M. (2005). Emergence of a third culture: shared leadership in international strategic alliances. *International Marketing Review*.
- Rozkwitalska, M. (2012). Accepted and strong organizational culture in multinational corporations. *Journal of Intercultural Management*, 4(3), 5-14.
- Salgado-Barandela, J., Barajas, A., & Sánchez-Fernández, P. (2017). Economic impact of sport: Topic of growing interest for the scientific literature. *Revista Internacional de Medicina y Ciencias de la Actividad Física y del Deporte*, 17(68).
- Sánchez, A. D., Del Río, M. D. L. C., & García, J. Á. (2017). Bibliometric analysis of publications on wine tourism in the databases Scopus and WoS. *European Research on Management and Business Economics*, 23(1), 8-15.
- Sancho, R. (1990). Indicadores bibliométricos utilizados en la evaluación de la ciencia y la tecnología. *Revisión bibliográfica. Revista española de documentación científica*, 13(3-4).

- Schuler, R. S., & Rogovsky, N. (1998). Understanding compensation practice variations across firms: The impact of national culture. *Journal of International Business Studies*, 29(1), 159-177.
- Selmer, J. (2004). Psychological barriers to adjustment of Western business expatriates in China: newcomers vs long stayers. *The International Journal of Human Resource Management*, 15(4-5), 794-813.
- Shenkar, O. (2001). Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of international business studies*, 32(3), 519-535.
- Simonin, B. L. (1999). Ambiguity and the process of knowledge transfer in strategic alliances. *Strategic management journal*, 20(7), 595-623.
- Simonin, B. L. (1999). Transfer of marketing know-how in international strategic alliances: An empirical investigation of the role and antecedents of knowledge ambiguity. *Journal of International Business Studies*, 30(3), 463-490.
- Thyer, B. A. (2008). *Preparing Research Publications. Social Work Research Methods*, Oxford University Press.
- Tihanyi, L., Griffith, D. A., & Russell, C. J. (2005). The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis. *Journal of international business studies*, 36(3), 270-283.
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management*, 14(3), 207-222.
- Tsang, E. W. (2005). Influences on foreign ownership level and entry mode choice in Vietnam. *International Business Review*, 14(4), 441-463.
- Tsui, A. S., Nifadkar, S. S., & Ou, A. Y. (2007). Cross-national, cross-cultural organizational behavior research: Advances, gaps, and recommendations. *Journal of Management*, 33(3), 426-478.
- Van Eck, N. J., & Waltman, L. (2013). VOSviewer manual. *Leiden: Univeriteit Leiden*, 1(1), 1-53.
- Van Eck, N. J., & Waltman, L. (2014). Visualizing bibliometric networks. In *Measuring scholarly impact* (pp. 285-320). Springer, Cham.
- Vermeulen, F., & Barkema, H. (2002). Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal*, 23(7), 637-653.
- Welch, C., Piekkari, R., Plakoyiannaki, E., & Paavilainen-Mäntymäki, E. (2011). Theorising from case studies: Towards a pluralist future for international business research. *Journal of international business studies*, 42(5), 740-762.
- Yiu, D., & Makino, S. (2002). The choice between joint venture and wholly owned subsidiary: An institutional perspective. *Organization Science*, 13(6), 667-683.

- Zahra, S. A., Ireland, R. D., & Hitt, M. A. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. *Academy of Management Journal*, 43(5), 925-950.

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