Research Article

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What has been said about the reinvention of post-COVID tourism: A bibliometric analysis

Abstract: The purpose of this study is to analyse the relationship between the COVID-19 impacts on tourism and the political approaches adopted to overcome the crisis in this sector. There has been a deep reflection on a new tourism paradigm, guided by an increasing commitment to sustainability and innovation, which was triggered by the COVID-19 outbreak. This perspective reinforces the role of decentralisation and autonomy of policies at the regional level. A network governance model emerges as a strategy to overcome this crisis. A bibliometric analysis (Rafael & Pires, 2021) was carried out using the SCOPUS and Web of Science (WOS) databases, from January 2020 to April 2021. The search criteria followed the assumptions of the non-probabilistic snow-ball sampling technique (Vinuto, 2014). The results were processed in SPSS and VosViewer software. Four main dimensions were found that mediate the relationship between tourism and the effects of the COVID-19 pandemic, namely: (1) policies, enabling network governance and regional autonomy; (2) research, enhancing knowledge transfer and new teaching models; (3) economic collaborative approaches that support DMO´s activities; and (4) network innovation that fosters positive change. Understanding the impacts of COVID-19 in tourism politics and strategies offers important guidelines to both private and public decision-makers.

Keywords: Bibliometric Analysis; COVID-19; Tourism Policies and Strategies

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1 Introduction

This study focuses on the relationship between the effects of COVID-19 and tourism, regarding the most appropriate policies and strategies to relaunch the sector. Its main objective is to identify the mediating variables that help one understand the relationship established between the main variables ('Policies' and 'Tourism Recovery'), as well as the relevance of the associations established between them. In this context, systematising the characteristics of scientific literature about this field contributes to a more solid knowledge of the most relevant aspects of crisis management in tourism. The effects of the pandemic crisis on diverse sectors of society, and on tourism in particular, caused serious economic, social, and psychological problems. This new reality implies rethinking policies and strategies that help to develop a more efficient tourism model in adverse conditions.

Bibliometric analysis is one of the most appropriate techniques to highlight new configurations between concepts and give meaning to themes that have not yet been explored (Herrera-Franco et al., 2021; León-Gómez et al., 2021; Sigala, 2020). Research was carried out in the SCOPUS and Web of Science (WOS) bibliographic databases, having been selected all the papers published from January 2020 to April 2021, which included the descriptors 'Tourism and COVID-19' in the title, abstract or keywords.

The underlying motivations for this study were, essentially, three: (1) bibliometric analysis on this topic is scarce and essential to guide future research; (2) it is crucial to give visibility to the work already carried out about the effects of this pandemic on tourism, crossing information, signalling gaps, and highlighting the most explored themes; (3) systematise the academic recommendations for the sector can contribute to reflect on the tourism organisation model and make it evolve in a more solid and grounded way.

2 Literature Review

The COVID-19 pandemic has had unprecedented negative effects on tourism worldwide. In addition to the serious economic crisis that ensued, insecurity at work and the decrease in social life caused changes in people's behaviour, which began to be guided by fear, mistrust, and insecurity. At the psychological level, it is expected that the negative impacts will still have greater visibility in the daily organisation of people's lives (Chica et al., 2021; Guo et al., 2021). For these reasons, the relaunch of the tourism sector is a priority, as the improvement in economic conditions is directly reflected in the social and psychological well-being of the populations. In this sense, more than talking about the recovery of tourism in the post-COVID period, it is important to assume tourism as a political option for the recovery from this global crisis, given the transversality of its impacts on society (Tzanelli, 2021; Wickramasinghe & Ratnasiri, 2020).

This literature review focuses on the need for a paradigm shift in tourism, highlighting the necessity for a change in the sector's guiding policies, particularly on the following fields: (1) research and training; (2) social responsibility, encouraging ethics, equality, authenticity and helping the poorest; (3) network governance; and (4) technology. It is also highlighted regional autonomy in the elaboration and implementation of specific policies at the destination, leading to a development model that combines the sector´s modernisation and competitiveness with the increase in its ability to manage crises (Benjamin et al., 2020; Chica et al., 2021; Hayes, 2021; Ivars-Baidal et al., 2021; Knight et al., 2021). On the other hand, tourism responses cannot be dissociated from social challenges, so governments should guarantee ethics and social responsibility in their planning, ensuring more equitable responses. The connection between business, health, education, and social well-being enriches the tourist experience, as it emphasises the companies' commitment to the destinations, reinforcing the bonds between tourism and local identity.

This development model involves the governance of networked destinations, in which the active participation of stakeholders and the inclusion of local communities is fundamental. New perspectives on the shared economy emphasise the increase of collaborative tourism practices, due to the transformation that this operates in the way businesses are carried out. It is the articulated management of the components of this intricate system that will bring the economy closer to the environment, people, and technology. In this context, Destination Management Organisations (DMOs) must assume themselves to be inte-

grated structures for the strategic thinking of tourism, ensuring sustainability, in its different dimensions (Çakar & Uzut, 2020; Carr, 2020; Coles, 2021; Dias et al., 2021; Gyimóthy et al., 2020; Kallmuenzer et al., 2021).

Developing resilient local economies involves supporting small-scale businesses, empowering them with resources and skills. Linking these to consolidated business fields facilitates entrepreneurs' access to markets and encourages network innovation. This strategy is an important way to deal with the tourism crisis, in which local sustainability is the basis for competitiveness (Bravo et al., 2021; Cooper & Alderman, 2020; Del Río et al., 2020; Everingham & Chassagne, 2020; Lee et al., 2021, Rubio-Mozos et al., 2020; Sigala, 2020; Sharfuddin, 2020; Sheller, 2020).

Finally, human resources education in fields such as e-governance, leadership, decision-making and social responsibility is essential (Hayes, 2021). The pandemic crisis has led to an association between the loyalty of tourists and the perception of risk management in destinations. The transformation of commercial structures, smart tourism policies, more effective communication systems and monitoring of destinations, appear to be strategic fields in managing change in the sector. These seem to be the most relevant conditions to consider when it comes to formulating policies aimed at fostering confidence, an essential link to the revitalisation of tourism (Knight et al., 2021).

3 Methods

3.1 Data collection

Documentary sources were retrieved from SCOPUS and WOS bibliometric databases in the period from March to April 2021. The publications were selected based on the following criteria: (1) integrated scientific domains (Business, Management and Accounting, Social Sciences, Environmental Science, Economics, Econometrics and Finance, Decision Sciences and Multidisciplinary); (2) 'Tourism and COVID-19' descriptors included in articles´ title, abstract, or keywords.

The research followed the assumptions defined in the PRISMA Statement, although it is recognised that this method is especially suited for systematic literature reviews (Liberati et al., 2009; Moher et al., 2009). However, its four phases (identification, selection, eligibility, and synthesis) provided a guide for the definition of the criteria for analysis, and for selection of the docu-

ments to be considered in the document sample, consolidating the required rigor for the bibliometric study carried out (Cavalcante et al., 2021). In order to guarantee that all publications directly related to the topic under study were explored, as well as their citations (indirect publications), the 'Snowball' non-probabilistic documentary sample construction technique was used (Vinuto, 2014). The WOS database was consulted to complete the previous search. However, although this process produced an appreciable set of results (n=265), most of them repeated the documents found in SCOPUS. It was only possible to retain 55 articles from this research source. The previous arguments justify the methodological options followed; articles were classified in three domains: (1) scientific perspective of the publications; (2) type of study; and (3) sample, in terms of supply or demand-oriented studies.

The documentary sample consisted of 613 documents. A pre-analysis of the documents was carried out, applying the following criteria: (1) publications written in English, Spanish, or Portuguese; (2) papers whose content was relevant to the topic under study; (3) documents saved as Portable Document Format (PDFs). Documents not available in full text were also excluded. A deeper analysis of the documents allowed us to identify a set of publications that dealt with the themes 'Policies and strategy', 'Social responsibility and sustainability', 'Economic and legal support'. For this reason, the focus of the investigation was included in the selection criteria for the documentary sample. This process led to the exclusion of 437 documents (see Figure 1 and Table 1).
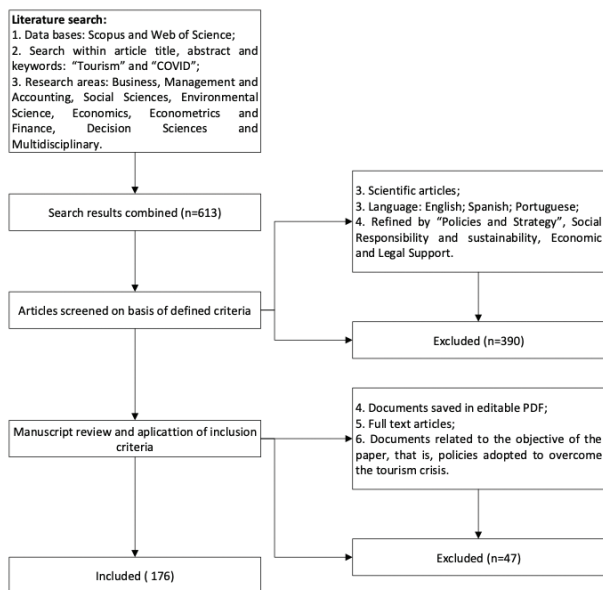

Figure 1. Prisma assumptions
Source: Original compilation based on SCOPUS and WOS

3.2 Data analyses

A total of 613 documents were identified. Data was processed with SPSS software for descriptive analysis and with VosViewer software applying the VOS concepts mapping. The analysis of the research produced included the treatment of a set of bibliometric indicators, namely: number and type of documents published, scientific perspective, contributions by countries, most referenced publications, and performance of scientific journals (Herrera-Franco et al., 2021). The 'Year' indicator was not analysed because all the scientific production on this subject is very recent. The analysis of the intellectual structure highlights the co-occurrences of keywords based on their frequency, allowing the extraction of the mediating variables that most influence the problem under study. This data analysis technique was chosen because the Science Mapping is particularly suited to the analysis of a large volume of documents from which extraction of measures of semantic similarity between authors, documents, journals, or citations (Aria & Cuccurullo, 2017) is intended. It was decided to treat the data from the two bibliometric databases separately, in order to highlight contrasting or coincident perspectives on the subject under study, which, incidentally, were observed in some of the results found.

3.3 Sample

The sample resulting from documents that relate the variables 'Tourism' and 'COVID' consisted of 613 items. After applying the criteria defined in the pre-analysis, 176 publications were considered usable (Table 1).

Table 2 shows the distribution of results by type of approach. As previously illustrated in Figure 1, one of the final criteria for the selection of the publications was if they focused on how policies could contribute to the recovery of tourism. It was found that about half of the articles (50.6%) associated 'Policies' with 'Strategy', 27.3% indicated that 'Policies' should focus on stimulating 'Sustainability and Social Responsibility', and 22.1% suggested that 'Policies' should promote 'Economic and Legal' support measures. Therefore, the areas of 'Strategy', 'Sustainability and Social Responsibility', and 'Economic and Legal' support measures seem to be central to tourism recovery, and thus policies should focus on these.

The research concerning the most appropriate policies and strategies to overcome the effects of COVID-19 on tourism focuses, above all, on the need to reorganise the supply sustained by a new business model. Regarding studies on tourism demand, the dominant theme is

Table 1. Document sample

Data source	Initial result	Excluded in pre-analysis	Result	Not available	Final result
SCOPUS	348	198	150	29	121
WOS	265	192	73	18	55
Total	613	390	223	47	176

Source: Original compilation based on SCOPUS and WOS

Table 2. Scientific approach

Approach	N (SCOPUS)	N (WOS)	Total	%
Policies and strategy	48	41	89	50.6
Sustainability and social responsibility	45	3	48	27.3
Economic and legal support	28	11	39	22.1
Total	121	55	176	100

Source: Original compilation based on SCOPUS and WOS

Table 3. Research focus

Focus	N (SCOPUS)	N (WOS)	Total	%
Supply	105	48	153	87.0
Demand	16	7	23	13.0
Total	121	55	176	100

Source: Original compilation based on SCOPUS and WOS

the effect of consumer perceptions of travel safety/risk (Table 3).

As shown in Table 4, the most common research approaches used in the analysis of policies and strategies to overcome COVID-19 effects on tourism are empirical studies, critical literature reviews, and econometric models (93.2%). Systematic literature reviews and bibliometric analysis are still very scarce. Empirical studies

Table 4. Type of study

Studies	N (SCOPUS)	N (WOS)	Total	%
Empirical study	51	19	70	39.8
Literature review	39	29	68	38.7
Econometric model	22	4	26	14.7
Systematic literature review	7	1	8	4.5
Bibliometric analysis	2	2	4	2.3
Total	121	55	176	10

Source: Original compilation based on SCOPUS and WOS

are divided equally between qualitative (n=46) and quantitative (n=46) approaches. Qualitative research included the following: case studies (n=22), interviews (n =15), discourse analysis (n =6), Delphy technique (n=2), and visual data analysis (n=1). As regards quantitative research, the most used approaches were econometric models (n=26), self-administered surveys (n=18), and meta-analysis (n=2).

Figure 2 shows the distribution of publications by country of the first author, highlighting countries with three or more publications. The distribution of documents by continent is as follows: Europe (n=76, 43.0%),

Figure 2. Publications' geographic distribution

Source: Original compilation based on SCOPUS and WOS

Asia (n=53, 30.0%), America (n=21, 12.0%), Oceania (n=19, 11.0%), and Africa (n=7, 4.0%).

Table 5 systematises the scientific journals and their classification in terms of impact factor. It was considered important to present scientific journals with three or more publications, due to the high Impact Factor Score.

4 Results

4.1 Conceptual maps

The results and their discussion highlight a comparative analysis between the concepts most mentioned in the publications identified in each of the bibliometric databases consulted. In the previous section, some considerations have already been made regarding the characterisation of the sample, which will be considered in this section in order to consolidate the interconnection with the co-occurrences analysis.

This section presents the outputs taken from the *VosViewer* informatic program, on the documents selected in each of the databases (SCOPUS and Web of Science). We chose to highlight the different approaches published there. Finally, the co-occurrences of publications from the two databases were jointly analysed, to extract the predominant common themes.

Table 5. Number of publications per Journal and their impact factor

Source	N	Impact Factor
Tourism Geographies	22	3.159
Current Issues in Tourism	16	6.031
Tourism Economics	9	1.819
Journal of Sustainable Tourism	8	7.968
Annals of Tourism Research	8	5.908
Sustainability (Switzerland)	7	2.576
Journal of Travel Research	6	5.169
International Journal of Hospitality Management	6	6.701
Tourism Recreation Research	3	1.360
Scandinavian Journal of Hospitality and Tourism	3	3.943
Journal of Tourism Futures	3	3.500
Journal of Asian Finance, Economics and Business	3	1.332

Source: Original compilation based on SCOPUS and WOS

4.1.1 WOS documentary sample

Table 6 presents the clusters associated with the most relevant themes identified in the WOS database publications, ranked by relevance score.

Based on the results presented, it is possible to observe that some terms have a high frequency, but are associated with a less expressive relevance, because a word can appear many times, but be identified in few publications. Cluster 1, designated as 'Governance', emphasises the importance of collaboration between stakeholders to maximise their activity, namely, regarding the revitalisation of rural or nature tourism spaces. The relationship between the economy and the local context stands out, especially in inland territories. On the other hand, the role of the 'DMOs' in tourist destinations structured at a regional level is also highlighted, based on public measures to support the recovery of the tourism business, with an emphasis on technology. What stands out here is the role of DMOs in promoting local governance models that ensure the connection of businesses to the territory. In the governance models of networked destinations, the active participation of local communities is crucial to the stimulation of local economies. These results show a close association between Cluster 1 and Cluster 2, highlighting the conditions for bringing the economy closer to the environment, people, and technology. (Çakar & Uzut, 2020; Carr, 2020; Coles, 2021; Dias et al., 2021; Gyimóthy et al., 2020; Kallmuenzer et al., 2021). Cluster 2, designated 'Local economy', refers to public economic policies focused on the recovery of tourist destinations. Despite considering world economic trends, these policies must be differentiated according to local contexts and focused on the quality of life of people (community, workers, and tourists). The regionalisation of policies and the economy of the territory stand out. Cluster 3 ('Research') highlights the resilience of destinations. This Cluster indicates the destinations' issues on which research should be focused. Destinations that promote sustainable businesses and can project this image can increase their capacity to resist crises, because they generate confidence in demand. Cluster 4, called 'Tourism model', points out the strategies to be followed. The sector's development will involve technological innovation, ensuring the sustainability of destinations. These seem to be the essential conditions to guarantee the sector's internationalisation.

Figure 3 clarifies the results of Table 6, focusing on the key dimensions of tourism economic development policies, namely: governance, stimulation of the local economy, people's quality of life, sustainability, and technological innovation.

Table 6. Relevance score by items (WOS)

| Clusters	Items	Occurrences	Relevance score
Governance (14 items)	Stakeholder	7	3.0692
	Rural tourism	9	2.8602
	Space	14	2.2426
	Work	6	2.1052
	Hospitality	15	1.6539
	DMO	9	1.3650
	Relationship	7	1.2192
	Tourism governance	5	1.0494
	Future	16	0.7950
	Response	21	0.7068
	Geography	15	0.6862
	Governance	7	0.6679
	Transformation	21	0.6029
	Information technology	5	0.3356
Local economy (10 items)	Region	9	1.6350
	Tourism recovery	8	1.5314
	State economic policy	6	1.1702
	Person	8	1.0009
	Environment	10	0.9905
	Implementation	5	0.9897
	Buen vivir	6	0.8527
	Policy	23	0.7698
	Government	16	0.7101
	World economy	6	0.4053
Research (9 items)	Tourist destination	6	2.2383
	Destination resilience	6	1.2806
	Destination	29	1.0821
	Resilience	28	0.9532
	Tourism business	7	0.7555
	Sustainable tourism	7	0.5834
	Demand	12	0.5019
	Global economy	5	0.3226
	Tour	19	0.1667
Tourism model (8 items)	Technology	24	0.6299
	International tourism	8	0.5636
	Innovation	15	0.5632
	Sustainable development	5	0.4578
	Application	8	0.4385
	Model	37	0.3815
	Tourism development	12	0.3868
	Development	27	0.2798

Source: VosViewer Output
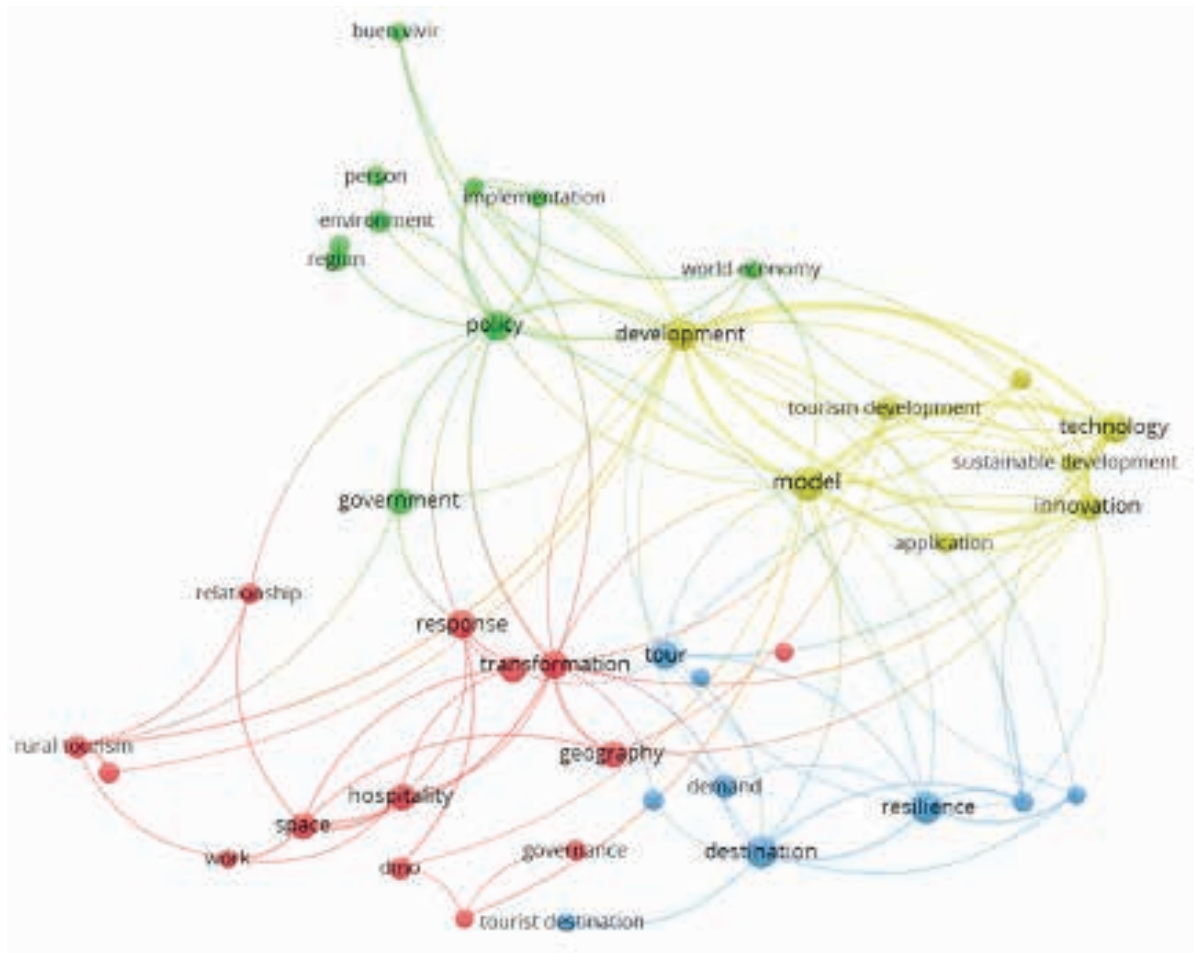
Figure 3. Graphic illustration of co-occurrence networks (WOS)
Source: VosViewer Output

4.1.2 SCOPUS document sample

The analysis of information retrieved from the SCOPUS database highlights the importance of knowledge and identification of territories (see Table 7). Cluster 1 ('Tourism Model') indicates that the recovery of tourism in the post-COVID period constitutes an opportunity for development, as it was demonstrated that the survival of businesses depends on their capacity to be developed through unique and differentiating experiences. It is no longer possible to think about tourism detached from the identity of its contexts and local communities. The model of tourism in the future must be based on the territory's economy and economic geography, the emergence of cultural identity of destinations and on the assumption of tourism as a project of a society. Cluster 2 ('Local Economy') highlights the sector's access to knowledge and information, producing studies that are integrated into management practices. This knowledge should be produced in a differentiated way at the local level. Knowledge transfer stands out here.

Finally, Cluster 3 ('Research') indicates the main fields on which research in tourism should focus. The sustainable development of the territories, combined with climate change, stands out.

In short, the development of tourism is an economic issue, whose long-term survival and ability to withstand crises depends to a large extent on triggering the sector´s evolution and modernisation. To achieve success in this context, it is fundamental to redirect the focus from a purely financial logic of immediate profit to one of gradual evolution towards a model of inclusive development, including cultural identity of territories, people, knowledge, and environment. Technological innovation is essential in this process (see Figure 4).

Figure 5 systematises the path to be followed by tourism policies based on the set of documents analysed. This should facilitate the development of a tourism model sustained by 'technological innovation' and 'sustainability'. These two factors will be essential to make destinations more resilient to crises.

Table 7. Relevance score by items (SCOPUS)

Clusters	Items	Occurrences	Relevance score
Tourism model (13 items)	Tourism geographies	12	3.2691
	Tourism economic	11	1.2846
	Tourism management	28	0.8918
	Post-COVID	16	0.8850
	Tour	64	0.8115
	Person	12	0.7824
	Tourism development	19	0.7463
	Experience	15	0.6324
	Community	20	0.5885
	Opportunity	17	0.5479
	Tourism industry	25	0.3289
	Society	18	0.2074
	Way	17	1.0501
Local economy (8 items)	Manage	14	3.0008
	Hospitality industry	11	2.0514
	Implication	28	1.1140
	Study	62	1.0485
	Economics	29	0.9763
	Relationship	23	0.7194
	Sector	33	0.5609
	Access	71	0.4915
Research (6 items)	Literature	21	1.3596
	Sustainable development	12	1.2539
	Tourism research	16	1.0564
	Sustainability	22	0.5879
	Climate change	12	0.4851
	Sustainable tourism	20	0.2682

Source: VosViewer Output

5 Discussion

The literature review made it evident that the recovery of the tourism sector from the crisis caused by COVID-19 requires a multidisciplinary approach. Diverse problems emerged as a result of the pandemic crisis, demanding answers at different levels that would address the psychological, economic, and political dimensions of the crisis (Tzanelli, 2021; Wickramasinghe & Ratnasiri, 2020). The results provided by the empirical study were in line with these dimensions. However, it was verified that specific aspects for each of these perspectives emerge depending

on whether the respective scientific source was provided by SCOPUS or WOS.

Regarding the psychological dimension, the articles in the WOS documentary sample associate 'person' with 'buen vivir', 'region', and 'economic policy'. This indicates that there is an urgent need to reflect on regional/local policies that stimulate the quality of life of residents and tourists. A link is established between the binomial 'tourism/people's quality of life' (see Table 6 and Figure 3). The documentary sample collected at SCOPUS suggests a similar path, refocusing the 'tourism model' on the

Figure 4. Graphic illustration of co-occurrence networks (SCOPUS)
Source: VosViewer Output

Figure 5. Tourism policies (SCOPUS/WOS)
Source: VosViewer Output

'person' associated with 'experience' and 'economy' (see Table 7 and Figure 4).

The 'economy' and 'policy' dimensions are observed in the themes that constitute the factors designated as 'governance model' and 'crisis management', evidenced in publications taken from the WOS database (see Table 6). The documents selected from the SCOPUS database regarding this issue emphasise the link between 'tourism model' and 'knowledge economy' and 'research' (see Table 7). It can be concluded that the analysis of the documents published in the SCOPUS database emphasises the conceptual component of the 'tourism model'. This is more evident in what the 'research' refers to on the implications of 'hospitality industry' management practices and its progress towards sustainable economic models, focused on the tourist experience and local communities. The publications selected in the WOS database refer to the more operational side of the 'tourism model', associating the ability of destinations to overcome this crisis to the stimulation of local economies through governance models.

Finally, in relation to the political dimension, the analysis of the documents (see Figure 5) highlighted that refocusing policies on the regional/local level seems to be of utmost importance to tourism transformation and recovery. Governments have an important role in building this tourism model, guiding businesses towards sustainability, technological innovation, and revitalisation of rural and inland tourism. Moreover, stakeholder involvement is crucial in implementing this new paradigm. The transformational tourism model requires governance models that reconcile political constraints resulting from the pandemic and business innovation. The urgency to find answers that help people to re-establish confidence in tourism and zest for life can be highlighted here. The contribution of tourism to global economic development depends, to a large extent, on governance models that integrate sustainability, innovation, technology, and people at the local level.

6 Conclusions

This study provided a bibliometric analysis (Rafael & Pires, 2021) that made it possible to systematise the characteristics of scientific literature produced about the effects of COVID-19 on tourism, especially the policies and strategies adopted to relaunch the sector. The bibliometric analysis was carried out using the SCOPUS and Web of Science (WOS) databases, from January 2020 to April 2021. The search criteria followed the assumptions of the

non-probabilistic Snowball sampling technique (Vinuto, 2014). A total of 613 documents containing references to the variables 'Tourism' and 'COVID' were considered, having been selected from 176 publications that met rigorous previously defined criteria. It was considered appropriate to conduct the data analysis from the two bibliometric databases separately, in order to highlight contrasting or coincident perspectives on the subject under study. The results were processed in SPSS and VosViewer software.

Four main dimensions were found that mediate the relationship between tourism and the effects of the COVID-19 pandemic, namely: (1) policies, enabling network governance and regional autonomy; (2) research, enhancing knowledge transfer and new teaching models; (3) economic collaborative approaches that support DMO´s activities; and (4) network innovation that fosters positive change.

Through the analysis of these four dimensions, it was possible to reflect on the main effects that the new reality brought by COVID-19 will have on a new paradigm of tourism development. The results suggest that this will be more focused on host communities, implying a more efficient tourism model, based on sustainability principles. In addition, the regionalisation of policies, bringing the economy closer to the environment, will reinforce the territories´ identity. Strengthening relationships among stakeholders is also central to the sector's transformation. Finally, tourism is a vital sector in the recovery of the world economy, which depends, in part, on restoring people's feelings of confidence in travel, destinations and tourism products. Tourism recovery policies must pay special attention to this dimension.

It is crucial that research will continue to follow the ongoing changes closely, either on the new business models and technologies, but also regarding tourism demand trends, especially the tourists´ needs and behaviours. A solid knowledge about these dimensions will be fundamental to the development of more sustainable tourism destinations, based on the needs of people involved in the development process, host communities, tourists, workers, and entrepreneurs.

Bionotes

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