

THE PAST, PRESENT, AND FUTURE OF ACCESSIBLE TOURISM RESEARCH: A BIBLIOMETRIC ANALYSIS USING THE SCOPUS DATABASE

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Abstract: At present, it is estimated that there are more than 1 billion people with some type of disability worldwide. Against this background, it is important to reconceive every life sphere and activity to ensure the inclusion, participation and equal opportunity of people with disabilities and to promote respect for their capacities and desires as people. The tourism sector is leaving large segments of global society behind. Tourism companies need more training and guidance to address the requirements of tourists who have specific needs or require certain types of support. This study aims to analyze and map the progress in scientific research on accessible tourism. To achieve this objective, this paper presents a bibliometric analysis of scientific papers on accessible tourism published in the Scopus database between 1997 and 2021. The study used the VOSviewer and CiteSpace software to map and visualize publication trends within this field. A total of 254 articles were included, of which 95.6% were original research. These studies were published in 52 countries. Australia is among the countries with high research productivity in this field. The most productive journals are Tourism Management and Sustainability (Switzerland), and the most prominent author is Simon Darcy. The analysis of keywords allows us to continually review the opportunities that new information and communication technologies (specifically smartphones and virtual reality) offer for the future development of the accessible tourism sector.

Keywords: Accessible tourism; Disability; Research trends

Introduction

According to the World Health Organization (WHO) (2011), around 15% of the total world population (about 1 billion people) lives with some type of disability. As a result, the WHO considers the accessibility of tourism facilities, products, and services a fundamental part of any responsible and sustainable tourism policy.

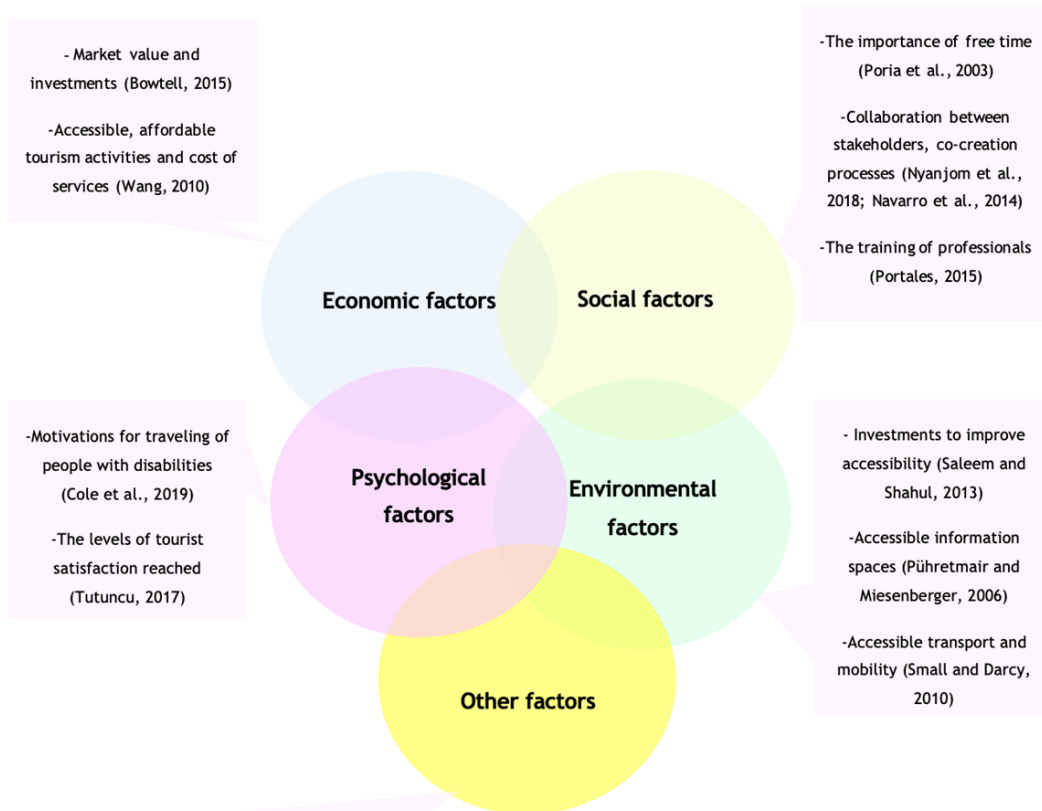
The evolution exhibited by models of disability, as well as changes in social perceptions, have driven the transformation of accessible tourist services, which are becoming increasingly diversified (Zajadacz, 2015). According to leading authors in the field, accessible tourism (AT) can be understood as:

A specific form of tourism in which collaborative processes are generated between the different stakeholders allows people with accessibility requirements to function independently, with inequity and dignity, through tourism products and services focused on universal design (Darcy and Dickson, 2009; Gillovic et al., 2018-a).

As an extension of this conception of AT, some authors began to link it with the notion of “inclusive development”. Inclusive tourism, from this perspective, is understood as tourism in which marginalized groups are involved in terms of ethical production and consumption and which vulnerable and/or marginalized groups share the benefits (Scheyvens and Biddulph, 2018).

Based on the contributions of various studies, Figure 1 summarizes the factors deemed necessary for the development of high-quality AT.

Figure 1. Some determining factors of quality accessible tourism.



Domínguez et al. (2015) summarize the competitiveness factors of accessible tourism as follows:

| | | |
|-----------------------------|-------------------|---|
| 1. Physiography and climate | 6. Hospitality | 11. Destination planning and management |
| 2. Mix of activities | 7. Political will | 12. Safety |
| 3. Culture and history | 8. Cost value | 13. Service quality |
| 4. Accessibility | 9. Location | 14. Positioning and branding (brand management) |
| 5. Infrastructure | 10. Awareness | Article citation |

Understanding the general problems that persist concerning accessibility in tourist environments is key for ensuring the development of positive tourism experiences and devising procedural manuals allowing the tourist industry to better serve individuals with all levels of disability (Darcy, 2008). Bibliometric studies can highlight emerging trends within a research area and, in the context of AT, offer guidance on the future of the sector, as well as the mindset of visitors, service providers, planning agencies and tour operators; they can also provide insight into the current state of research in the field of AT.

Previous bibliometric analyses of AT research are available in the literature; however, they contain few studies (Tite et al., 2021); focused on very specific topics, such as “the perspectives of managers who work in hotel companies on

AT” (Akinci et., 2019), or pertain to highly specific geographical areas (Köseoglu et al., 2015).

Due to the notable increase in scientific papers within the general field of AT, it is necessary to conduct a new bibliometric study to summarize the changes in the intellectual structure of this field that have occurred over time. Therefore, this study aims to analyze and map progress in scientific research on AT by evaluating past contributions to the field, the current state of research, and possible future trends in this sector based on the literature.

Methodology

Search strategy

The source documents for the bibliometric analysis were obtained from the Scopus database, one of the most authoritative databases of scientific publications (Archambault et al., 2009). According to the Scopus Content Coverage Guide (2020), Scopus is the most complete database of global scientific research, especially in the fields of science, technology, medicine, social sciences, arts and humanities. Moreover, Scopus is one of the most widely used databases for almost all scientific disciplines (AlRyalat et al., 2019). Against this background, and because of the widespread use of Scopus among previous bibliometric analyses (Palomo et al., 2017; Niñerola et al., 2019), we used Scopus for our analysis of AT research, as well as research pertaining to the concept of “tourism for all”. The final bibliographic search was carried out between February and April 2021.

The terms included in the search string were Medical Subjects Heading (MeSH) terms for Medline, ProQuest and EBSCO Thesaurus (Shiri et al., 2002). The main terms used in previous relevant articles were also reviewed. The final terms/concepts included in our search equation were as follows: (1) Accessible tourism; (2) Tourism for all; (3) Inclusive tourism; and (4) People with disabilities. An expert in bibliographic searches provided advice regarding how to develop an adequate search strategy to meet the objectives of this

study. Table 1 shows the full search strategy, along with the labels, operators, and filters.

Table 1. Bibliographic search strategy

| Database | Search strategy | Filters |
|----------|---|--|
| Scopus | (ALL ("Accessible tourism") OR ALL ("Tourism for all") OR ALL ("Inclusive tourism") AND ALL ("People with disabilities")) | (EXCLUDE (DOCTYPE, "cp") OR EXCLUDE (DOCTYPE, "ch") OR EXCLUDE (DOCTYPE, "bk") OR EXCLUDE (DOCTYPE, "ed") OR EXCLUDE (DOCTYPE, "le") OR EXCLUDE (DOCTYPE, "no")) |

Note. The filters all relate to the exclusion criteria implemented in this study.

Selection of study area and inclusion criteria

When carrying out the bibliometric analysis, the following considerations and inclusion criteria were applied:

1. To obtain more reliable and accurate results, only “articles” and “reviews” were considered. Therefore, the initial database search was refined according to the type of study.
2. Only articles published in the period 1997-2021 were considered, based on previous research charting the development of universal accessibility in the field of tourism.
3. Articles were not filtered according to language or the availability of free (vs paywalled) full text. Similarly, the author, institution, country and keyword variables were unfiltered, as they were used to generate the bibliometric indicators.

All data obtained via the literature search were independently verified by two investigators (C.S.H. and A.J.R.-C.) to reduce the risk of bias. More specifically, the titles and abstracts of each document were reviewed. It was unnecessary to rule out any studies during this process since they all met the inclusion/eligibility criteria. Table 2 summarizes the study inclusion criteria.

Table 2. Criteria for including studies in the bibliometric analysis.

| Research item | Delimitation |
|---------------------------|---|
| Database 5.6 | Scopus 4.1 |
| Type of documents 15.7 | Articles and Reviews 4.9 |
| Document content | Articles related to Universal Accessibility in the field of tourism |
| Publication date | Articles published between 1997-2021 |

Data analysis

All of the bibliographic data were extracted from the Scopus database, including the following: (1) citations; (2) bibliographic information; (3) abstract and keywords; (4) financing details; and (5) other information. All data were exported to the software in “CSV” file format. The bibliometric techniques and software used to evaluate the research were as follows:

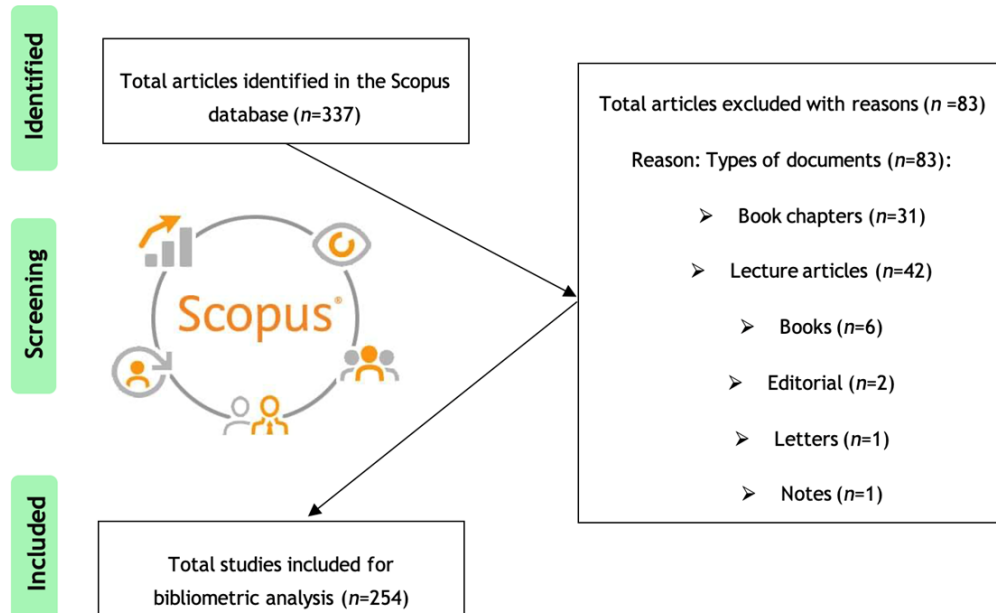
1. Country analysis; keyword analysis; visualization of collaboration/cooperation networks; pennant diagram of the study concept; and keyword timeline. Program: CiteSpace 5.7.R2 (64 bit; licensed under Java Runtime v.8 update 91, build 1.8.0_91-b15) (Chen et al., 2010; Chen, 2005; Chen, 2014) and Microsoft Excel 2016 (Microsoft Corp., Redmond, WA, USA).
2. Author analysis; analysis of co-citations; journal analysis; and keyword analysis. These analyses yielded bibliographic association strength and cluster data. Program: VOSviewer version 1.6.15 (Drexel University, Philadelphia, PA, USA) (Van-Eck and Waltman, 2013; Van-Eck and Waltman, 2017).

Results

Results of the bibliographic search

The advanced search for studies in Scopus, which followed the specifications outlined in the previous sections, yielded 337 documents. Subsequently, and to avoid bias, we performed a blinded peer review of the titles and abstracts. A third expert author resolved any discrepancies arising during this process; however, no study was eliminated based on the subject matter, since all were related to AT-and tourism for all. The studies were then filtered according to document type. During this phase, 83 documents were eliminated, i.e., all book chapters (9.20%), conference articles (12.46%), books (1.78%), editorials (0.59%), letters (0.30%) and notes (0.30%). In total, 254 studies were included in the bibliometric analysis. The screening process, from the initial results to the final selection of studies for inclusion in the bibliometric analysis, is shown in the flow diagram in Figure 2.

Figure 2. Flowchart on document retrieval and screening.



Results by publication type and trends in AT literature

A total of 254 studies were included in the bibliometric analysis, of which 243 were original articles (95.6%) and 11 were review articles (4.3%). Our analysis

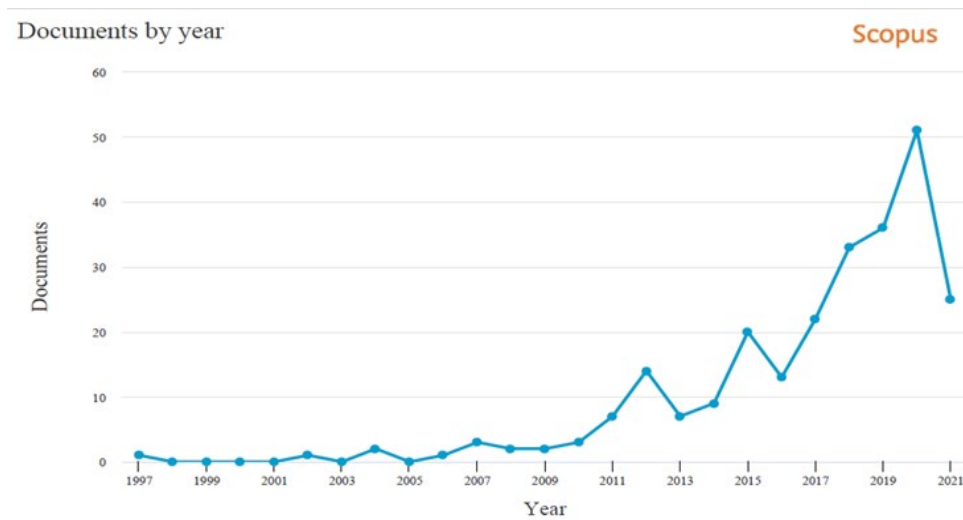
shows how AT research volume has progressively increased over the last 24 years, from 1 article in 1997 to 52 in 2020 (2021 was not considered since it was still in progress at the time of the search). The marked increase in research since 2016 (see Figure 3) is mainly due to the increased productivity of the following authors:

- Simon Darcy, who conducted numerous studies on tourism related to social inclusion, sustainability, disability studies, sports events, and volunteer tourism (Darcy et al., 2016; Darcy et al., 2018; Darcy et al., 2020).
- Brielle Gillovic, who carried out studies on tourism related to AT, care, critical tourism and disability (Gillovic et al., 2018-a; Gillovic et al., 2018-b; Gillovic et al., 2020).
- Trinidad Domínguez, who carried out studies on disability, the elderly and tourist accommodation (Domínguez-Vila et al., 2016; Losada et al., 2017), and the accessibility of web spaces (Domínguez-Vila et al., 2017; Domínguez-Vila et al., 2018).

Starting in 2015, measures were taken to regulate the accessibility of tourism, i.e., to ensure that services are adapted to meet the needs of all people and thus promote AT. These measures include the publication of the *Manual on Accessible Tourism for All - Public-Private Partnerships and Good Practices* by the World Tourism Organization (UNWTO), which served as a basis and guide for numerous subsequent studies.

For several years, experts from more than 100 countries have been working on ISO standard 21902: *Tourism and related services - AT for all - Requirements and recommendations*, under the direction of the ONCE Foundation, World Tourism Organization (UNWTO) and Spanish Association for Standardization, UNE. This ISO will stipulate the standards that tourism providers must meet for their services to be accessible to all and provide guidance on how to create, design and present information in an accessible way. Other issues to be covered by the standard include accommodation, transportation and restaurants.

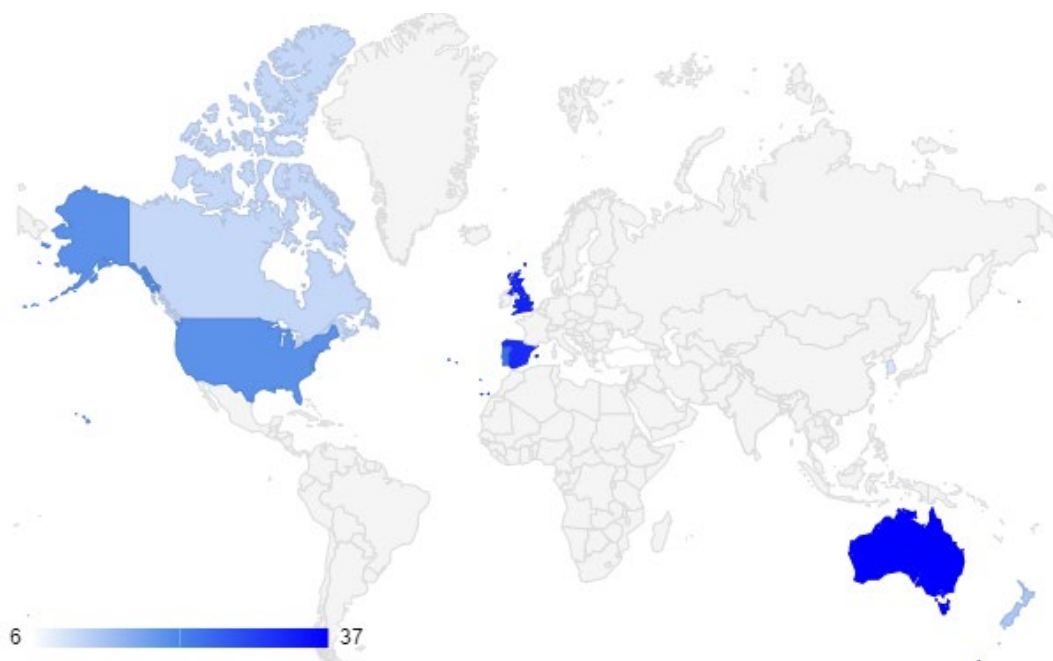
Figure 3. Total of studies published between the years 1997-2021.



Analysis of countries and institutions

The contribution of individual countries to AT research is illustrated in Figure 4. Authors from 52 countries have published publications on AT. The 10 most productive countries, in order, have been Australia (n = 37 studies; 14.57%), the United Kingdom (n = 33; 12.99%), Spain (n = 32; 12.60%), Portugal (n = 24; 9.45%), the United States (n = 20; 7.87%) , Canada (n = 13; 5.12%), The Netherlands (n = 13; 5.12%), Italy (12; 4.72), South Korea (9; 3.54%), and Ghana (7; 2.76%).

Figure 4. Worldwide geographical distribution of the research results in AT.



Note. The world map of the productivity of publications by countries within the field of AT can be interpreted by observing the indicator located in the lower-left (productivity, in the countries where at least one work was published, increases from light blue to dark blue, based on the number of publications).

Bibliometric association strength was calculated using VOSviewer version 1.6.15. The bibliometric association strength is based on the strength of the links for a given element concerning other elements, with the number of documents and citation counts taken into account (Eck and Waltman, 2009). The three countries with the highest bibliometric association strength, that is, the most productive, cited, and collaborative countries, were Australia, the United Kingdom and Spain 32 (see Table 3). Figure 5 clearly shows the relationships among the most productive countries.

Finally, Table 4 shows the most productive institutions within the field of AT research. The University of Technology Sydney, UTS Business School (n = 42 studies; 16.54%) is the top-ranked institution, followed by the University of Aveiro (n = 13; 5.12%) and Auckland University of Technology (n = 9; 3.54%).

Table 3. The 10 most influential countries

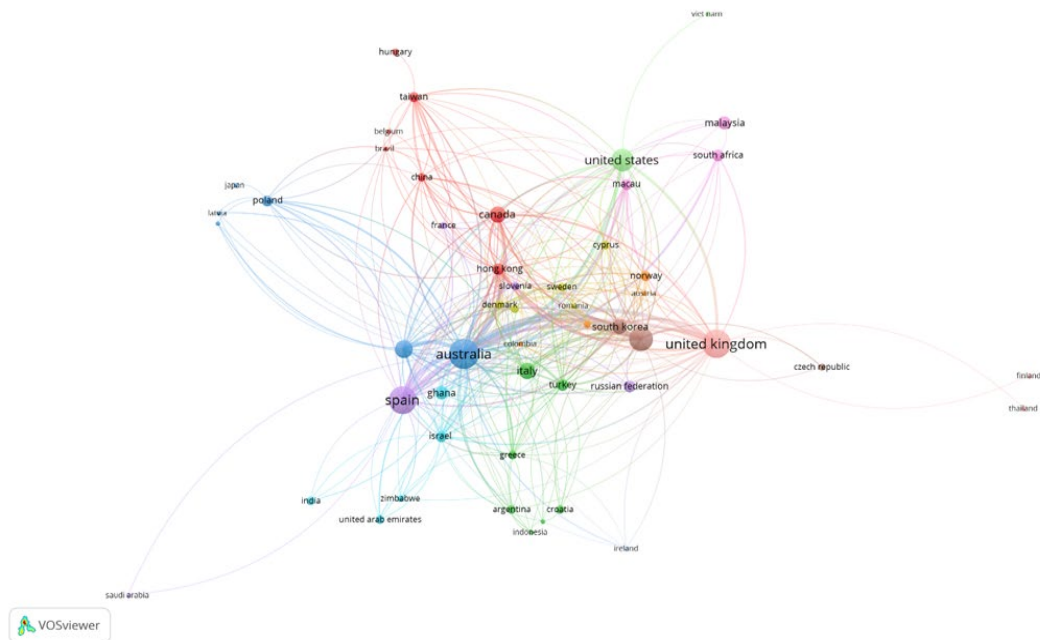
| Ranking | Country | Documents (%) N=254 | Citation count | Total link strength |
|------------------|----------------|------------------------|-------------------|------------------------|
| 1 st | Australia | 37 (14.57%) | 939 | 579 |
| 2 nd | United Kingdom | 33 (12.99%) | 290 | 290 |
| 3 rd | Spain | 32 (12.60%) | 229 | 229 |
| 4 th | Portugal | 24 (9.45%) | 208 | 208 |
| 5 th | United States | 20 (7.87%) | 163 | 163 |
| 6 th | New Zealand | 13 (5.12%) | 140 | 140 |
| 7 th | Hong Kong | 6 (2.36%) | 138 | 138 |
| 8 th | South Korea | 9 (3.54%) | 123 | 123 |
| 9 th | Canada | 11 (5.12%) | 111 | 111 |
| 10 th | Turkey | 6 (2.36%) | 81 | 81 |

Tabla 4. The 10 most influential institutions

| Ranking | Institutions | Documents (%) N=254 |
|------------------|---|---------------------|
| 1 st | University of Technology Sydney. UTS Business School. | 42 (16.54%) |
| 2 nd | Universidade de Aveiro | 13 (5.12%) |
| 3 rd | Auckland University of Technology | 9 (3.54%) |
| 4 th | Universidade de Vigo | 8 (3.15%) |
| 5 th | Universidad de Malaga | 7 (2.76%) |
| 6 th | Bournemouth University | 7 (2.76%) |
| 7 th | Indiana University Bloomington | 6 (2.36%) |
| 8 th | The University of Queensland | 6 (2.36%) |
| 9 th | University of Waikato | 5 (1.97%) |
| 10 th | Universidade do Algarve | 5 (1.97%) |

Note. Tables 3 and 4 represent different rankings. The interpretation of the same must be made separately. In most cases, there is no direct correspondence between the countries and the location of the institutions.

Figure 5. Cluster view of the most active countries in the field of AT.

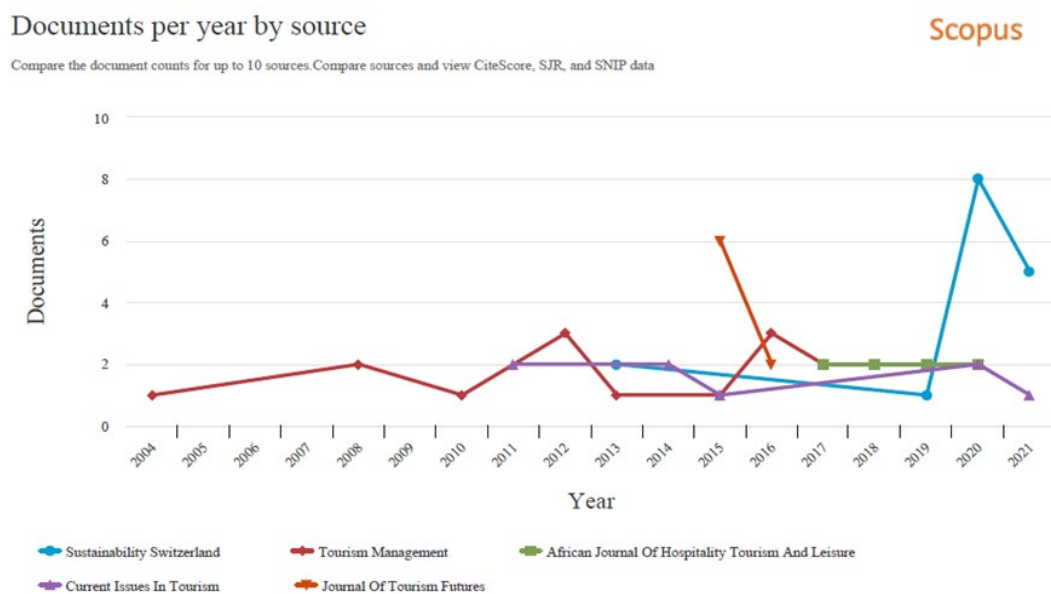


Note. Each colour in the figure represents groups of cooperative relationships between countries. The size of the clusters (circles) is linked to greater or lesser cooperation between a country and the other countries.

Journal analysis

The 254 articles were published in 120 academic journals. Figure 6 shows the yearly trends in publications in the five leading journals worldwide in terms of AT research. Sustainability Switzerland is the top-ranked journal, with eight AT studies published in 2020.

Figure 6. Number of documents by year and source.



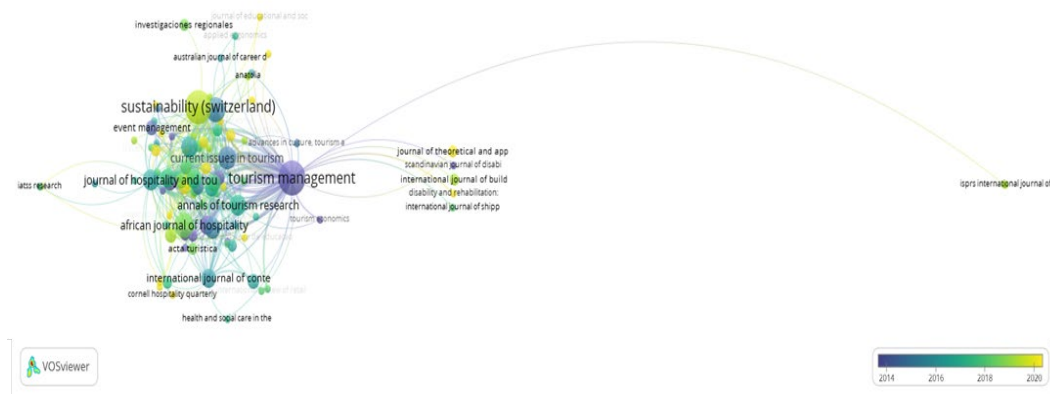
According to the analysis of bibliometric association strength, the journals with the most collaborations are Tourism Management (n = 16 collaborative studies; 6.30%, Sustainability (Switzerland) (n = 15; 5.91%) and the Journal of Hospitality and Tourism Management (n = 6; 2.36%) (see Table 5).

Table 5. The 10 most influential journals in the field of AT research.

| Ranking | Journal | Documents (%) N=254 | Citation count | Total link strength |
|------------------|---|---------------------|----------------|---------------------|
| 1 st | Tourism Management | 16 (6.30%) | 2232 | 315 |
| 2 nd | Sustainability (Switzerland) | 15 (5.91%) | 44 | 129 |
| 3 rd | Journal of Hospitality and Tourism Management | 6 (2.36%) | 154 | 112 |
| 4 th | Journal of Tourism Futures | 8 (3.15%) | 130 | 89 |
| 5 th | International Journal of Hospitality Management | 6 (2.36%) | 102 | 79 |
| 6 th | Journal of Sustainable Tourism | 5 (1.97%) | 94 | 75 |
| 7 th | Current Issues in Tourism | 7 (2.76%) | 363 | 59 |
| 8 th | International Journal of Tourism Research | 3 (1.18%) | 142 | 57 |
| 9 th | Annals of Tourism Research | 6 (2.36%) | 110 | 56 |
| 10 th | Tourism Management Perspectives | 2 (0.79%) | 37 | 56 |

Similarly, VOSviewer version 1.6.15 was used to visualize the leading journals in the field of AT. Notably, although journals such as Tourism Management have made the largest contribution to the field and exhibit the most links/relationships, the overlay display indicates that they were most productive around 2014. More recently (approximately since the end of 2019), journals such as Sustainability (Switzerland) have exhibited greater productivity (albeit not over the entire study period) and more links with other journals (see Figure 7).

Figure 7. Cluster view of the most active sources in the AT field.



Analysis of authors and co-citation networks

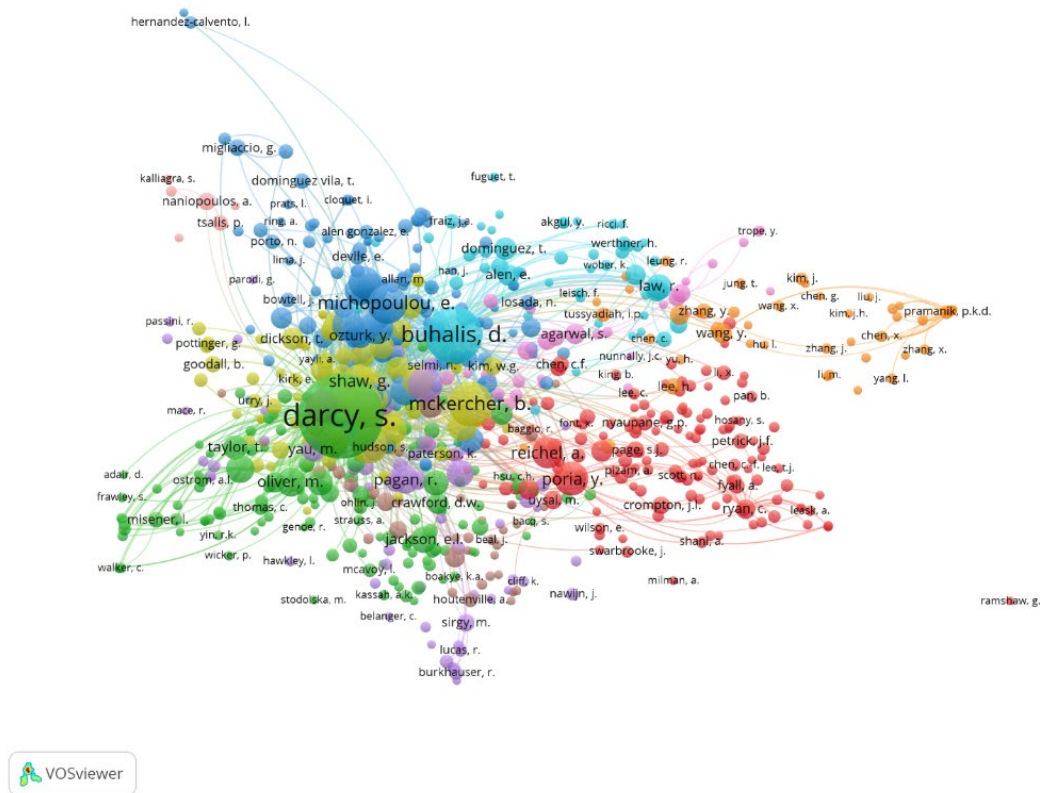
A total of 492 authors were involved in the 254 retrieved articles. The top 10 most influential authors are shown in Table 6. Again, both the number of citations and bibliometric association strength, which relates to the number of studies published by a given author and the citation count of those articles, are shown. As for the figures previously presented, the VOSviewer version 1.6.15 selection parameters included a minimum of one document per author (i.e., the author must have at least one published article), with no filter applied to the minimum number of citations (i.e., any study by the author is eligible, even if it has not been cited). The best-represented authors were Darcy S. (n = 1061 articles), Eusébio C. (n = 370) and Kastenholz E. (n = 108).

A total of 16,085 authors were co-cited by the 254 studies included in this bibliometric analysis (see Table 6). Due to the high rates of co-citations, only authors with a minimum of five citations are shown to improve the clarity of the figure. A total of 733 authors were thus represented. The three authors with the highest bibliometric association strength were Darcy S. (n = 57,068 citations), Buhalis D. (n = 24,951) and Mckercher B. (n = 14389; see Table 5 and Figure 8).

Table 6. The ten most influential authors and most co-cited authors in the field of AT.

| Ranking | Author | Documents (%) N=254 | Citation count | Total link strength | Co-cited authors | Citation count | Total link strength |
|------------------|---------------|------------------------|-------------------|------------------------|------------------|-------------------|------------------------|
| 1 st | Darcy S. | 24 (9.45%) | 751 | 1061 | Darcy S. | 939 | 57068 |
| 2 nd | Eusébio C. | 9 (3.54%) | 97 | 370 | Buhalis D. | 363 | 24951 |
| 3 rd | Kastenholz E. | 4 (1.57%) | 108 | 276 | Mckercher B. | 203 | 14389 |
| 4 th | Dickson T.J. | 5 (1.97%) | 162 | 234 | Michopoulou E. | 144 | 9660 |
| 5 th | Figueiredo E. | 2 (0.79%) | 89 | 208 | Packer T. | 137 | 8172 |
| 6 th | McIntosh A. | 6 (2.36%) | 56 | 195 | Pegg S. | 123 | 8151 |
| 7 th | Mckercher B. | 3 (1.18%) | 92 | 192 | Miller G. | 112 | 7634 |
| 8 th | Pegg S. | 3 (1.18%) | 135 | 177 | Poria Y. | 107 | 7526 |
| 9 th | Gillovic B. | 3 (1.18%) | 43 | 161 | Small J. | 103 | 7345 |
| 10 th | Buhalis D. | 3 (1.18%) | 1579 | 155 | Kastenholz E. | 95 | 7101 |

Figure 8. Cluster view of the authors with the highest co-citations in the field of AT.



Note. Each colour represents co-citation networks between authors. The size of the nodes (circles) is related to higher or lower levels of co-citations per author.

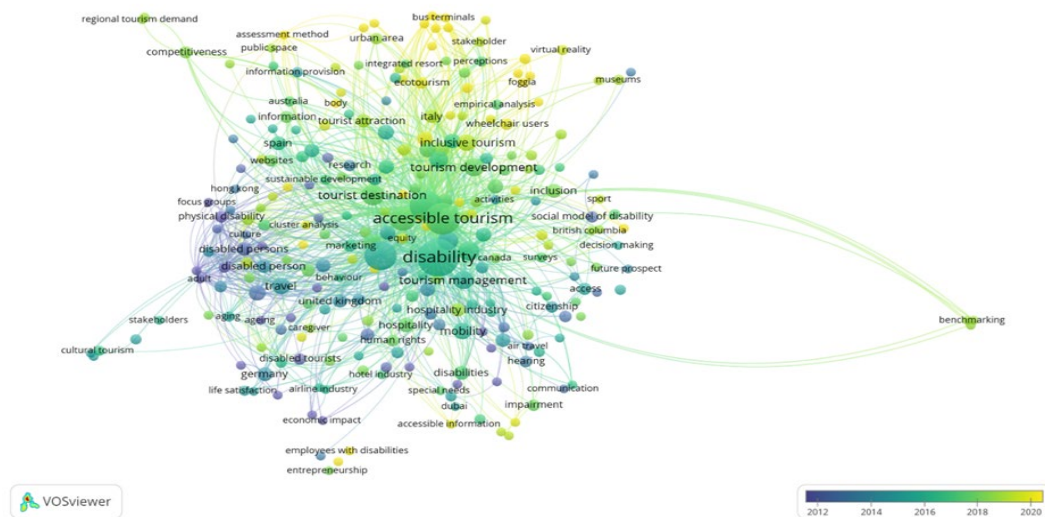
Keyword co-occurrence network

Keyword analysis has been widely used to understand the knowledge structure of specific research domains. These analyses are considered vital within bibliometric studies (Che and Xiao, 2016). In this study, using VOSviewer version 1.6.15, an automatic network measure based on centrality was applied to select highly similar keywords. The program was used to carry out a co-occurrence analysis of all keywords.

The program detected a total of 1158 keywords among the 254 articles included in this bibliometric analysis. For clarity of the generated graph, each keyword was required to appear at least twice; 267 keywords met this threshold.

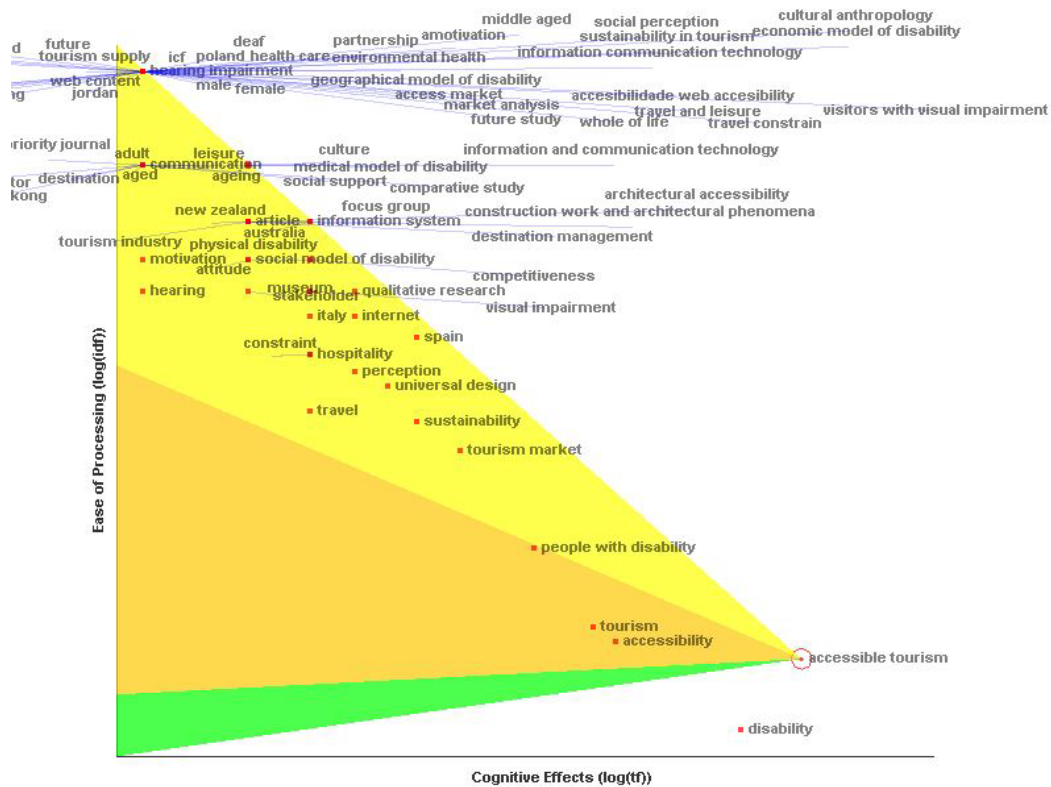
The keyword co-occurrence network map clearly showed past, present and future trends in the literature on AT. The top 10 terms, i.e., those appearing

Figure 9. Part 2. Cluster view of keywords based on the time of appearance (progression by years of literature).



A more detailed analysis was performed using CiteSpace 5.7.R2 (64 bit) software, given the importance of keyword analysis for understanding research productivity. Flag diagrams provide information about keywords directly connected to nodes; keywords in closer proximity in the graph are more frequently correlated in the studies from which they derive. It can be seen that AT, i.e., the second most frequent concept/keyword in the 254 articles and the one most closely aligned with the objectives of this bibliometric analysis, has co-occurrence links (a relationship of two or more terms within a text unit) with (in descending order) Disability, Tourism, Accessibility, People with disabilities, Tourism marketing, Sustainability, Travel, Universal Design and Perception (see Figure 10).

Figure 10. Pennant diagram of concepts related to the term Accessible Tourism.



Finally, a keyword timeline was made; this is useful for analyzing groups of words that appear interconnected among studies. In addition to grouping related terms, CiteSpace 5.7.R2 (64 bit) can present the evolution of the literature over time. Table 7 shows all 20 concept groupings resulting from the keyword analysis of the 254 articles. Figure 11 shows the evolution of terminology within the field and the existing connections between the different groupings. As of 2020, concepts of particular interest included “Smartphones”, “Special assistance”, “Differentiation strategy”, and “Information marketing”; these will be discussed later in terms of their contributions to AT.

Table 7. Summary of the 20 groups in AT research in the period 1997-2021.

| Ranking | Concepts that form the grouping |
|---------|---|
| #0 | Social; life; quality; policy; benefic health; mental; public |
| #1 | Market; information marketing; communication; technology travel; motivations; profitability; practice |
| #2 | Travel; internet; wcag; medical; education qualitative; care; caregiver; canada; medical |
| #3 | Human; architectural; person; disabled; application aged; adult; environment; environmental |
| #4 | Approach; perception; people; mobility; transport destination; stakeholder; development; families |
| #5 | Universal design; area hospitality; delivery; quality; stereotyping; operation |
| #6 | Tourist; stakeholder; destination; approach; reality planning; network; attraction; urban; method |
| #7 | Travel; willingness; choice; experiment; product management; blind; dog; familiar; sensory |
| #8 | Sport; british; columbia; sports; infrastructure disability; orientation; normality; medical; human |
| #9 | Competitiveness; human; policy; right; brazil attraction; research; management; visitor; spain |

| Ranking | Concepts that form the grouping |
|---------|---|
| #10 | Tourism; marketing; imagery; society; england behaviour; impairment; tourism |
| #11 | Website; social; accessibility; comparative commerce; search; engine; business; meta |
| #12 | Travel; market; experience; tourist; segmentation national park; area; sustainability |
| #13 | Development; sustainable; goal; sustainable tourism; inclusive; inclusion; refugee; framework |
| #14 | Wheelchair; user; heritage; assessment; interview tourism; tourist; challenge; wheelchair |
| #15 | Social; management; system; theory; systems inclusion; building; conservation; dementia |
| #16 | Access; vehicle; private; citizenship; systems inclusion; automobility aircraft; wheelchair; manual; passenger; flying |
| #17 | Travel; disability; education; health; priority constraint; education social; disability; health |
| #18 | Data too sparse to form a link |
| #19 | Accessible tourism; desired companion; inclusive tourism; leisure constraint; people with disabilities; recreation companionship; social intimacy; social network; social tourism |
| #20 | Accessibility; design for all; intellectual access; multimodality; multisensory; museum; orientation and mobility; sensory access; visiting experience; visual impairment |

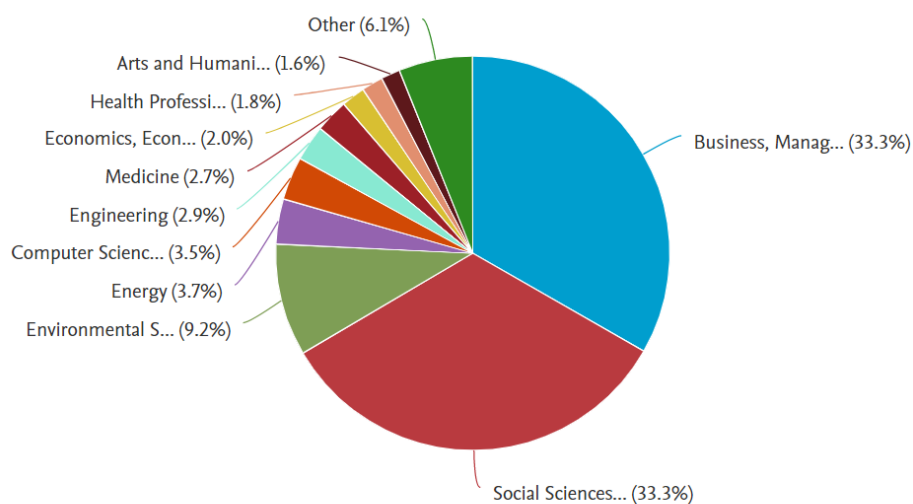
Figure 11. Timeline diagram of keywords on AT research during the period 1997-2021.



Subject areas

The areas of knowledge and categories (directly determined from the Scopus database and Scimago journal rankings) associated with the most publications on AT are as follows (in descending order): Business, Management and Accounting/Social Sciences (both 33.3 %) and Environmental Science (9.2%) (See Figure 12).

Figure 12. Document analysis depending on the area of knowledge.

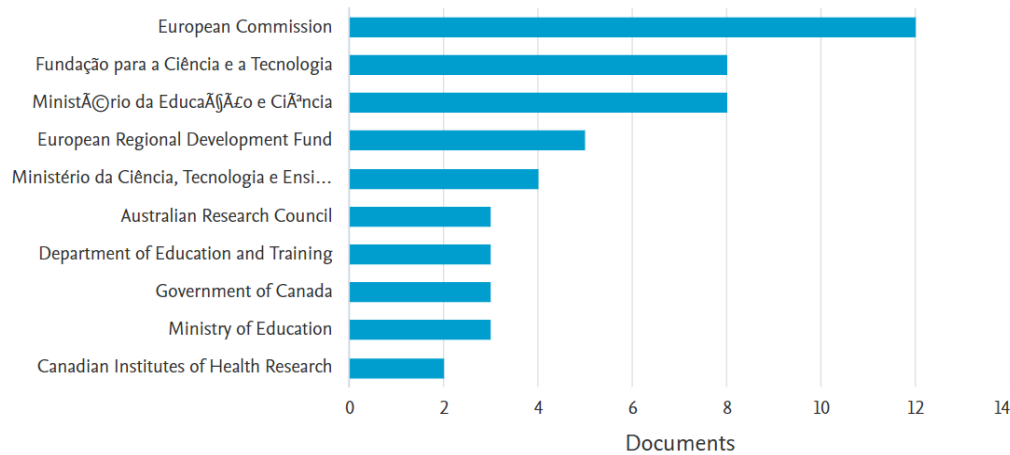


Note. The sum of percentages in the figure exceeds 100% since the studies are published in journals that can be simultaneously indexed in different areas of knowledge and categories.

Financing

A total of 60 institutions provided financial support for the 254 articles analyzed. Thus, there is a wide array of funding agencies, none of which are particularly dominant. The top three organizations were, in descending order, the European Commission ($n = 10$ studies subsidized); Foundation for Science and Technology ($n = 8$); and 3rd Ministry of Education and Science ($n = 8$) (see Figure 13).

Figure 13. Documents by funding sponsor.



Discussion

The objective of this bibliometric study was to analyze and map progress in scientific research on AT and tourism for all by studying past contributions to the field, its current status, and future trends based on the literature.

To achieve this objective, an analysis of research productivity was conducted using the Scopus database; specifically, our analysis involved a detailed examination of literature trends by year, country and institution, journal, author and co-citation networks, keywords, knowledge domains and funding institutions (sponsors).

Several bibliometric studies of great relevance and interest to researchers in the field of tourism have been carried out, such as those by Bastidas-Manzano et al. (2020) and Johnson and Samakovlis (2019), who reviewed the literature about smart tourist destinations, and that of Della-Corte et al. (2019) on the development of sustainable tourism in terms of open innovation. These studies are relevant to AT, where a tourist destination cannot be considered smart if it is not accessible; moreover, the contributions of accessibility to tourism sustainability are very clear (Darcy et al., 2010). However, few studies similar in nature to the present one were identified.

Given the paucity of previous bibliometric studies on AT, we decided to conduct a bibliometric analysis of literature published during a 24-year period

(1997-2021). Bibliometric analysis is a rigorous method for analyzing large volumes of scientific data (Donthu et al., 2021). This methodology has several advantages for the analysis of AT research: it can reveal emerging trends in articles, journals, and collaborations between researchers and can also be applied to explore the intellectual structure of specific areas of the literature.

The volume of publications within the field of AT has progressively increased, especially since 2016. However, the considerable attention that accessibility is attracting within the tourism sector, from a social and commercial perspective, does not necessarily correspond to the number of scientific publications thereon, albeit publications from more countries on this topic are now appearing.

According to the results of this study, the country with the most publications on AT is Australia, followed by the United Kingdom and Spain; significant international collaborations involving researchers from these countries were also observed. Hong Kong and South Korea, despite not having large numbers of papers on AT, also have extensive collaboration networks with other countries.

The top 10 most productive journals concerning AT research were tourism journals, whose overall objective is to promote understanding of tourism from a transversal and multidisciplinary point of view. One of the leading journals was identified as “Sustainability”. This international, interdisciplinary and open-access journal focuses on environmental, cultural, economic and social sustainability. The drastic increase in papers on AT published by this journal in 2020 may be attributable to the publication of the special issue “Disability, Tourism and Sustainability”, which included seven such studies.

Our analysis indicated that the author with the highest number of publications, citations, and collaborations was Simon Darcy. In 2011, he edited the book “Accessible tourism: concepts and issues”, his most cited publication (n = 566). The authors of this publication sought to document AT's foundations and theoretical problems using a broad constructionist approach.

Our cluster analysis of keywords showed how, along with AT, new areas of research are gaining prominence, such as ecotourism, virtual reality, inclusive tourism, the visions of sector stakeholders, and sustainability.

New types of tourism are beginning to appear, among which accessible ecotourism may be one of the most promising. Tourism has an important role in the social lives of people with disabilities. Accessible ecotourism can expand both the physical and social environment of people with disabilities (Gura et al., 2020).

In the same way, virtual reality, defined as a realistic environment comprising computer-generated scenes and objects, offers great opportunities to the different stakeholders in the tourism sector. On the one hand, it allows clients with special needs to experience hotels, museums and destinations prior to making travel decisions (Altinay et al., 2021), especially in heritage destinations where accessibility is often extremely limited (Marasco and Balbi, 2019). Similarly, the functions of smartphones and some mobile applications have proven useful for circumventing barriers to visiting tourist attractions (Lam et al., 2020).

To ensure that tourism services are accessible and inclusive for all, it is essential to consider the visions, opinions and perspectives of the different stakeholders involved in the sector's development (De La Fuente et al., 2020). In this scenario, value co-creation arises between clients and tourism providers, allowing services to be adapted to the clients' particular needs, especially those with disabilities. This promotes tourist satisfaction and brand loyalty (Navarro et al., 2015; Neuhofer, 2016).

An emerging field of research suggests that, in addition to taking into account the universal design strategy to achieve more inclusive tourism, social tourism policies and practices that advocate for more inclusive and sustainable outcomes for people who have disabilities should be prioritized (Darcy et al., 2010; Gillovic and McIntosh, 2020).

Our analysis of publications on AT by knowledge domain revealed that Business, Management and Accounting (33.3%), Social Sciences (33.3%) and Environmental Science (9.2%) were dominant. Several recent studies have

assessed the value of AT marketing in different geographical regions, with the consensus being that it constitutes a business opportunity. Many of these studies were published in journals and related organs about business management and accounting (Luiza, 2010; Alén et al., 2012; Domínguez et al., 2013; Bowtell, 2015; Gondos & Nárai, 2019). However, given the pertinence of AT to the rights of people with disabilities, research should not neglect aspects such as the perceptions and needs of tourists with disabilities (Blichfeldt & Nicolaisen, 2011; De La Fuente et al., 2020) and not focus purely on the value or economic potential of this emerging niche market.

Limitations

The present study had some limitations. The main drawback of this bibliometric analysis was that only one database was searched. Although this may have limited the scope of the results, Scopus is nevertheless among the major international databases, such that any studies not revealed by our search would likely not be relevant to this study.

Another potential limitation concerns the specificity of the proposed search. For example, the use of specific descriptors such as "Accessible tourism", "Tourism for all", "Inclusive tourism", and "People with disabilities" may have led to the omission of some literature related to AT, such as "Smart Tourism"; however, given the objectives of our analysis, we preferred to focus on studies that dealt with similar topics to facilitate comparison.

Finally, given the proliferation of concepts comprising each grouping, the keyword timeline was not ideal in visual terms. However, any attempt to reduce their number would have resulted in the dispersion of terms, preventing the formation of links between them.

Implications

This study may have different implications for different stakeholders involved in the development of AT. For the academic/scientific field, it sheds light on emerging trends in AT, which shows the efforts made within the field and could guide new and more empirical research.

We have shown how many different disciplines are required to advance AT as an interdisciplinary field. For example, information and communication technologies provide a basis for the design of future AT destinations. Technological tools can improve the tourism experience and tourist satisfaction since they can address areas such as planning (through virtual reality), reservations, transport, accommodation, and the plurality of needs of tourists according to their disability status and age (Pühretmair & Nussbaum, 2011; Ribeiro et al., 2018; Altinay, 2021).

Our study showed growing interest within the scientific community in the field of accessible and inclusive tourism. The contributions of this bibliometric analysis can be summarized thusly:

- The analysis of the most productive countries, institutions and authors could guide academics intending to engage in collaborations at a national or international level by helping them search for relevant papers and identify institutions and research centres amenable to collaborations on AT research.
- The analysis of productive journals could guide researchers concerning destinations for future publications on tourism, people with disabilities, on AT.
- As already mentioned, the temporal analysis of key concepts revealed hot subtopics/concepts within AT research. This could also guide future research.
- Our study also revealed funding sources and sponsors that academics could approach for future projects related to AT.

Conclusion

This study presents a bibliometric analysis of the scientific literature on AT and reveals a general paucity of research to date. Although some countries, institutions, authors and funders have contributed to the field of AT for several decades, overall productivity is relatively low.

In closing, this paper synthesizes the research on inclusive tourism accessible to all. It is expected that the bibliometric information thus provided can serve as a basis for future research in this field. This study highlights the importance of accessible tourist environments to enhance tourists' satisfaction with disabilities and their families and friends, and may attract interest from researchers and professionals worldwide.

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