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Current Issues of Cross-border Tourism Management – Bibliometric Analysis of Research Directions

Abstract. The aim of the article is to identify research areas that are relevant from the perspective of management in the field of cross-border tourism. The analysis is based on bibliometric information included in the Web of Science and Scopus database. The main task of the analysis is to identify current problems in the field of cross-border tourism management, taking into account regional characteristics as well as forms and content of tourism services. The authors use bibliometric analysis supported by the VOSviewer software. In addition, the case study method is used to identify the most common features and tendencies in the study of cross-border tourism management. A review of the literature in the field shows that the management of tourism services in border regions is currently a new branch of management sciences, which has seen a dynamic growth as evidenced by the number of studies published since the middle of the first decade of the 21st century. Most of them analyse problems of cross-border tourism management in Europe, in the border regions of Germany, the Czech Republic, Spain and Portugal. The objectives of cross-border tourism management in this region are the background for sustainable development, harmonization of relationships at the regional level, concern for the state of the environment. One of the urgent problems is the management of health-related or medical crossborder tourism. A number of issues require more in-depth research, such as the management of transnational tourism services and products at the borders of the EU; European and world trends in the development of the tourism services market in the border regions; and the impact of cross-border tourism on local communities. The article's contribution consists in providing a list of current problems in the study of cross-border tourism management and identifying research gaps in this field.

Keywords: bibliometrics, scientific research, management, cross-border tourism

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1. Introduction

In the era of globalization, models and functions of the political border are becoming an important factor determining forms of cooperation not only between neighbouring countries but also at the global level. Border policies tend to support trade and facilitate movement, cooperation and liberalization of economic activities, including international cross border tourism [Weidenfeld, 2013]. At the same time, the creation of an optimal system of cross-border cooperation requires the resolution of many current problems associated with cultural, economic, religious and other differences between countries and nations, and the effective and mutually beneficial use of natural, demographic, historical and cultural resources of neighbouring countries. Management in the field of crossborder tourism involves the development of products and services taking into account characteristics of border regions. Such activities reveal current problems of a given region that need to be resolved for the benefit of neighbouring countries. By using various forms of tourism activities and organizing them appropriately it is possible react quickly to changes in other sectors of the economy and in other areas, such as politics, ecology, and culture. The integrating role of cross-border tourism in the context of globalization and emerging supranationalism became the basis for a European programme to support initiatives taken by neighbouring countries in the area of sustainable transnational tourism products, co-funded by the European Commission through the COSME¹ programme [Nilsson, Eskilsson, Ek 2010].

The aim of the article is to identify research areas that are relevant from the perspective of management in the field of cross-border tourism. The analysis is based on bibliometric information included in the Web of Science and Scopus database. The authors use technique of bibliometric analysis with the support of the VOSviewer software. This computer programme uses content analysis, where the frequency with which a phenomenon of interest is mentioned in scientific articles [Holsti 1969]. This method, however, does not give a complete picture of problems that occur in specific regions with regard to the management of a specific tourist product. Since the main task of the analysis is to identify current problems in the field of cross-border tourism management, taking into account regional characteristics, as well as forms and content of tourism services, the case study method was used to identify the most common features and tendencies in the study of this phenomenon. The method was particular useful for describing publications grouped by keyword.

¹ Competitiveness of Enterprises and SMEs.

The results of the study have theoretical and, to some extent, practical implications. From the point of view of management theory and, in particular, tourism management, they show the range of problems that are in the focus of modern science, and also indicate directions for further research. From a practical point of view, they show trends in the development of cross-border tourism in various regions of the world, including regional peculiarities of tourism and current problems in its management.

2. Literature review

Research interest in the field of cross-border tourism management started at the turn of 20th and 21st centuries and was motivated by the development of globalization processes. The problem of the formation of a tourism product and management of tourism activities in border areas is analysed in the scientific literature in the framework of a number conceptual approaches. The first thing that gives rise to this variety of research perspectives is the very definition of cross-border tourism. Some researchers define the term "cross-border tourism" as any tourism product or activity related to the movement of tourists from contiguous countries across state borders [Gonçalves 2017; Jimber del Río et al., 2017; Tsaur, Chen 2018 and others]. Another approach is based on the understanding of cross-border tourism as an activity undertaken in the territory directly adjacent to the state border and involving interactions between business entities, local communities, non-governmental public organizations of neighbouring countries in creating a cross-border tourism product and managing it [Ioannides, Nielsen, Billing 2006; Prokkola 2010; Paunovic, Jovanovic 2017; Pallero, Barragán, Scherer 2018 and others]. Shaul Krakover and Yehuda Gradus introduce the concept of "tourism in frontier areas" to identify tourism activities in regions with an unfriendly environment, in particular in separate border regions of Israel [Krakover, Gradus 2002]. In addition to being a risk zone for tourism management; many frontier regions are characterized by limited infrastructure, such as transportation, accommodation and other services [(Butler 2002: 4, 15], which hampers the development of the tourism industry. Tomasz Studzieniecki, Tadeusz Palmowski & Valentin Korneevet propose five types of cross-border areas: 1) frontier zones, 2) cross-border administrative areas, 3) Euroregions, 4) areas eligible for the European Neighbourhood Instrument, 5) areas of local border traffic [Studzieniecki, Palmowski Korneevet 2016]. As can be seen, the existing literature does not provide a single, unambiguous definition of cross-border tourism. This affects research devoted to cross-border tourism management: the multiplicity of interpretations makes it difficult or impossible to develop universal strategies and models.

It is possible to identify several key areas in the study of management of tourism services in border regions. One such issue is the effective use of the border region's tourism potential and the possibility of using it to create a unique touristic product. This is closely connected with the study of the characteristics of a tourist destination as a typical form of utilising the resources of border areas. This issue is particularly relevant in the context of integration processes in Europe, the EU policy of consolidating European countries and peoples. As noted by Dani Blasco, Jaume Guia & Luís Prats, "a very large number of Interreg projects have included cross-border tourism" [Blasco, Guia, Prats 2014: 160]. The possibility of creating and operating a tourist destination in border regions requires good relations between neighbouring countries; such joint projects are usually implemented within the borders of the European Union or jointly with UE partner countries [Nilsson, Eskilsson, Ek 2010].

Another aspect that has attracted the attention of researchers are specific factors of cross-border tourism management, which depend on regional characteristics. Various natural, historical, cultural, political, economic and other characteristics of border areas determine the choice of various models and management strategies. This raises the problem of the role of local communities in cross-border cooperation. Given that each region on both sides of the border is part of the national administrative structure and shares in the cultural and economic life of its respective country, it may be difficult to coordinate regions at the local level, not to mention at a more global level [Stoffelen, Ioannides, Vanneste 2017: 128]. Another problem identified in this context has to do with a comparatively small involvement of local communities in the management of tourism activities and a rather low level of interest in its results [Chiutsi, Saarinen 2017]. Quite often the literature discusses opportunities associated with the use of a cluster model as a form of management of the tourism infrastructure in border regions [Libkovska, Ozol, Kruzhalin 2015].

One direction of research in this field focuses on the analysis of the influence of cross-border tourism on border regions and on neighbouring countries. Findings suggest that the development of cross-border tourism can have positive and negative results. Positive effects are brought about by the consolidation and integration of neighbouring regions, the exchange of cultural values and innovations, the development of the region's economy and infrastructure [Weidenfeld 2013; Horodnikova, Derco 2015; Blasco, Guia, Prats 2014; Makkonen et al. 2018]. Negative consequences include ecological deterioration of the region due to intensive tourist traffic [LaVanchy 2017; Pallero, Barragán, Scherer 2018], an increase in crime rate [Tsaur, Chen 2018]. Another controversial tourism phenomenon is the exploitation of objects with an ambiguous historical past, related to past conflicts between neighbouring nations or nationality disputes. Capitalizing on place identities may facilitate the creation of cross-border destinations but may also create threats to the regional integration of stakeholders [Stoffelen, Vanneste 2017].

An overview of the main areas in the study of cross-border tourism management shows that this research field is still in its formative stage. Some conceptually important problems have not been resolved, including the definition of cross-border tourism, there is a lack of comparative studies, generalizing works are poorly represented, and most authors rely on the case study method.

3. Research methods

The bibliometric analysis described in this article involved standard methods used in similar studies [Glińska, Siemieniako 2018: 47-48]. Data collection and processing was carried out in several stages. First, the Web of Science and Scopus databases were searched for articles, monographs, surveys and scientific reports containing the terms "cross-border tourism", "tourism management" and "management of cross-border tourism". At this stage, it was important to get an understanding of the percentage of publications dedicated to the management of cross-border tourism in the total number of studies on the management of tourist services and cross-border tourism. It was assumed that the selected authors have a similar understanding of management, "cross-border tourism" and "management of cross-border tourism". It should be remembered that the problem of cross-border tourism management can also be addressed in studies devoted to other aspects of the economy, the social sphere, and international relations. However, our analysis focused on those studies in which cross-border tourism and its management were the main research topic. In our opinion, the inclusion of any of the three key phrases could be interpreted as evidence that problems investigated in the selected articles were relevant for cross-border tourism.

The following stages of the study were mainly based on data from the Scopus database. Publications included in the Web of Science database (37) were used in the literature review to characterize the current state of research on cross-border tourism management. During the second stage, a selection of publications was made, taking into account the place and time of publication. The purpose of this stage was to identify publications and countries in which problems of cross-border tourism receive the most attention as well as factors that influence scientific interest in this issue. The purpose of the third stage was to identify links between cross-border tourism management and other areas of knowledge in publications. Finally, the results were processed using the VOSviewer software in order to group the publications and analyse interdependence between key terms that

refer to specific research topics. Information obtained at all stages of the study was used to characterise the current state of research in the field of cross-border tourism management.

4. Research results

The analysis of keywords indicates that research into problems associated with the management of tourist activities in border regions is in its early stages, as evidenced by the percentage of publications on this topic in the total number of works in closely related areas: management of tourism services and cross-border tourism. The Scopus database contains only 77 publications on this issue (compared with over 17 thousand publications on tourism management and 489 – on cross-border tourism) (Fig. 1).

There has been a dynamic growth in the number of studies on the management of services in cross-border space since the middle of the first decade of the 21^{st} century. In our opinion, this trend can be linked to the EU's programs aimed at developing cross-border links, as well as to the processes of globalization (Fig. 2).

Another piece of information associated with any article or monograph is its place of publication, which does not specify the article's geographic scope but can be used to identify countries with the most publications addressing the management of tourism services in border regions. The ranking is led by Great Britain (16), followed by Spain and the USA (9), Italy and Russia (7) and Germany (6) (Fig. 3).

When one considers what other problems are discussed in the selected articles that refer to the management of cross-border tourism, it turns out that almost



Fig. 1. The number of publications containing the key phrases

Source: based on dat a from the Scopus database.



Fig. 2. The number of publications referring to cross-border tourism management

Source: based on data from the Scopus database.



Fig. 3. Countries ranked by the number of publications on cross-border tourism management

Source: based on data from the Scopus database.

one third of all articles are concerned with the provision of medical services in the context of cross-border tourism, while more than 40% of publications focus on the social and humanitarian aspects of cross-border tourism rather than on



Fig. 4. Articles referring to the management of cross-border tourism by subject area

the economic ones. About a quarter of publications take an interdisciplinary approach (Fig. 4).

Articles are the most frequent type of publication where cross-border tourism management is mentioned, both in the Scopus and in the Web of Science database. Several articles have been published online by such journals as *Health Policy, International Journal of Health Policy and Management, Tourism Management, Anales De Geografia De La Universidad Complutense, Annals of Tourism Research, Gesundheitswesen, Journal of Sustainable Tourism.*

There are only 2 monographs in the total set of 77 publications (Fig. 5). It should be noted that these two monographs are not strictly dedicated to cross-

Fig. 5. Publications on cross-border tourism management by type



Source: based on data from the Scopus database.

border tourism. The first edition of C. Michael Hall, D.J Timothy & D.T. Duval's work, published in 2004 and revised in 2012, is devoted to the problem of security in tourism, which includes cross-border tourism [Michael, Timothy, Duval 2012]. The authors pay a lot of attention to tourism management in the face of the growing threat of terrorism. The monograph by Brent W. Ritchie addresses the management of educational tourism, primarily in higher education, including the management of cross-border educational tourism [Ritchie 2003].

The data analysis was carried out using the VOSviewer software and was based on 50 key words related to the sphere of management, tourism services, and geography, which appear in the publications most frequently. Links between these terms can be grouped into four clusters. Interestingly, each cluster is associated with one or several countries (Fig. 6).

Cluster 1 includes articles containing four key words (*tourist, Finland, Russia, information*) and devoted to problems of managing tourist services in the border regions of Russia and Finland, as well as in the Arctic zone [Sevastiyanov et al. 2014; Makkonen et al. 2018; Kondratov 2017]. The three articles in this cluster address issues related to the management of cross-border tourism between post-Soviet countries and EU countries. This cluster is only loosely associated with

Fig. 6. Relationships between keywords that appear in publications referring to cross-border tourism management



Source: based on data from the Scopus database.

the other clusters. In our opinion, this can be explained by the small number of publications, and by the fact that tourism management plays a secondary role in these articles. The authors focus on ecology and innovations in education. The small number of articles and their narrow research focus may also reflect a weak development of this segment of the tourist market.

Cluster 2 includes articles containing such key words as *the region, sustainability, government, environment.* This relatively numerous cluster groups publications related to cross-border tourism in the EU, namely in Germany, the Czech Republic, Spain and Portugal. The highlighted key words indicate that cross-border tourism management is associated with efforts towards sustainable development, harmonization of relationships at the regional level, a concern for the environment [Blas de, Fabeiro 2012; Jelen, Kučera 2017; Blasco, Guia, Prats 2014; Pallero, Barragán, Scherer 2018 and etc.]. The authors' focus on problems of successful interaction between countries and regions within the EU can also indicate a high degree of development of cross-border tourism, the existing market in this area, as well as integration processes in this region.

Cluster 3 includes key words such as *patient, service, treatment, care, risk,* which appear in publications on the management of health services conducted in the context of cross-border tourism. The problem attracting the most research interest is the provision of reproductive medicine services by clinics in neighbouring countries and significant risks involved [Connolly, 2011; Deonandan 2015; Messinis et al. 2016 and others]. Geographically, this cluster is connected with Germany, Hungary and Canada. In this case, cross-border tourism is indicative of a social problem and the need to increase the level of medical services and reduce their cost.

Cluster 4 contains only 2 key words: *business, Canada*. The publications in this cluster relate to the border zone between Canada and the United States and explore aspects of management in the field of medical tourism, including economic reasons why US residents travel to Canada for treatment [Ferreira 2016]. Like the previous cluster, these publications highlight a social problem, and show the specific characteristics of the tourist market in the border area between Canada and the United States.

6. Conclusions

A study of publications indexed in the Scopus database shows that the management of tourism services in border regions is currently a new branch of management sciences. Works devoted to this problem started appearing comparatively recently - only in the middle of the first decade of the 21st century. This

study has identified regions where problems of management of tourism services in border areas can be regarded as an urgent topic of research, as well as the main directions of scientific research. Most of the selected publications analyse problems of cross-border tourism management in Europe, specifically in border regions of Germany, the Czech Republic, Spain and Portugal. Management of cross-border tourism in this region is driven by efforts towards sustainable development, harmonization of relationships at the regional level, and the concern for the environment. The border area between Canada and the United States is faced with an urgent problem of managing services in the field of health tourism. The same problem is studied by researchers from Hungary and some other European Union countries. The absence of synthetic and generalizing works in this field may be related to the limited geographic scope of existing studies. Also, a number of relevant problems and issues require more in-depth research, such as the management of transnational tourism services and products at the borders of the EU, European and global trends in the development of the tourism services market in border regions, or the impact of cross-border tourism on local communities.

References

- Blas X.P. de, Fabeiro C.P., 2012, Local cooperation in border destinations: Galicia and North of Portugal [La cooperación local en destinos compartidos: Galicia y Norte de Portugal], *Revista de Economia Mundial*, 32: 27-49.
- Blasco D., Guia J., Prats L., 2014, Emergence of governance in cross-border destinations, *Annals of Tourism Research*, 49: 159-173.
- Butler W.R., 2002, The Development of Tourism in Frontier Regions: Issues and Approaches, in: S. Krakover, Y. Gradus (eds.), *Tourism in Frontier Areas*, Lanham: Lexington Books, 3-20.
- Chiutsi S., Saarinen J., 2017, Local participation in transfrontier tourism: Case of Sengwe community in Great Limpopo Transfrontier Conservation Area, Zimbabwe, *Development Southern Africa*, 34(3): 260-275.
- Connolly M., 2011, Cross-border reproductive care: Market forces in action or market failure? An economic perspective action or market failure? An economic perspective, *Reproductive BioMedicine Online*, 23(7): 817-819.
- Deonandan R., 2015, Recent trends in reproductive tourism and international surrogacy: Ethical considerations and challenges for policy, *Risk Management and Healthcare Policy*, 8: 111-119.
- Ferreira L.S., 2016, Cross-border healthcare requests to publicly funded healthcare insurance: Empirical analysis, *Healthcare Policy*, 11(3): 32-54.
- Glińska E., Siemieniako D., 2018, Binge drinking in relation to services bibliometric analysis of scientific research directions, *Engineering Management in Production and Services*, 10(1): 45-54.

- Gonçalves D., 2017, A whole-of-society approach to wildlife crime in South Africa, *South African Crime Quarterly*, 60: 5, 25, doi.org/10.17159/2413-3108/2017/v0n60a1747.
- Holsti O.R., 1969, *Content analysis for the social sciences and humanities*, Massachusetts etc.: Reading.
- Horodnikova J., Derco J., 2015, Dark tourism, thematic routes and possibilities for innovation in the Slovak Republic, *Turizam: međunarodni znanstveno-stručni* časopis, 63(2): 241-246.
- Ioannides D., Nielsen P., Billing P., 2006, Transboundary Collaboration in Tourism: The Case of the Bothnian Arc, *Tourism Geographies*, 8: 122-142.
- Jelen J., Kučera Z., 2017, Approaches to identification and interpretation of mining heritage: The case of the jáchymovsko area, Ore Mountains, Czechia, *Hungarian Geographical Bulletin*, 66(4): 321-336.
- Jimber del Río J.A., Orgaz Agüera F., Moral Cuadra S., Cañero Morales P.C., 2017, Satisfaction in border tourism: An analysis with structural equations, *European Research on Management and Business Economics*, 23(2): 103-112.
- Kondratov N., 2017, Comparative geographical analysis of environmental management in the Russian part of the green belt of fen-noscandia and western sector of the Russian arctic, *International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM*, 17(52): 201-207.
- Krakover S., Gradus Y. (eds.), 2002, Tourism in Frontier Areas, Lanham: Lexington Books.
- LaVanchy T., 2017, When wells run dry: Water and tourism in Nicaragua, *Annals of Tourism Research*, 64: 37-50.
- Libkovska U., Ozol I., Kruzhalin V., 2015, Management of regional clusters: basic principles of formation of tourism recreation clusters. Ecology, Economics, Education and Legislation, *International Multidisciplinary Scientific GeoConference-SGEM*, 3: 377-384.
- Makkonen T., Williams A.M., Weidenfeld A., Kaisto V., 2018, Cross-border knowledge transfer and innovation in the European neighbourhood: Tourism cooperation at the Finnish-Russian border, *Tourism Management*, 68: 140-151.
- Messinis I.E., Messini C.I., Daponte A., Garas A., Mahmood T., 2016, The current situation of infertility services provision in Europe, *European Journal of Obstetrics Gynecology and Reproductive Biology*, 207: 200-204.
- Michael Hall C., Timothy D.J., Duval D.T., 2012, Safety and Security in Tourism: Relationships, Management, and Marketing, New York: Haworth Press.
- Nilsson J.K., Eskilsson L., Ek R., 2010, Creating cross-border destinations: Interreg Programmes and regionalization in the Baltic Sea Area, *Scandinavian Journal of Hospitality and Tourism*, 10(2): 153-172.
- Pallero C., Barragán J.M., Scherer M., 2018, Management international estuarine systems: The case of the Guadiana river (Spain-Portugal), *Environmental Science and Policy*, 80: 82-94.
- Paunovic I., Jovanovic V., 2017, Implementation of Sustainable Tourism in the German Alps: A Case Study, *Sustainability*, 9(226): 5, 25, doi.org/10.3390/su9020226.
- Prokkola E.K., 2010, Borders in tourism: The transformation of the Swedish-Finnish border landscape, *Current Issues in Tourism*, 13: 223-238.
- Ritchie B.W., 2003, Managing educational tourism, Bristol: Channel View Publications.

- Sevastiyanov D.V., Colpaert A., Korostelyov E., Mulyava O., Shitova L., 2014, Management of tourism and recreation possibilities for the sustainable development of the north-western border region in Russia, *Nordia Geographical Publications*, 43(1): 27-38.
- Stoffelen A., Ioannides D., Vanneste D., 2017, Obstacles to achieving cross-border tourism governance: Amulti-scalar approach focusing on the German-Czech borderlands, Annals of Tourism Research, 64: 126-138.
- Stoffelen A., Vanneste D., 2017, The role of history and identity discourses in crossborder tourism destination development: A Vogtland case study, *Journal of Destination Marketing & Management*, 8: 204-213, doi.org/10.1016/j.jdmm.2017.04.003.
- Studzieniecki T., Palmowski T., Korneevets V., 2016, The System of Cross-border Tourism in the Polish-Russian Borderland, *Procedia Economics and Finance*, 39: 545-552.
- Tsaur R.-C., Chen C.-H., 2018, Strategies for cross-border travel supply chains: Gaming Chinese group tours to Taiwan, *Tourism Management*, 64: 154-169.
- Weidenfeld A., 2013, Tourism and cross border regional innovation systems, *Annals of Tourism Research*, 42: 191-213.

Aktualne problemy zarządzania turystyką transgraniczną – analiza bibliometryczna kierunków badań naukowych

Streszczenie. Artykuł ma na celu identyfikację obszarów badań naukowych, w których tematyką problemową jest zarządzanie w dziedzinie turystyki transgranicznej. Identyfikacja opiera się na analizie danych bibliometrycznych charakteryzujących publikacje naukowe indeksowane przez baze danych Web of Science i Scopus. Głównym zadaniem analizy jest określenie faktycznych problemów z zakresu zarządzania turystyką transgraniczną, z uwzględnieniem specyfiki regionu, a także rodzajów i form usług turystycznych. Autorzy wykorzystali różne techniki analizy bibliometrycznej za pomocą oprogramowania VOSviewer. W badaniu zastosowano metodę studium przypadku, która pozwala wyłonić charakterystyczne cechy i tendencje w badaniu tego zjawiska. Badanie pokazuje, że zarządzanie usługami turystycznymi w regionach przygranicznych jest obecnie nową gałęzią nauk o zarządzaniu, a dynamiczny wzrost liczby badań obserwuje się od połowy pierwszej dekady XXI w. Większość publikacji analizuje problemy zarządzania turystyką transgraniczną w Europie, np. w przygranicznych regionach Niemiec, Czech, Hiszpanii i Portugalii. Celami zarządzania turystyką transgraniczną w tym regionie jest dążenie do zrównoważonego rozwoju, harmonizacja relacji na poziomie regionalnym i troska o stan środowiska. Znaczącym problemem jest zarządzanie transgraniczną turystyką zdrowotną. Wiele aktualnych problemów pozostaje nierozwiązanych: zarządzanie usługami i produktami turystycznymi na granicach UE; europejskie i światowe trendy rozwoju rynku usług turystycznych w regionach przygranicznych; wpływ turystyki transgranicznej na społeczności lokalne. Jako wkład teoretyczny części badawczej artykułu zaproponowano zdefiniowanie aktualnych problemów w zarządzaniu turystyką transgraniczną oraz identyfikację luk w tych poszukiwaniach naukowych. Materiały z artykułu można wykorzystać do opracowania teoretycznych problemów zarządzania turystyką, a także do badań na poziomie regionalnym.

Słowa kluczowe: bibliometria, badania naukowe, zarządzanie, turystyka transgraniczna