



Identifying Opportunities for Developing Nature-Based Sport Tourism to Improve Health in Papua: A Bibliometric Analysis of Research Over Ten Years

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Abstract

Objectives. This study aimed to examine research trends around nature-based tourism, event-based sports tourism, and their relationship with government policies to identify potential opportunities for sustainable sports tourism development in Papua.

Materials and methods. The methodological approach comprised using a bibliometric analysis by reviewing 997 scientific articles sourced from Scopus, PubMed, and Web of Science databases from 2014-2024. Harzing's publish or Perish software was used to sort the articles, and VOSviewer software was used to analyze the articles. The review included the number of cluster groups, research themes related to sports tourism in the year groups, research trends around nature-based sports tourism, and gaps in sports tourism development.

Results. There were eight cluster groups and five groups. The current research trends in the field of sports tourism comprise event-based sports tourism, nature tourism, the tourism industry, and social media. The research trends related to nature-based sports tourism include six keywords, namely nature-based tourism, nature connectedness, nature sport, nature-based events, nature-based recreation, and nature. Visitors, managers, communities, and governments benefit from the health and economic advantages of nature-based sports tourism. In developing nature-based sports tourism, it is essential to consider the sustainability of nature, cultural characteristics, and the form of activities offered. Local governments need to take part in efforts to develop and preserve nature-based sports tourism.

Conclusions. The development of nature-based sports tourism with traditional sports activities has a great opportunity to be enhanced. This innovation certainly needs careful planning from determining goals, human resources, risk factors, and presenting an effective promotional strategies. The involvement of local government can facilitate the implementation of this planning.

Keywords: sports tourism, sports events, government policies, research trends, bibliometric analysis.

Introduction

Sports tourism can be defined as a tourism activity followed by sports activities (Higham & Hinch, 2018). Sports activities include recreational sports presented by the tourist attraction manager. The form of recreational sports provided

is adjusted to the opportunities possessed by the tourist attraction. For example, mountain tourism objects have the potential for tracking and hiking activities, marine tourism objects have the potential for surfing, diving, and water activities, and river tourism objects have the potential for tubing, kayaking, and rafting activities (Eriksson & Balslev Clausen, 2024; Philippe, 2024). The potentials of tourism objects need to be well developed, to optimize their potential (Brovina & Sallaku, 2024; Raso & Cherubini, 2023). In addition to recreational activities, sports tourism activities are also carried

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out to observe or participate in competitive sports activities and festival sports (Guan & Zhang, 2024; Guntoro et al., 2023; Kogoya et al., 2022; Sylvana Yaka Saputra et al., 2023). Sports tourism activities with this concept will bring new experiences related to sports culture in a country.

Sports tourism has contributed to the promotion of a healthy lifestyle with all forms of activities provided (Palmer et al., 2021). Outdoor activities packaged in the form of tourism have their appeal for tourists to visit (Hall & Brown, 2022). Sports activities, which have a description in the form of tiring physical activity, become more comfortable with tourism packaging (Mason & Neumann, 2024). This is because attractively presented sports tourism packaging can divert the response from sports activities. Therefore, it is important to have human resources who have high creativity and innovation in the development of sports tourism (Tsekouropoulos et al., 2022). The development of sports tourism is widely practiced by various countries because the development of tourist attractions will have an impact on increasing tourist visits (Arowosafe et al., 2022). Increased tourist visits will bring benefits to accommodation providers, culinary providers, and service providers (Raso & Cherubini, 2023; Román et al., 2022).

These benefits will ultimately have an impact on improving the economy of the community and the country (Mair et al., 2023). Tourism development with various approaches has been carried out by several countries, such as nature-based recreational sports tourism, season-based recreation, culture-based recreation, religious-based recreation, and history-based recreation (Li & Ito, 2023; Mzembe et al., 2023; Schwietering et al., 2023; Wailmi et al., 2024). All forms of development approaches must certainly continue to consider the sustainability of tourist attractions (Eriksson & Balslev Clausen, 2024). Nature-based sports tourism is a good sports tourism development developed in every country to optimize its natural potential (Guntoro et al., 2023). Natural beauty around the world has its potential and attractiveness. The design developed has its characteristics and has a great influence on attracting tourists to visit.

A review of research trends on the design of nature-based sports tourism over the past ten years is necessary to see the factors that influence success and failure. In addition, a review of previous research was conducted to look at elements that have a relationship with the basic theme. This review was also conducted to find future research gaps from the structured review. Bibliometric analysis is one analysis that can be used to find out the elements related to a topic to be examined (Ercan, 2023; Zhang et al., 2023). This analysis is widely used by previous researchers and is the basis for the research to be carried out.

Materials and Methods

This study aims to examine research trends around nature-based tourism, event-based sports tourism, and its relationship with government policy to see opportunities for sustainable sports tourism development. A literature review with a bibliometric analysis approach was used in this study.

Data Source

The data sources used in this study came from the Scopus, Web of Science, and PubMed databases. Articles

published in these databases have high standards because they have gone through several assessments by competent reviewers. In addition, articles published in these databases have a high and comprehensive impact factor. So that the articles published in the databases are worthy of being used as a source of further study.

Software

The software used in this research is Harzing Publish or Perish and VOSviewer. The functions and uses of each software can be seen in the following subchapters:

Harzing Publish or Perish

Sorting articles in literature review research is very important to find quality research results. Researchers can sort articles on publisher websites manually or using software. Harzing Publish or Perish is software that functions to sort articles published on several databases. By using this software, researchers can filter articles according to the desired database. The use of keywords and database selection to filter articles greatly affects the results of the articles obtained. Some researchers use several databases to get articles that can represent the source of the study.

VOSviewer

Novelty in research is a must-have in research. VOSviewer is a software that serves to map research based on networks and to visualize research mapping. This software is widely used by researchers to find empty gaps in the research theme to be studied. With the discovery of gaps in the research theme to be studied, the research to be carried out has the potential to have novelty.

Procedure

Researchers determine the theme of the research to be studied, in this study researchers used the theme "sport tourism" as a keyword. Furthermore, researchers determine the database that will be used in sorting research articles, the databases used by researchers in this study are Scopus, Web of Science, and PubMed. Researchers used harzing publish or perish software to sort articles with predetermined themes with publication years 2014-2024.

Total of 1567 articles were obtained from the Scopus database, 577 articles were obtained from the WOS database, and 105 articles from the PubMed database. After sorting in each database, the resulting articles were then saved for sorting. Articles that are not suitable for the research topic are eliminated, and the appropriate articles are then analyzed using VOSviewer. A total of 997 articles were analyzed using VOSviewer software. Analysis using VOSviewer was carried out to obtain the distribution of the number of studies in each year, cluster groups, research trends each year, the density of research themes related to the main keywords, research trends to be analyzed more deeply, and empty gaps for further research. The theme of nature-based sports tourism research is studied more in-depth manually, considering that the theme has a large gap for further research. An overview of the research procedure can be seen in Figure 1.

Table 1. Elements in each cluster

No	Cluster	Elmenets
1	Red cluster	Sports tourism, tourism, covid-19, destination management, China, leisure, climate change, sporting events, winter tourism, hiking, active tourism, adaptation, sport, social media, destination competitiveness, heritage, environment, physical activity, memory, development, hiking, authenticity, ecotourism, tourists, winter sport, ski resorts, competitiveness, adaptation, social impact, active tourism
2	Pink cluster	Sports tourism, surf tourism, serious leisure, travel behavior, event experience, sport event, mega event, media, event leveraging
3	Blue cluster	Rural tourism, event management, perception, sustainable tourism, sustainable development, nature-based tourism, recreation, urban development, market segmentation, factor analysis, physical education, motivation, place attachment, sport tourists, challenge football, event image, destination loyalty, tourist satisfaction, destination image, event quality, perceived value, nostalgia, cluster analysis, segmentation, sport event tourism, behavioral intentions, mega sports event
4	Green cluster	Quality of life, support, world cup, mega-event, service quality, running, artificial intelligence, tourism, industry, management, Olympic games, legacy, sport event, sport, event, volunteers, motivations, Olympic, impact
5	Yellow cluster	Gender, nature, education, economic impact, cultural tourism, martial art, adventure tourism, surfing, content analysis, low, wellness tourism, gis, ice and snow tourism
6	Purple cluster	Literatur review, sport management, leveraging, innovation, sustainability, event tourism, cycling, tourism development, surf tourism, community development, stakeholders, entrepreneurship, sports event
7	Orange Cluster	Destination marketing, destination, active sport tourism, event portfolio, trail running, mountain biking, south Africa, cycling tourism, revisit intention, virtual reality, augmented reality
8	Brown cluster	Golf, FIFA World Cup, social exchange theory, image, social impact, quality, scale development, golf tourism, loyalty, satisfaction, experience

Table 2. Theme grouping for each year

No	Years	Elements
1	2014-2015	Memory, heritage, ecotourism, nature-based tourism, mountain biking, travel behavior, scale development, social impact, rural tourism, leveraging, legacy.
2	2016-2017	Service quality, management, legacy, event, sport event, event, mega event, cycling, image, quality, segmentation, golf tourism, serious leisure place attachment, economy impact, social impact, cultural tourism, martial art, tourists, content analysis, world cup.
3	2018-2019	Support, mega-event, running, media, world cup, mega event, social capital, sports events, sport, volunteers, motivations, golf, destination management, tourism, stakeholders, satisfaction, destination marketing, urban development, south Africa, market segmentation, trail running, augmented reality, event portfolio, recreation, ski resorts, winter sport, adventure tourism, winter tourism, climate change, China, leisure.
4	2020-2021	Quality of life, Olympics, impacts, motivations, FIFA World Cup, social exchange theory, tourism development, behavioral intentions, destination image, event quality, experience, destination loyalty, college football, sports tourism, lifestyle, revisit intention, virtual reality, physical education, systematic review, tourist satisfaction, event tourism, event leveraging, sports events, adaptation, gis, sustainable development surfing, competitiveness, innovation, hiking, education, destination management, destination competitiveness, education, physical activity, environment, ice and snow tourism.
5	2022-2024	Event image, event leverage, literature review, flow, decision making, entrepreneurship, covid-19, gender, nature, social media, tourism industry, artificial intelligence.

Research Trends in the Year Group

Overlay visualization illustrates the history of research. Based on the results of the analysis using VOSviewer, the overlay visualization results are obtained from 2014 to 2024. The color setting on each label or keyword shows the history of the research topic. The blue color shows research in 2014-2015, light blue color shows research in 2016-2017. The green color indicates research in 2018-2019, the green color indicates research in 2020-2021, and the orange color indicates research in 2022-2024. An overview of the distribution of overlay visualization can be seen in Figure 4.

The overlay visualization results show an overview of keywords or research elements related to sports tourism based on the year. The grouping of elements or keywords based on history or years of research can be seen in Table 2.

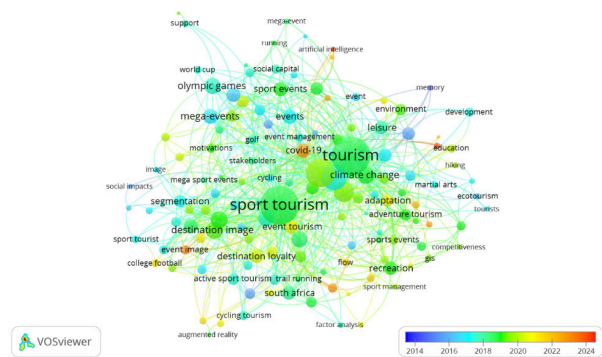


Fig. 4. Overlay visualization

Research Trends Around Nature-Based Sports Tourism

The research topics studied in more depth are research trends around nature-based sports tourism. The findings and suggestions on the research related to the chosen theme are presented in Table 3 below.

Table 3. Research findings and suggestions around nature-based sports tourism

No	Name/Years	Methods	Findings and suggestions
1	Klauco et al., 2017	Planning or part of the development method	Land planning for recreational activities based on an ecological approach includes spatial analysis, interpretation, evaluation, and review of recreational activity suggestions. Recreational activities are adapted to the season. Nature-based recreational activities include skiing, hiking, water sports, and fishing. The recreational activities that can be presented every season are therapeutic. All activities provided do not cause any impact (Bausch & Unseld, 2018).
2	Bausch & Unseld, 2018	Qualitative	Winter sports tourism is an economic sector supplier across the world's mountain ranges. Skiing is the activity of choice for winter visitors. In addition, activities related to relaxation and the development of sustainable winter sports tourism are expected by visitors.
3	Huhta & Sulkava, 2014	Longitudinal study	Nature-based recreational tourism in and near protected areas has negative impacts on the environment, biodiversity, and landscape fragmentation in the absence of clear government regulation. This can be caused by disturbances caused by recreational activities such as making campfires.
4	Stojanović et al., 2024	Prism of Sustainability (PoS) model	Nature, socio-cultural, sociocultural, and tourist destinations are factors that influence residents' and visitors' satisfaction with sustainable tourism. Forms of tourism such as recreational sports, ecotourism, bird watching, events, culture, and gastronomy, can provide environmental, economic, and social benefits in protected areas that are used as tourist attractions.
5	Ponting & O'Brien, 2014	Evaluation	The importance of government regulation in maintaining the sustainability of nature-based sports tourism (nature-based tourism).
6	Houge Mackenzie et al., 2023	Literature review	Adventure sports tourism positively influenced hedonic and eudaimonic psychological well-being through the satisfaction of basic psychological needs and connectedness with nature. Future research on the development of adventure sports tourism would do well to examine its benefits on psychological well-being (nature connectedness).
7	Wagner, 2024	Intersectionality of study	Geographical characteristics and cultural characteristics affect the character of tourism objects. The role of tour guides is very important in giving an impression to tourists. A good impression given by a tour guide can have an impact on return visits. (nature sport).
8	Schwietering et al., 2023	Survey	The importance of the diversity of digital tools used to support outdoor activities. Tourism managers need to consider the use of digital tools to monitor the presence of visitors to be effective in traveling in nature conservation tourism objects (nature sport).
9	Melo & Gomes, 2017	Survey	Nature and adventure were indicated as the main reasons for engaging in nature sports, but time and cost constraints were the main obstacles to participating in nature sports (nature sport).
10	Eriksson & Balslev Clausen, 2024	Survey	Sporting events have impacts such as waste and greenhouse gas emissions. An even bigger impact is damage to the environment and public facilities. Participants generally assign responsibility for these issues to the event organizers. However, it is important to educate participants or visitors to sport tourism events to preserve nature and public facilities (nature-based event).
11	Román et al., 2022	Literature review	Surfing-related research topics have continued to grow since the 21 st century, and the management of these tourist destinations needs to be considered to ensure the sustainability of tourist attraction development. Good collaboration between managers, communities, and stakeholders is a factor that can affect the sustainability of tourism (nature-based recreational).
12	Rojo-Ramos et al., 2023	Survey	Tourist attraction managers need to study the characteristics of tourists who visit, this is done to adjust the services that are adjusted to the tourist attraction. That way tourist visits will increase (Nature).
13	Štumpf & Kubalová, 2024	Linear Model with a logit link function	Environmental changes and environmental conditions affect visitor satisfaction. Tourist attraction managers need to carry out promotions related to the activities presented in nature tourism. Sports activities to maintain health and lifestyle are activities that many tourists want.
14	Philippe, 2024	Study Case	The role of sports associations in preserving the environment amid the development of recreational sports in the natural environment is good work. Natural damage can occur in the process of developing tourist attractions if the use of heavy equipment is not supervised.
15	Quezada-Sarmiento et al., 2024	Evaluation	Adventurous nature activities organized through travel to places that are natural and exotic, accessible and rugged, generating adrenaline when doing extreme sports.

Discussion

The nature-based sports tourism trend is a tourism activity that presents outdoor activities in the form of recreational sports. Recreational sports are packaged in the form of adventure, hiking and camping, water games, surfing, skiing, and others (Quezada–Sarmiento et al., 2024; Román et al., 2022). The specified activities are generally adapted to the conditions of natural attractions, culture, geographical characteristics, and sociocultural (Stojanović et al., 2024). The selection of activities is also determined by adjusting the season (Bausch & Unseld, 2018). Activities carried out in nature will certainly affect the sustainability of nature. Risk factors for natural damage to tourist attractions are often found, so supervision and regulation from tourist attraction managers and the government are needed (Philippe, 2024). Regulatory rules related to sports tourism activities in the natural environment need to be emphasized to managers and users by establishing regulations for negligent acts of managers or visitors that have an impact on environmental damage (Hu et al., 2022).

Sports tourism activities in nature can relax the mind which will have a positive effect on psychological conditions that are stressed due to work. Not infrequently the activities provided in nature-based sports tourism can spur adrenaline. Nature-based sports tourism activities are also beneficial for improving physical health (Houge Mackenzie et al., 2023). This is because physical activity will affect fitness. The benefits of nature-based sports tourism are not only obtained by visitors, but the surrounding community, managers, and government also benefit from nature-based sports tourism activities (Mason & Neumann, 2024). The management of nature-based sports tourism requires many competent natural resources in the fields of management, finance, promotion, and law (Román et al., 2022). In its implementation, it certainly requires many employees in each field, which in turn will create new jobs (Qwatekana & Tshikovhi, 2024). In addition, the surrounding community also gets a positive impact from selling souvenirs and providing accommodation in the form of lodging and transportation (Tiku & Shimizu, 2020). The many benefits of organizing nature-based sports tourism open up opportunities for communities and governments in areas that have natural potential (Huhta & Sulkava, 2014). However, nature conservation needs to be considered in the development of nature-based sports tourism.

The Gap in Sports Tourism Development

Based on a review of previous research on nature-based sports tourism, the research trend has good benefits for visitors, organizers, communities, and governments (Ponting & O'Brien, 2014). Although the activities organized in some countries include cultural and sociocultural-based activities, the activities presented are only adapted to the needs of activities in certain seasons of nature (Stojanović et al., 2024; Wagner, 2024). The difference in culture and seasons in European countries and Indonesia raises new opportunities for the development of sports-based tourism. Opportunities for the development of nature-based tourism in Indonesia are by including elements of culture and local wisdom as a specialty (Guntoro et al., 2023). Indonesia is

one of the countries in the Southeast Asian region that has a variety of cultures and traditional games (Kusumawardhana et al., 2021; Prayitno et al., 2024). This diversity can be expressed in the development of nature-based sports tourism, considering that the natural beauty in Indonesia is also diverse and spread throughout the territory of the unitary state of Indonesia.

Opportunities for the development of nature-based sports tourism with a cultural approach and traditional games need to be launched and planned. Planning the development of nature-based sports tourism requires collaboration from developers, communities, sponsors, academics, and the government (Philippe, 2024; Ponting & O'Brien, 2014). Reviewing opportunities and risk factors from a variety of perspectives is necessary for a good nature-based sports tourism design (Klauco et al., 2017; Wagner, 2024). With an innovative nature-based sports tourism design, it will have a positive impact on tourist interest in visiting. Increased tourist visits will have a positive impact on the economy of the community and the country.

Conclusions

Visitors, managers, communities, and governments benefit from nature-based sports tourism. Sports in tourist attractions can have a positive effect on the physical and psychological health of visitors. Managers and surrounding communities benefit economically from the development of nature-based sports tourism. The development of nature-based sports tourism needs to consider the preservation of nature, cultural characteristics, and the form of activities offered. Local governments need to take part in efforts to develop and preserve nature-based sports tourism. The development of nature-based sports tourism with traditional sports activities has a great opportunity to be developed. This innovation certainly needs careful planning from determining goals, human resources, risk factors, and promotion. This planning will certainly run well with the support of the local government.

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Conflict of interest

All authors declare no conflict of interest.

References

Higham, J., & Hinch, T. (2018). *Sport Tourism Development* (3rd edition). Channel View Publications.

- Eriksson, A., & Balslev Clausen, H. (2024). Nature always recovers! A degrowth analysis of event participants' perspective on environmental impacts. *Journal of Outdoor Recreation and Tourism*, 45, 100706. <https://doi.org/10.1016/j.jort.2023.100706>
- Philippe, M. (2024). Le Club Alpin Français et les Glénans: Nature Conservation in French Mountaineering and Water Sports Associations, 1950–1990. *Sport History Review*, 55(1), 105-126. <https://doi.org/10.1123/shr.2022-0040>
- Brovina, F., & Sallaku, D. (2024). Sports Tourism in Albania: A Critical Review. *Migration Letters*, 21(S1), 675-683.
- Raso, G., & Cherubini, D. (2023). sport tourism and regional economic development. *Scientific Journal of Sport and Performance*, 3(1), 108-121. <https://doi.org/10.55860/JKWX7277>
- Guan, Z., & Zhang, L. (2024). The Study for the Analysis of the Development trend of sports tourism. *Academic Journal of Science and Technology*, 9(1), 263-265. <https://doi.org/10.54097/43a49551>
- Guntoro, T. S., Putra, M. F. P., Nurhidayah, D., Sutoro, S., Sinaga, E., Sianga, F. S. G., & Nanda, F. A. (2023). The design of contextual domain tourism sports through traditional sports in jayapura indonesia. *Retos*, 52, 164-170. <https://doi.org/10.47197/retos.v52.101626>
- Kogoya, K., Guntoro, T. S., & Putra, M. F. P. (2022). Sports Event Image, Satisfaction, Motivation, Stadium Atmosphere, Environment, and Perception: A Study on the Biggest Multi-Sport Event in Indonesia during the Pandemic. *Social Sciences*, 11(6), 241. <https://doi.org/10.3390/socsci11060241>
- Sylvana Yaka Saputra, Muhammad Riyan Hidayatullah, & Lalu Moh Yudha Isnaini. (2023). Analisis Kesiapan Sport Tourism Pantai Senggigi Lombok Barat Pada Era Kenormalan Baru. *SPRINTER: Jurnal Ilmu Olahraga*, 4(1), 7-13. <https://doi.org/10.46838/spr.v4i1.285>
- Palmer, D., Cooper, D. J., Emery, C., Batt, M. E., Engebretsen, L., Scammell, B. E., Schamasch, P., Shroff, M., Soligard, T., Steffen, K., Whittaker, J. L., & Budgett, R. (2021). Self-reported sports injuries and later-life health status in 3357 retired Olympians from 131 countries: a cross-sectional survey among those competing in the games between London 1948 and PyeongChang 2018. *British Journal of Sports Medicine*, 55(1), 46-53. <https://doi.org/10.1136/bjsports-2019-101772>
- Hall, J., & Brown, K. M. (2022). Creating feelings of inclusion in adventure tourism: Lessons from the gendered sensory and affective politics of professional mountaineering. *Annals of Tourism Research*, 97, 103505. <https://doi.org/10.1016/j.annals.2022.103505>
- Mason, C. W., & Neumann, P. (2024). The Impacts of Climate Change on Tourism Operators, Trail Experience and Land Use Management in British Columbia's Backcountry. *Land*, 13(1), 69. <https://doi.org/10.3390/land13010069>
- Tsekouropoulos, G., Gkouna, O., Theocharis, D., & Gounas, A. (2022). Innovative Sustainable Tourism Development and Entrepreneurship through Sports Events. *Sustainability*, 14(8), 4379. <https://doi.org/10.3390/su14084379>
- Arowosafe, F., Akinwotu, O., Tunde-Ajayi, O., Omosehin, O., & Osabuohien, E. (2022). Push and pull motivation factors: a panacea for tourism development challenges in Oluminrin waterfalls, Nigeria. *Journal of Policy Research in Tourism, Leisure and Events*, 14(1), 63-74. <https://doi.org/10.1080/19407963.2021.2017729>
- Román, C., Borja, A., Uyarra, M. C., & Pouso, S. (2022). Surfing the waves: Environmental and socio-economic aspects of surf tourism and recreation. *Science of The Total Environment*, 826, 154122. <https://doi.org/10.1016/j.scitotenv.2022.154122>
- Mair, J., Chien, P. M., Kelly, S. J., & Derrington, S. (2023). Social impacts of mega-events: a systematic narrative review and research agenda. *Journal of Sustainable Tourism*, 31(2), 538-560. <https://doi.org/10.1080/09669582.2020.1870989>
- Li, H., & Ito, H. (2023). Visitor's experience evaluation of applied projection mapping technology at cultural heritage and tourism sites: the case of China Tangcheng. *Heritage Science*, 11(1), 52. <https://doi.org/10.1186/s40494-023-00898-4>
- Mzembe, A. N., Koens, K., & Calvi, L. (2023). The institutional antecedents of sustainable development in cultural heritage tourism. *Sustainable Development*, 31(4), 2196-2211. <https://doi.org/10.1002/sd.2565>
- Schwietering, A., Steinbauer, M., Mangold, M., Sand, M., & Audorff, V. (2023). Digitalization of planning and navigating recreational outdoor activities. *German Journal of Exercise and Sport Research*. <https://doi.org/10.1007/s12662-023-00927-1>
- Wailmi, K., Mahmudin, T., Novedliani, R., Randi, R., & Samaduri, L. (2024). Dark Tourism as a Tourism and Culture Development Strategy in Indonesia. *Reslaj: Religion Education Social Laa Roiba Journal*, 6(3), 2191-2200. <https://doi.org/10.47467/reslaj.v6i3.6054>
- Ercan, F. (2023). Smart tourism destination: A bibliometric review. *European Journal of Tourism Research*, 34, 3409. <https://doi.org/10.54055/ejtr.v34i.2788>
- Zhang, S., Liang, J., Su, X., Chen, Y., & Wei, Q. (2023). Research on global cultural heritage tourism based on bibliometric analysis. *Heritage Science*, 11(1), 139. <https://doi.org/10.1186/s40494-023-00981-w>
- Klauco, M., Gregorova, B., Koleda, P., Stankov, U., Markovic, V., & Lemenkova, P. (2017). Land Planning As A Support For Sustainable Development Based On Tourism: A Case Study Of Slovak Rural Region. *Environmental Engineering and Management Journal*, 16(2), 449-458. <https://doi.org/10.30638/eeemj.2017.045>
- Bausch, T., & Unseld, C. (2018). Winter tourism in Germany is much more than skiing! Consumer motives and implications to Alpine destination marketing. *Journal of Vacation Marketing*, 24(3), 203-217. <https://doi.org/10.1177/1356766717691806>
- Huhta, E., & Sulkava, P. (2014). The Impact of Nature-Based Tourism on Bird Communities: A Case Study in Pallas-Yllästunturi National Park. *Environmental Management*, 53(5), 1005-1014. <https://doi.org/10.1007/s00267-014-0253-7>
- Stojanović, T., Trišić, I., Brđanin, E., Štetić, S., Nechita, F., & Candrea, A. N. (2024). Natural and Sociocultural Values of a Tourism Destination in the Function of Sustainable Tourism Development—An Example of a Protected Area. *Sustainability*, 16(2), 759. <https://doi.org/10.3390/su16020759>
- Ponting, J., & O'Brien, D. (2014). Liberalizing Nirvana: an analysis of the consequences of common pool resource

- deregulation for the sustainability of Fiji's surf tourism industry. *Journal of Sustainable Tourism*, 22(3), 384-402. <https://doi.org/10.1080/09669582.2013.819879>
- Houge Mackenzie, S., Hodge, K., & Filep, S. (2023). How does adventure sport tourism enhance well-being? A conceptual model. *Tourism Recreation Research*, 48(1), 3-16. <https://doi.org/10.1080/02508281.2021.1894043>
- Wagner, F. (2024). Cowboy professionalism: a cultural study of big-mountain tourism in the last frontier. *Journal of the Philosophy of Sport*, 1-17. <https://doi.org/10.1080/00948705.2024.2334884>
- Melo, R., & Gomes, R. (2017). Nature sports participation: Understanding demand, practice profile, motivations and constraints. *European Journal of Tourism Research*, 16, 108-135. <https://doi.org/10.54055/ejtr.v16i.281>
- Rojo-Ramos, J., Gómez-Paniagua, S., Guevara-Pérez, J. C., & García-Unanue, J. (2023). Gender Differences in Adventure Tourists Who Practice Kayaking in Extremadura. *International Journal of Environmental Research and Public Health*, 20(5), 3889. <https://doi.org/10.3390/ijerph20053889>
- Štumpf, P., & Kubalová, T. (2024). Tangible or intangible satisfiers? Comparative study of visitor satisfaction in a nature-based tourism destination in the pre- and during-COVID pandemic. *Journal of Outdoor Recreation and Tourism*, 46, 100777. <https://doi.org/10.1016/j.jort.2024.100777>
- Quezada-Sarmiento, P. A., Armijos-Jaramillo, A. M., Chango-Cañaverl, P. M., Alejandra Longa-López, R., Salas-Álvarez, W. T., & Pomboza-Tamaquiza, P. P. (2024). *Adventure Tourism in Santo Domingo Province Based in an Educational Proposal* (pp. 153-161). https://doi.org/10.1007/978-981-99-9765-7_14
- Hu, B., He, F., & Hu, L. (2022). Community Empowerment Under Powerful Government: A Sustainable Tourism Development Path for Cultural Heritage Sites. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.752051>
- Qwatekana, Z., & Tshikovhi, N. (2024). *Tourism Under Siege: Impact of Climate Change on the Global South Tourism Sector*. In *Future Tourism Trends Volume 1* (pp. 19-31). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-83753-244-520241002>
- Tiku, O., & Shimizu, T. (2020). Tourism, accommodation, and the regional economy in Indonesia's West Papua. *Island Studies Journal*, 15(2), 315-334. <https://doi.org/10.24043/isj.124>
- Kusumawardhana, I., Lemy, D. M., Nathalia, T. C., & Kristiana, Y. (2021). Towards a common goal for a sustainable tourism destination: Case study of Biak Numfor, Papua, Indonesia. *IOP Conference Series: Earth and Environmental Science*, 729(1), 012097. <https://doi.org/10.1088/1755-1315/729/1/012097>
- Prayitno, G., Auliah, A., Ari, I. R. D., Effendi, A., Hayat, A., Delisa, A., Siankwilimba, E., & Hiddlestone-Mumford, J. (2024). Social capital for sustainable tourism development in Indonesia. *Cogent Social Sciences*, 10(1). <https://doi.org/10.1080/23311886.2023.2293310>

Визначення можливостей розвитку спортивного природно-орієнтованого туризму щодо покращення стану здоров'я в Папуа: Бібліометричний аналіз досліджень за десять років

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Авторський вклад: А – дизайн дослідження; В – збір даних; С – статаналіз; D – підготовка рукопису; Е – збір коштів

Реферат. Стаття: 9 с., 3 табл., 4 рис., 38 джерел.

Мета дослідження. Метою цього дослідження було вивчення наукових тенденцій у галузях природно-орієнтованого туризму, спортивного подієвого туризму, а також їхнього зв'язку з державною політикою щодо визначення потенційних можливостей для сталого розвитку спортивного туризму в Папуа.

Матеріали та методи. Методологічний підхід включав в себе проведення бібліометричного аналізу шляхом огляду 997 наукових статей, отриманих з наукометричних баз даних Scopus, PubMed та Web of Science у період з 2014 по 2024 рік. Для сортування статей було застосовано програмне забезпечення Harzing's publish or Perish, а для аналізу статей — програмне забезпечення VOSviewer. До аналізу було включено кількість кластерних груп, дослідницькі тематики, пов'язані зі спортивним туризмом у відповідних групах за роками, дослідницькі тенденції щодо спортивного природно-орієнтованого туризму, а також наявні прогалини у розвитку спортивного туризму.

Результати. Сформовано вісім кластерних груп та п'ять підгруп. Сучасні дослідницькі тенденції у сфері спортивного туризму охоплюють спортивний подієвий туризм, природний туризм, туристичну індустрію та соціальні медіа. Дослідницькі тенденції, пов'язані зі спортивним природно-орієнтованим туризмом, складаються з шести ключових слів, а саме: природно-орієнтований туризм, зв'язок з природою, заняття спортом на природі, подієві заходи на природі, оздоровчий

відпочинок на природі та природне середовище. Відвідувачі, менеджери, громади та уряди користуються оздоровчими та економічними перевагами спортивного природно-орієнтованого туризму. Розвиваючи спортивний природно-орієнтований туризм, важливо враховувати питання сталості природного середовища, культурних особливостей та форми запропонованих видів активності. Місцеві органи влади повинні брати участь у заходах, спрямованих на розвиток та збереження спортивного природно-орієнтованого туризму.

Висновки. Розвиток спортивного природно-орієнтованого туризму з традиційними видами спорту має велику перспективу для подальшого вдосконалення. Така інновація, безумовно, потребує ретельного планування, починаючи з визначення цілей, людських ресурсів, факторів ризику та представлення ефективних стратегій популяризації. Залучення органів місцевого самоврядування може сприяти реалізації планування цього процесу.

Ключові слова: спортивний туризм, спортивні події, державна політика, дослідницькі тенденції, бібліометричний аналіз.

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