Identification of Factors Affecting the Development of the Iranian Sports Tourism Industry

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Reza Parsamehr[1]
Mohammad Saivan Nouri[2*]
Navid Mahtab[3]
Korosh Vaisi[4]

[1]PhD Candidate of Sport Management, Islamic Azad University, Sanandaj Branch, Sanandaj, Iran
[2]Department of Sport Management, Marivan Branch, Islamic Azad University, Marivan, Iran
[3]Assistant Professor of Sport Management, Islamic Azad University, Q orve Branc ,iIran
[4]Assistant Professor, Department of Physical Education and Sport Sciences, Sanandaj Branch, Islamic Azad University, Sanandaj, Iran

*Correspondence:
Mohammad Saivan Nouri, Department of Sport Management, Marivan Branch, Islamic Azad University, Marivan, Iran
Email: saiwannouri@gmail.com
Orcid: 0000-0002-7905-8525

Abstract

Purpose: This study aimed to identify factors affecting the development of the Iranian sports tourism industry.

Methods: This research was both applied regarding the objective and a quantitative study in terms of using a meta-analysis approach. In this study, factors affecting the development of the sports tourism industry were identified using a meta-analysis approach. The statistical population of the present study consisted of all available studies on the development of sports tourism. Given the nature of the research, a total of 21 studies were selected by the purposive sampling method. The primary studies were analyzed using the effect size for individual studies, the effect size combined with two fixed and random effects models, funnel plots, sensitivity analysis, homogeneity test, I^2, and NF-S statistics. The r index was also used for the effect size index using CMA software Ver. 2.

Results: Among factors affecting the development of sports tourism, the utmost effect with an effect size of 0.786 belonged to the service factor, followed by factors of mountaineering and caving attractions and management in the second to third ranks. Moreover, the information factor had the least effect on the development of sports tourism.

Conclusion: This finding can be explained by the fact that information is one of the propaganda tools in the field of tourism. Thus, paying attention to the performance and role of this phenomenon in the actions of tourism service providers can underpin the development of sports tourism as both the sports tourism audience and the trustees mutually communicate with each other.

Keywords: Sports tourism, Service factor, Mountaineering, and caving attractions, Meta-analysis.

Introduction

Sports tourism consists of traveling from one's original place of residence to participate in sports activities, recreation, and competition, watching sports, and visiting sports attractions (Gibson and Yiannakis, 2002). As this tourism is supported by sports, it has significantly helped companies and organizations, investments in sports infrastructure and facilities, and increasing the comprehensive economic benefits of the host, in addition to creating new jobs (Gusma, Wahab, and Hanafi, 2020). This tourism aims that people to travel from their place of permanent residence to participate in or watch sporting events (Weaver, 2006). Owing to improving social welfare, promoting the quality of life, enhancing the national economy, helping to increase the social, environmental, and cultural aspects of the host community, and many other desirable outcomes and achievements, the development of sports tourism has alween interest by relevant stakeholders over the past decades (Chang, Choong, and Ng, 2020). In some countries, sport accounts for more than 25% of tourism revenue. In the United States, sports tourism revenue is estimated at $ 27 billion per year (Azami, 2017).

The World Tourism Organization (2014) announced that sports tourism accounted for 15% of the tourism market, which is projected to increase to more than 30% by 2020 (Fang & Deng, 2019). However, it is observed that the sports tourism revenue has decreased over time in some countries, where not only sports tourism has not developed due to the many problems that emerged in these countries but it has also experienced some recession (Chang et al., 2020). Maxim (2019) aimed to identify the challenges facing tourism cities in the world and concluded that the more successful developed countries in tourism than less developed countries to be the result of planning and implementing major strategic policies and plans for this field by the former countries that, accordingly, predict the progress of their tourism industry.

Golzadeh and Saeedi (2016) analyzed the effects of tourism on improving the livelihood of rural settlements with an emphasis on sports tourism and found that tourism was effective on economic, social, and environmental indices in the study area. In a study on the development of competitiveness strategies and development of sports tourism in cities using the Meta SWOT technique (case study: Mashhad metropolis), it was found that technology, inflation, depreciation, and infrastructure failure were the major environmental barriers to the development of sports tourism in Mashhad (Heidari et al., 2016). In a study on the content analysis of research in Iran concerning sports tourism, Ramezani Nejad et al. (2020) reported that studies conducted in the field of sports tourism in Iran can be categorized at three macros, medium, and micro levels, five general areas, and 17 topics. The uppermost and lowermost studies were concentrated at the macro and micro levels focusing on tourism development (45.45%) and psychological fields (3.78%), respectively.

In Iran, the importance of paying attention to tourism development in the field of macro-planning is generally known to some extent. Moreover, measures such as the 20-year vision document of the development in the field of tourism and reaching 20 million tourists up to the 1404 horizon, as the first document of strategic and futuristic thought in Iran, indicate paying attention to this issue is in the macro areas of policy-making (Hassanpour and Shahisavandi, 2017). This important issue can be considered one of the appropriate options for Iran, which is seeking to overcome the problem of over-reliance on oil revenues and the employment problem. In recent years, however, good efforts and activities have been made in this context, and these activities appear to be insufficient compared to the increasing growth of tourism worldwide (Javid et al., 2015).

On the other hand, the analysis of research trends

in the field of sports tourism in Iran shows that the major challenge for researchers concerning sports tourism is mostly related to strategic, natural, and climatic factors at the macro level and the quality of services, employment, and entrepreneurship at the micro level. The content of tourism-related research has mainly focused on four topics, namely recreation, tourism dimensions, economic effects, and tourism planning (Ramezani Nejad et al., 2020). Sports tourism trends in the coming years in long-time horizons and possible factors influencing the future of this industry in Iran have been overlooked in such studies. Accordingly, this study aims to identify the factors affecting the development of the Iranian sports tourism industry.

Materials and Methods

This research was both an applied and quantitative study in terms of the objective and using a meta-analysis approach. The statistical population consisted of all available studies on the development of sports tourism, which could be examined at two levels: master's and doctoral dissertations for the development of sports tourism, which were previously registered on the GANJ website. Available studies in computer databases included the scientific database of Jihad Daneshgahi (SID), the database of Iranian publications (MagIran), the specialized database of Noor magazines (Noormags), and the National Library of Iran. Using the purposive sampling method, all available studies in the field of sports tourism development were reviewed by valid keywords, and the studies that corresponded to the research objectives were selected based on the inclusion criteria. Finally, a total of 21 studies were selected from all reviewed investigations, each of which tested several hypotheses, hence, 111 effect sizes were obtained from the studies. Primary studies were selected by determining valid keywords, including sports tourism, development of sports tourism, factors affecting the development of sports tourism, consequences of sports tourism development, and the priorities of sports tourism development. To select relevant and appropriate investigations, samples from the primary studies were selected by determining several inclusion and exclusion criteria, which are presented in Table (1).

Table (1). Inclusion and exclusion criteria for studies reviewed in the meta-analysis

Exclusion criteria	Inclusion criteria
Studies that did not provide the data needed to calculate the effect size.	All studies related to the research topic were conducted and published between 2006 and 1400.
Papers extracted from dissertations that were analyzed (or vice versa) and their data were collected twice.	Studies that examined factors affecting the development of sports tourism.
A single study was published under different titles in various journals and quarterlies.	Studies that met other criteria and reported adequate data to calculate the effect size.
Studies conducted with methods other than correlation.	Studies that were available online.
Dissertations that were submitted to other institutions and organizations in addition to the university.	Studies conducted at the master and doctoral levels.

Data from the primary studies were collected using a designed checklist, which was used to extract and categorize three categories of data from the primary studies, namely bibliographic data, methodological data, and data needed to calculate the effect size. For internal validity of the research, studies were selected that were tailored to the subject and goal of the meta-analysis using appropriate inclusion and exclusion criteria. For external validity, studies were included in this meta-analysis that were conducted throughout the country.

The primary studies were analyzed using the effect size for individual studies, the effect size combined with two fixed and random effects models, funnel diagrams, sensitivity analysis,

homogeneity test, I^2, and NF-S statistics. The r index was also used for the effect size index using CMA software Ver. 2.

Results

In this study, factors affecting the sports tourism industry development were analyzed using a meta-analysis approach. The results of the searches based on the inclusion and exclusion criteria led to the identification of 21 studies, which yielded 111 effect sizes. According to the results in Table (2), low, medium, and high effect sizes were observed in 15, 10, and 86 cases out of 111 effect sizes.

Table (2). Frequency distribution of effect size classes of variables

Effect value	Effect size	Frequency	Frequency (%)
> 0.3	Low	15	514.13
0.3-0.5	Medium	10	009.9
≥ 0.5	High	86	477.77

Table 3 summarizes the data and effect sizes (based on the effect size r) extracted from primary studies. Accordingly, the vast majority of the presented effect sizes are significant, except for three cases. The maximum and minimum effect sizes are 0.988 and 0.133, respectively.

Table (3). Effect sizes the factors affecting the development of sports tourism

Study code	Independent variables	Effect size r	Low limit	High limit	Z value	Sig.
1	**Information**	0.241	0.053	0.413	2.495	0.013
	Media coverage of important events	0.271	0.085	0.439	2.821	0.005
	Homogenization and compatibility of tastes	0.211	0.021	0.386	2.174	0.030
	Dissemination of concepts and values	0.276	0.090	0.443	2.876	0.004
	Specific policies and strategies	0.133	−0.059	0.316	1.358	0.175
	Educational aspects	0.141	−0.051	0.323	1.441	0.150
	Consolidation of social and intercultural relationships	0.212	0.022	0.387	2.185	0.029
	Media efforts to attract participation and investment	0.181	−0.010	0.359	1.857	0.063
	Notification and clarification	0.343	0.163	0.501	3.628	0.001
2	**Tourism infrastructure**	0.329	0.216	0.434	5.457	0.001
	Sports infrastructure	0.253	0.135	0.364	4.130	0.001
	Holding sports events	0.253	0.135	0.364	4.130	0.001
	Attention by officials and trustees	0.191	0.071	0.306	3.088	0.002
3	**Information Technology**	0.381	0.268	0.484	6.203	0.001
	Human resources management	0.485	0.382	0.576	8.186	0.001
4	**Informative roles**	0.810	0.773	0.842	21.999	0.001
	Attention-grabbing roles	0.902	0.881	0.919	28.944	0.001
	Enthusiastic roles	0.643	0.580	0.698	14.898	0.001
	Acting roles	0.823	0.788	0.853	22.760	0.001
	Retentive roles	0.835	0.802	0.863	23.509	0.001
5	**Managerial**	0.811	0.759	0.853	16.257	0.001
	Infrastructure	0.677	0.596	0.744	011.849	0.001
	Communicational	0.871	0.834	0.900	19.239	0.001
	Political	0.778	0.718	0.826	14.967	0.001
	Economical	0.745	0.678	0.800	13.835	0.001
6	**Natural attractions related to beach sports, etc.**	0.780	0.695	0.843	10.914	0.001
	Attractions to winter sports	0.560	0.418	0.675	6.607	0.001
	Attractions related to mountaineering and	0.700	0.591	0.784	9.055	0.001

	caving					
	Attractions related to spa and nature therapy (Eco therapy)	0.670	0.553	0.761	8.464	0.001
	Attractions of desert sightseeing in Iran	0.750	0.656	0.821	10.158	0.001
	Attractions related to hunting and fishing in Iran	0.750	0.656	0.821	10.158	0.001
	Attractions of slope-sporting and ecotourism	0.790	0.708	0.851	11.186	0.001
7	**Knowledge management**	0.988	0.984	0.991	35.952	0.001
8	**Attractions related to mountaineering, etc.**	0.820	0.780	0.853	20.564	0.001
	Attractions of summer sports	0.770	0.721	0.811	18.138	0.001
	Hunting and fishing attractions	0.760	0.709	0.803	17.709	0.001
	Attractions to Winter sports	0.750	0.698	0.794	17.296	0.001
9	**Information and advertising**	0.960	0.949	0.969	29.639	0.001
	Capacities of the province	0.940	0.923	0.953	26.473	0.001
	Events and festivals of sports tourism	0.890	0.860	0.914	21.658	0.001
	Service quality	0.900	0.873	0.922	22.424	0.001
	Sports tourism platforms	0.940	0.923	0.953	26.473	0.001
	Management, marketing, and planning	0.880	0.847	0.906	20.955	0.001
10	**Organization management**	0.413	0.310	0.507	7.231	0.001
	Technology management	0.325	0.215	0.427	5.551	0.001
	Knowledge management	0.276	0.163	0.382	4.664	0.001
11	**Internal absorbing factors**	0.610	0.515	0.690	9.950	0.001
	External absorbing factors	0.671	0.587	0.741	11.405	0.001
12	**Sociocultural factor**	0.725	0.667	0.774	15.955	0.001
	Environmental factor	0.713	0.653	0.764	15.523	0.001
	Sports factor	0.890	0.864	0.911	24.710	0.001
	Infrastructure factor	0.663	0.595	0.722	13.870	0.001
13	**Social factors**	0.350	0.259	0.435	7.143	0.001
	Economic factors	0.360	0.270	0.444	7.366	0.001
	Environmental factors	0.390	0.302	0.472	8.049	0.001
	Institutional factors	0.560	0.487	0.625	12.369	0.001
14	**Factors resulting from natural resources**	0.894	0.859	0.921	18.572	0.001
	Factors resulting from facilities and infrastructure	0.781	0.714	0.834	13.502	0.001
	Factors resulting from welfare facilities	0.772	0.703	0.827	13.210	0.001
	Factors resulting from information services	0.585	0.476	0.676	8.633	0.001
	Factors arising from transportation services	0.780	0.713	0.833	13.469	0.001
	Factors resulting from sports services	0.759	0.687	0.816	12.805	0.001
	Factors resulting from entertainment and recreational services	0.906	0.875	0.930	19.387	0.001
	Factors resulting from physical education	0.265	0.119	0.400	3.498	0.001
15	**Tourism attractions**	0.568	0.430	0.680	6.821	0.001
	Attractions of beach, water, and summer sports	0.557	0.416	0.672	6.651	0.001
	Attractions to Winter sports	0.521	0.374	0.643	6.114	0.001
	Attractions related to mountaineering and caving	0.600	0.468	0.706	7.336	0.001
	Forest and plain attractions	0.196	0.013	0.366	2.101	0.036
	Hunting and fishing attractions	0.557	0.416	0.672	6.651	0.001
	Attractions related to slope-sporting and ecotourism	0.228	0.047	0.395	2.456	0.014
16	**Factors resulting from sports services**	0.644	0.529	0.736	8.518	0.001
	Factors resulting from welfare facilities	0.617	0.496	0.714	8.019	0.001
	Factors resulting from natural resources	0.602	0.478	0.703	7.753	0.001
	Factors related to physical education	0.599	0.474	0.700	7.701	0.001
	Factors resulting from entertainment and recreational activities	0.595	0.469	0.697	7.632	0.001
	Factors related to cultural heritage and	0.594	0.468	0.696	7.615	0.001

	tourism					
	Factors resulting from facilities and infrastructure	0.578	0.449	0.683	7.343	0.001
	Factors resulting from transportation services	0.557	0.424	0.667	6.998	0.001
	Factors resulting from information services	0.552	0.418	0.663	6.918	0.001
17	**Natural resources**	0.757	0.696	0.807	15.001	0.001
	Transportation services	0.716	0.647	0.773	13.640	0.001
	Facilities and infrastructure	0.838	0.795	0.873	18.418	0.001
	Hobbies and recreational activities	0.794	0.741	0.837	16.412	0.001
	Holding sports competitions	0.658	0.578	0.725	11.970	0.001
	Information and communication services	0.492	0.388	0.584	8.170	0.001
	Welfare facilities	0.815	0.767	0.854	17.315	0.001
	Sports services	0.829	0.784	0.365	17.970	0.001
	Tourism and cultural heritage	0.792	0.739	0.835	16.330	0.001
18	**Attractions of beach water and summer sports**	0.760	0.690	0.816	13.254	0.001
	Attractions related to mountaineering and caving	0.720	0.641	0.784	12.075	0.001
	Attractions related to spa sports and nature therapy	0.830	0.778	0.871	15.807	0.001
	Attractions related to local sports	0.840	0.791	0.878	16.247	0.001
19	**Natural attractions related to summer sports**	0.720	0.578	0.820	7.147	0.001
	Attractions to Winter sports	0.710	0.564	0.813	6.986	0.001
	Hunting and fishing attractions	0.720	0.578	0.820	7.147	0.001
	Attractions related to mountaineering, caving	0.810	0.705	0.880	8.874	0.001
	Ecotourism attractions	0.800	0.691	8730	8.650	0.001
20	**Natural attractions related to summer sports**	0.600	0.471	0.704	7.498	0.001
	Attractions to Winter sports	0.580	0.447	0.688	7.166	0.001
	Attractions related to mountaineering and caving	0.700	0.595	0.781	9.381	0.001
	Spa attractions	0.750	0.659	0.819	10.524	0.001
	Desert-sightseeing attractions	0.860	0.805	0.900	13.990	0.001
	Hunting and fishing attractions	0.600	0.471	0.704	7.498	0.001
21	**Infrastructure development**	0.784	0.711	0.841	12.356	0.001
	Site development	0.804	0.736	0.856	12.990	0.001
	Service quality	0.846	0.791	0.887	14.536	0.001
	Attraction of investors	0.745	0.661	0.811	11.256	0.001
	The attraction of sports tourists	0.812	0.747	0.862	13.260	0.001
	Sports event marketing	0.713	0.620	0.786	10.455	0.001
	Job creation	0.728	0.639	0.798	10.821	0.001

Table 4 represents the combined effect sizes of the fixed and random models related to the factors affecting the development of sports tourism. Accordingly, introducing 111 primary effect sizes in the meta-analysis process resulted in the combined effect sizes of 0.708 and 0.693 for factors affecting the development of sports tourism in the fixed and random models, respectively, and the values of both models are statistically significant.

Table (4). Combined effect sizes of the factors affecting the development of sports tourism

Effect type	**Effect size r**	**Confidence interval (95%)**		**Z value**	**Sig.**
		Low limit	High limit		
Fixed	0.708	0.701	0.715	127.655	0.001
Random	0.693	0.64	0.733	20.8090	0.001

An important part of meta-analysis is the study of publication bias toward unpublished studies with non-significant findings related to the meta-analysis topic. To understand the extent of

publication bias in meta-analysis, it is necessary to examine all relevant published and unpublished studies in that field, which is practically impossible. Accordingly, sensitivity analysis is used in meta-analysis to find out this issue. Sensitivity analysis can be done with graphical methods (funnel plots) and the fail-safe N statistical index (number of missing studies that would bring p-value to > alpha). The funnel plot is based on the fact that the statistical weight of the study increases with increasing its sample size. Therefore, studies with small sample sizes are widely scattered at the bottom of the plot and those with larger sample sizes are placed at the top of the plot close to the average effect size. In the absence of any error, the plot resembles an inverted funnel, and a symmetrical funnel plot will form when there is an error. The absence of publication bias is evident based on the results depicted in Figure 1.

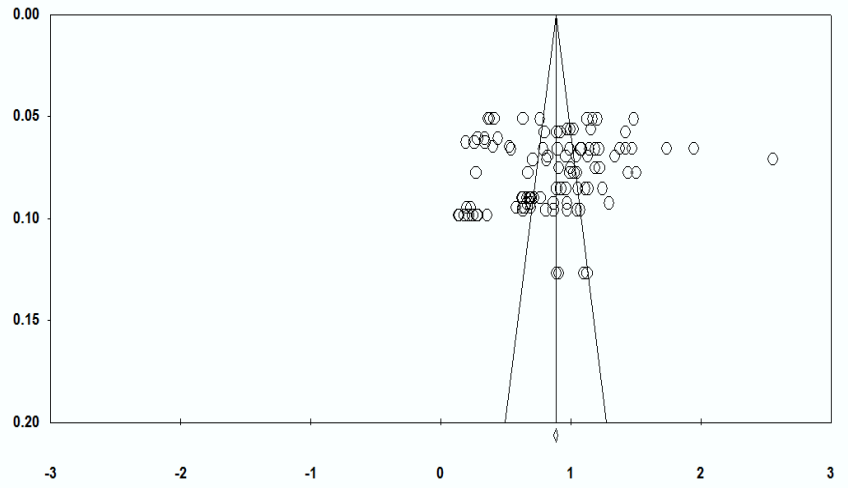

Figure (1). Funnel plot for the effect sizes of primary studies (I2 = 97.136)

Ideal NF-S values of 3583 and 738 were obtained after sensitivity analysis by the Rosenthal and Arvin methods, respectively. These perfect statistics suggest that the calculated effect size will be non-significant by introducing 3583 and 738 non-significant studies in Rosenthal and Arvin methods, respectively, into the analysis process.

After ensuring the absence of publication bias, a series of heterogeneity analyses was performed to determine the final meta-analysis model, and the results (Table 5) show a Q index value of 3840.366, which is statistically significant, suggesting a real difference between the effect sizes of the primary studies. Moreover, the I^2 index value (97.136) shows that 97% of the distribution in the results of the primary studies was realistic.

Table (5). Heterogeneity indices in the effect sizes of factors affecting the development of sports tourism

I^2	Sig.	Def.	Q value
97.136	0.001	110	3840.366

The effects of various factors on the development of sports tourism were studied in the statistical population of the primary studies. Therefore, similar sizes of hypotheses (repeated at least 5 times among studies) were extracted and combined. According to Thompson (1997), the inclusion criterion for a meta-analysis is their repetition in at least five studies. Therefore, eight out of 111 extracted hypotheses, which were examined 44 times in the studies and had a frequency of ≥ 5 were selected for repeated meta-analysis, which are listed in Table 6. (It

should be noted that a hypothesis was tested more than once in different ways in some studies. In these cases, their average effect coefficients and then their total average effect sizes were calculated with other studies). As shown in the table, out of 111 estimated effect sizes, five (11,363%), seven (159.909%), five (11,363%), six (13.636), five (11,363%), six (13.636), five (11,363%), and five (11,363%) studies investigated the effects of information, infrastructure, management, attractions of summer sports, attractions of winter sports, attractions of mountaineering and caving, attractions of hunting, and services, respectively, on the development of sports tourism. According to the presented data, among the factors affecting the development of sports tourism, the highest effect size (0.786) belongs to the service factor, followed by the factors of mountaineering and caving attractions and management in the second to third ranks. Besides, the information factor had the least effect on the development of sports tourism.

Table (6). Frequency distribution of similar variables with sufficient frequency in the reviewed studies

Study code	Independent variable	Dependent variable	Repetition in studies	%	Mean effect size
1-9-14-16-17	**Notices**	**Sports tourism development**	5	11.363	0.566
2-5-12-14-16-17-21	**Infrastructure**	**Sports tourism development**	7	15.909	0.658
3-5-7-9-10	**Management**	**Sports tourism development**	5	11.363	0.700
6-8-15-18-19-20	**Summer sports attractions**	**Sports tourism development**	6	13.636	0.702
6-8-15-19-20	**Winter sports attractions**	**Sports tourism development**	5	11.363	0.624
6-8-15-18-19-20	**Mountaineering and caving attractions**	**Sports tourism development**	6	13.636	0.725
6-8-15-19-20	**Hunting and hunting attractions**	**Sports tourism development**	5	11.363	0.677
9-14-16-17-21	**Services**	**Sports tourism development**	5	11.363	0.786
Total			44	100	0.678

Discussion

This study aimed to identify factors affecting the development of the Iranian sports tourism industry. The results showed that eight out of 111 extracted hypotheses, which were examined 44 times in the studies and had a frequency of ≥ 5, were selected for repeated meta-analysis. Out of 111 estimated effect sizes, five (11,363%), seven (159.909%), five (11,363%), six (13.636), five (11,363%), six (13.636), five (11,363%), and five (11,363%) studies investigated the effects of information, infrastructure, management, attractions of summer sports, attractions of winter sports, attractions of mountaineering and caving, attractions of hunting, and services, respectively, on the development of sports tourism. Based on the estimated data, among the factors affecting the development of sports tourism, the highest effect size (0.786) belongs to the service factor, followed by the factors of mountaineering and caving attractions and management in the second to third ranks. Furthermore, the information factor had the least effect on the development of sports tourism.

The effect size of the primary studies generally showed that the development of sports tourism was positively and significantly affected by the factors affecting the development of sports tourism, which were from different spectra. The hypotheses that were tested ≥ 5 times were meta-analyzed to determine the most and least effective studied factors on the development of

sports tourism. According to the meta-analysis results, factors of information, infrastructure, management, summer sports attractions, winter sports attractions, mountaineering, and caving attractions, hunting and fishing attractions, and services generally have positive and significant effects on the development of sports tourism.

Another aspect of this study was to examine the effect size of each factor separately for the effect sizes recorded for that factor. Accordingly, the services had the greatest effect on the development of sports tourism, followed by mountaineering and caving attractions and management in the second to third ranks. Furthermore, the information factor had the minimum impact on the development of sports tourism. To explain this finding, it can be argued that the quality of tourism services with a major emphasis on various areas of tourism accounts for the core of tourism marketing. In recent years, paying attention to the needs of tourists and responding to their demands in the service sector have been among the main and most necessary tasks or goals of sports tourism development. Service quality has a long history and has been identified and emphasized in the prime research in the field of tourism. Nevertheless, it is observed that, despite a long time after considering the subject of services and methods of measurement and evaluation, paying attention to this issue has not diminished over the past decade and has increasingly become important owing to its importance to tourists. In addition, the quality level of sports tourism services determines the attraction rate of tourists, and in other words, a more desirable level of service quality provided in the context of natural and unnatural landscapes will create satisfaction and peace of mind for visitors, thereby increasing the number of tourists depending on the satisfaction level of provided services.

After services, mountaineering and caving attractions had the greatest effect on the development of sports tourism. To explain this result, it can be pointed out that identifying the capabilities of tourism with a focus on creating attractions is the prime important step in the development of sports tourism. The success of sports tourism is entirely dependent on the capabilities of the tourism destinations, which are somewhat unique and distinctive in competition with other destinations. In the planning and application model of sports tourism development by the Canadian Sports Tourism Alliance, the identification, assessment, and development of sports tourism capabilities are introduced as one of the four stages of the development of Canadian sports tourism. The greater importance of mountaineering and caving than other attractions in Iran seems to be primarily rooted in the magnitude of these attractions. Besides, another reason can be the wider diversity of potential sports activities in these attractions.

Conclusion

Based on the obtained results, the management factor has the third greatest impact on the development of sports tourism after services and mountaineering and caving attractions. Despite the role of services and attractions, this finding suggests that the absence of the management factor hampers tourists' effective benefits from tourism because management plays a causative and critical role in the development and improvement of sports tourism. An important element in tourism management is that the relevant authorities plan, provide, and maintain tourism infrastructure to ensure that the tourism management is in proper condition.

Finally, it was found that the information factor had the least impact on the factors affecting the development of sports tourism. This finding can be explained by the fact that information is one of the propaganda tools in the field of tourism. Thus, paying attention to the performance and role of this phenomenon in the actions of tourism service providers can underpin the development of sports tourism as both the sports tourism audience and the trustees mutually communicate

with each other.

Despite the obtained results, there were some limitations in this study. These include probably no reports of non-significant studies, incomplete reports of methodological data in some studies in such a way to identify moderating variables accurately, and no reports of accurate and appropriate statistical data and, in particular, descriptive statistics in some studies as one of the simplest and most widely used methods of calculating the effect size in meta-analyses. Future investigators are recommended to develop strategic plans for the development of sports tourism by considering the weight of factors.

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