

Identification and ranking of factors affecting sports and physical education entrepreneurship

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Received 05/05/2024

Accepted 26/05/2024

Abstract

The main purpose of this research is to identify and rank the factors affecting sports and physical education entrepreneurship. In this research, 10 experts with a doctorate degree in physical education management who were experts in the research topic participated. The results showed that the factors of research and development, education and motivation, formulation of entrepreneurial strategies, communication and networking, sources of financing, entrepreneurial culture, market needs, sports facilities and infrastructure, and rules and regulations were identified as factors influencing the entrepreneurship of sports and physical education. .

Keywords: entrepreneurship, sports and physical education entrepreneurship, sports, physical education.

Introduction

In today's world, one of the factors that causes economic-social growth and development is entrepreneurship. Entrepreneurship is a process that plays a vital role in the continuation of national and even global economic growth and development. Therefore, the need to create a suitable platform and atmosphere for logical support, including material, spiritual, research and scientific culture, for entrepreneurship and entrepreneurs is felt more than ever in our country. The importance of entrepreneurship is so much that economists consider entrepreneurs as the engine of economic growth and development of the society and management scientists consider them as one of the most important factors of organizational transformation and innovation in the current era, so any environment whose people have entrepreneurial thinking and art is a dynamic economy and will be diverse (Karlis, 2006). Entrepreneurship refers to the ability to successfully use innovative ideas in competitive business markets. And in general, entrepreneurship is an activity that requires discovery, evaluation and use of opportunities to provide new services and tools and organize efforts that did not exist before (Eyal et al., 2004). One of

the fields in which the emergence of entrepreneurship is felt is entrepreneurship in sports. The process of entrepreneurship in sports creates new opportunities for employment in the field of sports, which due to the wide dimensions of sports science can be considered as one of the fastest growing sectors and related to The main economic, social and political issues raised in the world, there are achievements and job opportunities in a huge number of sports events, in other words, the increase of entrepreneurial processes in sports and events is creating a variety of new job opportunities. Sports through creating demand for services and goods. Sports and creating attraction for communities provides the necessary background for the development of entrepreneurship, and entrepreneurship helps the development of sports through the creation of a sports business in the production of sports equipment and sports services. Therefore, the use of innovation and entrepreneurship thinking in sports organizations is inevitable. Nowadays, organizations can no longer become agile, flexible, opportunistic, and low-cost organizations with a small number of creative and entrepreneurial people and by implementing several entrepreneurial plans. All employees should benefit from an entrepreneurial spirit and be able to carry out their entrepreneurial activities easily and individually or in groups (Razavi et al., 2015).

Sports entrepreneurship is the intersection of entrepreneurship and sports management and is considered an emerging field that is rapidly developing and expanding (Ratten, 2018). Entrepreneurship in sports can be considered the process of using economic opportunities in sports. Entrepreneurship in sports should find out the opportunities in sports and use those opportunities to create new entrepreneurial activities. Winsett and Farlow (2008) in the study of the effect of entrepreneurship training on starting a business by physical education students showed that holding appropriate and practical training courses and courses that students evaluate positively can be effective in creating real businesses for students. . Mandalizadeh (2018) stated that sports play an important role in society and participation in sports and recreation leads to improving health, reducing crime, creating employment and encouraging positive behavior. Ratten and Freya (2016) believe that sports entrepreneurship is part of the expanding research that links sports to the management of innovation and creativity. Ratten and Freya (2017) believe that sports is a type of social policy that can help solve society's problems. Sports policies and policies related to budget allocation are of the entrepreneurial type of innovation in sports, which is caused by the influence of cultural, economic and political forces on the society (Mirzaei et al., 1402). The problem of identifying and ranking factors affecting entrepreneurship in the field of sports and physical education is of great importance because sports and physical education as a growing and prosperous industry creates many opportunities for entrepreneurs and businesses. In this field, various factors can influence entrepreneurship. Having technical and professional capabilities in the field of sports and physical education provides the necessary skills to launch and manage related businesses. The ability to invent and implement innovative ideas in the field of sports and physical education can help develop successful businesses. Having strong communication networks in the field of sports and physical education can provide new opportunities and help attract suitable investors and partners. Knowing the legal and local environment provides favorable permission to start and grow businesses related to sports and physical education. Market research helps to identify the needs of customers and provide them with suitable services or products. By identifying and ranking these factors, entrepreneurs and investors can identify the best strategies for establishing and growing successful businesses in the field of sports and physical education.

Theoretical foundations and research background

The person link framework sees entrepreneurial opportunity as a combination of individuals engaged in entrepreneurial behavior and a set of conditions that support entrepreneurial behavior. While the growth of active individuals is a long-term process (Lara Bocangra et al., 2020). Institutional theory understands institutions as the rules and principles of the game in society, which act as predecessors of entrepreneurial activity. Therefore, institutions play an important role in the creation and quality of entrepreneurial activity. However, there is no guarantee of success and different countries approach this issue in different ways. The context of the country affects how these factors affect entrepreneurial activity in countries, and the role of environmental and contextual factors in strengthening sports entrepreneurship is a hot topic in studies. While countries with well-developed tourism are successful in creating a balance between people and the environment, developing countries are still struggling. Especially in the field of institutional support for sports entrepreneurship (Urbano, 2020).

In the current decade, one of the biggest challenges and one of the most important problems for the country's educated sports manpower; entrepreneurship and reducing unemployment, and government policies for privatization and downsizing have also led to a decrease in employment in the public sector and as a result, an increase in unemployment among university graduates, so providing a new definition of employment and transitioning from job hunting to entrepreneurship and using influential factors in The field of sports entrepreneurship is one of the solutions to solve the problem of unemployment among university graduates and in general the youth of this country and the world. New opportunities are created for employment in sports, which is characterized by innovation and creativity in producing and providing services to the society, and causes the country to progress day by day in the world arena (Razavi et al., 2015).

Ghasemi et al. (1403) showed that there is a positive and significant relationship between all entrepreneurial components ($P < 0.05$). The results of factor analysis showed that the items of background factors effective in sports entrepreneurship explain 84.46%. 22.58% sports advertising platform, 16.57% sports requirements development platform, 12.43% sports tools and equipment platform, 8.63% educational and research platform, 7.91% sports planning and venue management platform, 03/03 sports services platform 7%, cultural background is 5.03%, technological background is equal to 4.25%. Based on the results of the confirmatory factor analysis, the model of the effective factors has a significant fit and all the components show an unfavorable situation of the level of entrepreneurship. According to the results, sports managers and officials should provide the necessary foundations for each of the examined components and take appropriate measures according to specific economic and managerial issues and situations, especially the unemployment problem of graduates and the decrease in the desire for sports entrepreneurship. In their research, Mirzaei et al. (1402) showed that there are 10 common factors between influential and influential key factors, and 30 possible situations were defined for 10 factors. In the scenario writing section, there are 12 possible scenarios, among which the first scenario is the most important and most likely scenario for the development of entrepreneurship in Iran's sports industry. Nodehi et al. (1403) showed that 26 issues were identified in 5 areas of infrastructure, economic, management, advertising, legal and legal solutions. Also, the findings of the research showed that management factors were the most important factors affecting sports tourism entrepreneurship in the post-corona era. Based on this, improving the ability of managers and developing infrastructural and economic factors and legal and legal support for entrepreneurs can be effective in the development of

entrepreneurship in the field of sports tourism and ultimately lead to the improvement of employment and development of the sports industry.

Research questions

Based on the stated principles and in order to achieve the objectives of the research, the following questions were designed:

What are the factors affecting the entrepreneurship of sports and physical education?

What is the ranking of factors affecting sports and physical education entrepreneurship?

Research findings

DEMATEL technique is one of the decision making methods based on pairwise comparisons. Dimetal's technique can be used to identify and examine the relationship between criteria, cause and effect relationships and map network relationships. In order to identify the factors in this research, Dimetal technique was used.

The first step: making a survey matrix of experts

In the form of a questionnaire, the experts were asked to say according to the following spectrum how much is the direct effect of element i on element j in their opinion. 0 (not affected); 1 (very little effect); 2 (low impact); 3 (moderate effect); 4 (high impact).

Second step: making the initial decision matrix

This matrix is actually extracted from the simple average of experts' opinions in the previous step.

By combining the opinions of 10 experts, the decision-making matrix is obtained as shown in Table 1:

Table 1. Primary decision matrix

Row	Direct correlation matrix	1	2	3	4	5	6	7	8	9	Total
1	Research and Development	0	4	3	4	3.5	3.8	4	3.9	3.6	29.8
2	Training and motivation	3	0	3.2	3.4	3.5	3.5	3.8	3.7	3.8	27.9
3	Development of entrepreneurial strategies	3	2.9	0	3.3	3.5	3.6	3.7	3.6	3.5	27.1
4	Communication and networking	3	2.8	3.1	0	3.3	3.5	3.6	3.3	3.3	25.9
5	financial resources	2	2.1	3.2	3.1	0	3.1	3.2	3	3	22.7
6	Entrepreneurial culture	2	2.1	3.3	2.8	2.7	0	2.8	2.6	3	21.3
7	market need	2	2.2	2.2	2.7	2.6	3	0	3.1	3	20.8
8	Sports facilities and infrastructure	1	1.5	2.2	2.8	2.8	2.9	2.6	0	3.2	19
9	Terms and Conditions	1	1.5	1.8	2.8	2.9	3	3.2	3.3	0	19.5

The third step: calculation of the primary effect matrix

The primary effect matrix is obtained by normalizing the primary decision matrix. In this matrix, the main diagonal elements are all equal to zero. Matrix D shows the primary effects of an element, including effectiveness and effectiveness. To normalize the initial decision matrix, we first calculate the sum of the numbers of each row and then select the largest one (29.8) and invert it and call it α (0.033557047) and multiply it in each row of the initial decision matrix. In this way, the primary effect matrix is created (Table 2).

Table 2. Primary effect matrix (normalized)

Normal matrix	1	2	3	4	5	6	7	8	9
Research and Development	0	0.1342	0.1007	0.1342	0.1174	0.1275	0.1342	0.1309	0.1208
Training and motivation	0.1007	0	0.1074	0.1141	0.1174	0.1174	0.1275	0.1242	0.1275
Development of entrepreneurial strategies	0.1007	0.0973	0	0.1107	0.1174	0.1208	0.1242	0.1208	0.1174
Communication and networking	0.1007	0.0940	0.1040	0	0.1107	0.1174	0.1208	0.1107	0.1107
financial resources	0.0671	0.0705	0.1074	0.1040	0	0.1040	0.1074	0.1007	0.1007
Entrepreneurial culture	0.0671	0.0705	0.1107	0.0940	0.0906	0	0.0940	0.0872	0.1007
market need	0.0671	0.0738	0.0738	0.0906	0.0872	0.1007	0	0.1040	0.1007
Sports facilities and infrastructure	0.0336	0.0503	0.0738	0.0940	0.0940	0.0973	0.0872	0	0.1074
Terms and Conditions	0.0336	0.0503	0.0604	0.0940	0.0973	0.1007	0.1074	0.1107	0

Fourth step: extracting the total effect matrix

Table 3 shows the total effect matrix.

Table 3. Total effect matrix

Total relationship matrix	1	2	3	4	5	6	7	8	9	(R)
Research and Development	0.2966	0.4468	0.4719	0.5427	0.5288	0.5626	0.5741	0.5661	0.5576	4.5472
Training and motivation	0.3684	0.3064	0.4529	0.4994	0.5020	0.5260	0.5398	0.5322	0.5346	4.2618
Development of entrepreneurial strategies	0.3613	0.3873	0.3469	0.4864	0.4916	0.5178	0.5259	0.5184	0.5153	4.1508
Communication and networking	0.3511	0.3733	0.4278	0.3719	0.4713	0.4994	0.5073	0.4944	0.4941	3.9906
financial resources	0.2923	0.3190	0.3912	0.4218	0.3277	0.4418	0.4490	0.4394	0.4392	3.5215
Entrepreneurial culture	0.2806	0.3061	0.3787	0.3966	0.3940	0.3297	0.4199	0.4104	0.4212	3.3372
market need	0.2728	0.3008	0.3392	0.3842	0.3813	0.4108	0.3233	0.4140	0.4111	3.2375
Sports facilities and infrastructure	0.2248	0.2586	0.3145	0.3590	0.3593	0.3788	0.3739	0.2903	0.3873	2.9463
Terms and Conditions	0.2277	0.2620	0.3076	0.3636	0.3666	0.3865	0.3953	0.3950	0.2953	2.9997
(J)	2.6757	2.9603	3.4308	3.8257	3.8226	4.0532	4.1085	4.0601	4.0557	

Fifth step: Analysis

The analysis is done according to Table 4.

Table 4. Ranking of factors based on their effectiveness and effectiveness (R-j)

Agents	R	J	R+J	R-J	rank	influential / effective
Research and Development	4.547242	2.675665	7.222907	1.871577	1	influential
Training and motivation	4.261756	2.960257	7.222013	1.301499	2	influential
Development of entrepreneurial strategies	4.150782	3.430827	7.581608	0.719955	3	influential
Communication and networking	3.990602	3.82569	7.816292	0.164913	4	influential
financial resources	3.521503	3.822616	7.34412	-0.30111	5	effective
Entrepreneurial culture	3.337181	4.05323	7.390411	-0.71605	6	effective
market need	3.237478	4.108523	7.346001	-0.87104	7	effective
Sports facilities and infrastructure	2.999718	4.055684	7.055402	-1.05597	8	effective
Terms and Conditions	2.946304	4.060075	7.006378	-1.11377	9	effective

Based on the highest row sum (R):

R: which is obtained from the row sum of the elements of the total effect matrix, shows the degree of influence of a factor on other factors of the system. The larger the R value of a factor, the more influential that factor is. "Research and development" is the most influential factor and "sports facilities and infrastructure" is the least influential.

Based on the highest column sum (J):

J: which is obtained from the column sum of the elements of the total effect matrix, shows the degree of influence of a factor on other factors of the system. The larger the j value of a factor, the more influential that factor is. "Market need" is the most effective factor and "research and development" is the least effective.

Based on the most interactions in the system (R+J):

R+J: shows the total influence and effectiveness of the desired factor in the system. That is, any factor with a larger (R+J) has more interaction in the system. In fact, (R+J) for each factor indicates the weight of that factor in the system. "Communications and networking" has the most interaction in the system and "sports facilities and infrastructure" has the least interaction in the system.

Based on net effect (R-J)

In the event that:

$0 < (R-J)$, the desired factor affects other factors.

$0 > (R-J)$, the desired factor is influenced by other factors.

"Research and development" has the first rank in terms of net impact (R-J) and "laws and regulations" has the last rank.

According to Table 7, the factors of "research and development", "training and motivation", "preparation of entrepreneurial strategies" and "communication and networking" whose net effect (R-J) has become positive affect other factors, and the factors of "supply sources" Financial", "entrepreneurial culture", "market need", "laws and regulations" and "sports facilities and infrastructure" whose net effect (R-J) has become negative are influenced by other factors.

Conclusion

Based on the results of the research, nine factors of research and development, training and motivation, formulation of entrepreneurial strategies, communication and networking, sources of financing, entrepreneurial culture, market needs, sports facilities and infrastructure, and laws and regulations as factors influencing the entrepreneurship of sports and physical education. Were identified. Research and development in the field of sports and physical education provides the possibility of inventing and improving new products, services and technologies that can help grow existing businesses and create new businesses. Teaching the skills and knowledge necessary for success in the field of sports and physical education, as well as the motivation and passion for entrepreneurship, play an important role in encouraging people to start their own businesses. Entrepreneurial strategies are needed as effective strategies for the establishment, growth and survival of businesses related to sports and physical education. Having strong connections and extensive networks in the field of sports and physical education can help attract investors, colleagues and suitable customers. Access to appropriate financial resources is an essential tool for starting, growing and developing existing businesses. Organizational or social entrepreneurship culture provides the necessary motivation and support to carry out entrepreneurial activities. Knowing the needs of the market and matching the services or products with these needs is the basis of the success of businesses related to sports and physical education. Access to suitable places and infrastructures for the implementation of sports-related activities plays a vital role in the establishment and growth of existing businesses. Knowing the rules and regulations related to sports and physical training allows the optimal operation of related businesses. By considering these factors, entrepreneurs can have the best start to establish and grow their businesses in the field of sports and physical education.

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