

Investigating the Strategies of Developing Adventurous Sports in Ardabil Province

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Abstract

Purpose: The purpose of the current research was to investigate the development strategies of developing adventurous sports in Ardabil province.

Method: This research, using a mixed research method (qualitative and quantitative), seeks to investigate the solutions for the development of adventurous sports in Ardabil province. The research community in the qualitative part was all professors and experts in the field of sports. 14 people from this community were selected using purposeful sampling and snowball and were interviewed in an open manner. The research population in the quantitative part was all the welcoming sports tourists in Ardabil province 1399-1400, of which 370 people were selected by available sampling and answered the questionnaire made by the researcher. The method of collecting information in the qualitative part was through studying previous researches and conducting semi-structured interviews. To check the formal and content validity, the findings of the research were presented to the participants and they study the text of the theory and then their comments were applied. The method used to check reliability was intra-subject agreement method.

Results : Data analysis in the qualitative section was systematically investigated. According to the divisions and codings that were done, social, political, economic and environmental solutions are considered the most important and main solutions. In the quantitative part, the results obtained from the internal correlation coefficient showed that the solutions for the development of adventurous sports have good reliability. The results of exploratory factor analysis revealed 4 factors with special greater than one. The fit indices of the confirmatory factor analysis model also confirmed the 4-factor model of these solutions. Cronbach's alpha coefficient for adventure sports development solutions is in the range of 0.70 to 0.81.

Conclusion: This research provides useful solutions for the development of adventure sports to policy makers and planners, which will promote and increase the quality of adventure sports in Ardabil province.

Keyword: Adventure, sports, solutions, excitement, tourism.

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Introduction

Sports and physical activity are known as a source of psycho-physical well-being; Therefore, exercise can improve the perception of quality of life (Ingrassia, Mazza, Totaro, & Bendito, 2020). Sports is an expanding phenomenon in contemporary culture that people associate basic values for personal development.

Physical activity and exercise can help prevent and treat the world's leading non-communicable diseases.

The result of regular physical activity shows that people who participate in this sport and physical activity have the benefits of social, physical and mental well-being.

In fact, sport seems to be an essential factor for developing personal resources and increasing specific skills, such as self-awareness, self-confidence, independence, etc. (Amy, Charity, Harvey and Payne, 2015).

Sports has been evolving since time immemorial, in recent times development has been through people development, infrastructure development, sports facility development, sports performance development. (Extraction and Raizada, 2020).

In today's world, some people are looking for adventure sports activities and the number of adventure characters has also increased, and people want their leisure activities to be accompanied by fun and danger. In fact, the presence of a little risk is considered a feature of recreational activities (Badri, 1388).

In recent years, adventure sports have been growing rapidly. Adventure sports are new and attractive activities and usually include some amount of physical and mental challenges and the relative presence of the nature component. Adventure activities have provided new paths in sports activity and are sometimes introduced as a competitor to conventional sports. (Majidi, Safari and Khyberi, 2016).

The adventure sports industry has had a high growth rate all over the world in recent years, and therefore the revolution of the adventure

sports industry is an interesting area for research. The beneficial nature of this industry, which is based on the high number of participants (participants, sponsors and investors), there is a need to understand more about the nature of this sector (Kelt and Russell, 2009).

Naderian Jahormi and Hashemi (2008) in an article on "Participation in Recreational Sports" investigated the reasons for the motivation to participate in this field.

The results showed that men's participation in sports activities is mostly motivated by skill acquisition, success and superiority, health and physical strength. While women mostly exercise with the motivation of fitness and beauty, gaining health and mental health, and making friends.

In this research, the researcher states that clarifying the place of recreational sports in social and cultural development programs is very important and suggests that the legal authority of institutions and organizations such as the General Sports Council, institutions in charge of health and health education, recreational sports organizations, institutions implementing physical fitness programs in society increase and be supported by government organizations and authorities.

In their research, Kashif and Eshraghi (1383) came to the conclusion that the tourism industry is affected by sports, the managers of physical education departments showed a positive and significant correlation between sports and tourism, and also the correlation between the driving factors of the sports tourism industry and the level of participation in this industry. A positive and significant result has been obtained. Swadi et al. (2015) in an article titled "Evaluation of effective factors in the development of leisure-sports tourism with an emphasis on public sports", the results of this article show that the dimension of laws and regulations is the management factor and the dimensions of resource factors including human resources, finance, technology and equipment have non-normal distribution and other

dimensions have normal distribution. Finally, the results and prioritization of the different dimensions of each of the research factors showed that between the importance of these dimensions in all four levels, behavioral, resource, managerial and environmental factors have a significant impact on the development of public sports.

Studies show that since 1990, there has been a significant growth in adventure sports and recreation, and the diversity of its species has increased significantly. Of course, in less developed and developing countries, this field is considered a new phenomenon. For this reason, due to the emerging nature of adventure sports in Iran, there is very little research in this field. On the other hand, Ardabil province, with its many capabilities and potential, has a very suitable platform for the development of adventure sports, especially those related to the environment. are there Based on this, the present research was conducted with the aim of investigating the development strategies of adventure sports in Ardabil province.

Materials and methods

This research, using a mixed research method (qualitative and quantitative), seeks to investigate the solutions for the development of adventure sports in Ardabil province. Based on this, first the theoretical foundations and background of the research were examined; In this way, the richness of the work was added by identifying the concepts related to the development of adventure sports and applying these concepts. Then, by conducting interviews and asking open-ended questions to explore and describe the attitudes of the interviewees, a wealth of information about adventure sports was collected. Finally, with the help of the data-derived theory method, the findings of the research were categorized and the development strategies of adventure sports were designed with an emphasis on adventure sports activities.

The research community in the qualitative part was all professors and experts in the field of sports. In this research, using purposeful and snowball sampling method, a total of 14 professors and specialists were interviewed who had adequate information about adventure sports and had sufficient mastery of the subject. This number of samples included sports management professors (7 people), experienced people and experts in sports and youth departments (five people) and people active in adventure sports (two people) who were interviewed in an open manner. The characteristics of these people are listed in table number one. The sampling method of the statistical population was as follows: first, according to the knowledge of the researcher and taking into account the objectives of the research, interviews were conducted with selected experts who had the competence to answer the questions raised. Then, they introduced other experts to continue the sampling.

The research population in the quantitative part was all the welcoming sports tourists in Ardabil province 1399-1400, of which 370 people were selected by available sampling and answered the questionnaire made by the researcher. The method of collecting information in the qualitative part was through studying previous researches and conducting semi-structured interviews. To check the formal and content validity, the findings of the research were presented to the participants and they read the text of the theory and then their comments were applied. The method used to check reliability was intra-subject agreement method. The average intra-subject agreement was reported as 0.88. In the quantitative part, internal consistency coefficient, exploratory and confirmatory factor analysis were used. The data was analyzed with the help of SPSS 25 and LISREL 8.8 software.

Qualitative section

Table 1 - Characteristics and characteristics of the interviewees

Row	Job	education	Type of connection with the subject
1	faculty member	Specialized doctorate in sports management	Academic professors and researchers
2	faculty member	Specialized doctorate in sports management	Academic professors and researchers
3	faculty member	Specialized doctorate in sports management	Academic professors and researchers
4	faculty member	Specialized doctorate in sports management	Academic professors and researchers
5	faculty member	Specialized doctorate in sports management	Academic professors and researchers
6	faculty member	Specialized doctorate in sports management	Academic professors and researchers
7	faculty member	Specialized doctorate in sports management	Academic professors and researchers
8	Employee of Sports and Youth Department	PhD	Experienced and elite people of sports and youth departments
9	Employee of Sports and Youth Department	Masters	Experienced people of sports and youth departments
10	Employee of Sports and Youth Department	Masters	Experienced people of sports and youth departments
11	Employee of Sports and Youth Department	Masters	Experienced people of sports and youth departments
12	Employee of Sports and Youth Department	Masters	Experienced people of sports and youth departments
13	Responsible for sports camps	PhD	Active in adventure sports
14	Responsible for sports camps	PhD	Active in adventure sports

According to the method of gathering information, if the purpose of the interview is to explore and describe the interviewee's attitudes, and considering the available time and resources, 10 to 15 samples will be sufficient for the interview (Koval, 1996). In this research, repetition was observed in the 8th interview and saturation was achieved in the 12th interview, but due to the assurance of the received data, the interview was continued until the 14th person.

In this research, two stages were used. The first stage included the open coding method; In this way, to conceptualize the data and analyze the information, one of the methods is to use open coding so that the data can be classified into specific categories. In the open coding stage, concepts from the depth of the data are brought to the surface. Also, the analyst looks at how categories and their characteristics are formed (Corbin and Strauss, 2008). In the processing stage, he selects a concept from the set of

concepts of the open coding stage as a category, and during the process, he associates other synonymous concepts with it. For this reason, this coding is considered to be an axis that takes place around the axis of a research category. Also, in selective coding, determining the central category, conditional categories, strategy and process are discussed. Usually, the central class is the phenomenon under investigation in the research, which in this research is sports adventure tourism; Based on this, it was considered as the central class and other classes were examined as conditional categories (causal, contextual and intervening), strategy and consequence. The theoretical model or systematic approach is the approach of Corbin et al. (2008). To check the validity, the research findings were presented to the participants, they read the text of the theory and their comments were applied. In the end, this research was studied and revised by the professors, and some

points were stated for correction or change of the final opinion. Data reliability and correctness of all steps of the research were done by showing the path of the researchers' decisions and by placing all the raw, analyzed data, codes, categories, study process, primary objectives and questions at the disposal of the professors and also with a careful audit after the central coding process. . Axial coding is the process of converting concepts into components. For this, the experts' theory was approved. To calculate the reliability of the test, usually a few interviewees are selected as a sample from among the conducted interviews. Each of the interviews are coded twice in a short and specific time interval, and then, the specified codes are compared with each other. This method is used to evaluate the researcher's coding stability. In each of the interviews, codes that are similar to

each other in the time interval are identified as "agreement" and non-similar codes are identified as "disagreement". The method of calculating the reliability of the test is as follows:

$$\text{Inter-coder reliability percentage} = \frac{\text{Number of agreements} \times 2}{\text{Total number of codes}} \times 100$$

In the present study, three interviews were selected from among the interviews and one of the researchers coded them within a month. The results of this coding are presented in table number two. The results of table number two show that the total number of codes in these three interviews is equal to 59 and the number of agreements is equal to 26. Based on the relationship, the percentage of intra-subject agreement is 0.88, which is suitable.

Table 2 - Reliability of the test

Reliability	Agreement number	Total number of codes	Interview number
0.78	7	18	3
0.90	9	20	5
0.95	10	21	11
0.88	26	59	Total

The results of table number two show that the total number of codes in these three interviews is equal to 59 and the number of agreements is equal to 26. Based on the relationship, the percentage of intra-subject agreement is 0.88, which is suitable.

Results

The coding strategy was based on line-by-line coding; In such a way that almost every line of

the typed text of the interview was assigned a code. Coding of primary data included three stages: 1- open coding, 65 codes, 2- axial coding, 4 concepts and 3- selective coding in which, based on the analysis of the obtained information, social, environmental, political and economic conditions with the title Adventure sports development solutions were named.

Table 3: Strategies for the development of adventure sports

Concept	category	
Holding sports training workshops to train coaches and leaders of adventure sports tours	Social solutions	solutions
Design and evaluation of electronic educational software for adventure sports to educate people and obtain the information they need.		
Advertising introducing adventurous sports through virtual networks and designing sports websites to encourage people to do sports		
Creating a suitable platform for using the experiences of champion athletes		
Providing comfort facilities for sports residences	Environmental solutions	
Development of communication routes to the possibility of sports and recreation		
Development of means of transportation to sports and entertainment places		
Health development of residential centers and adequacy of health services		

Practical use of the potentials in the nature of the province and its expansion into adventure sports	Political solutions	
Law to support the development of adventure sports		
Adoption of laws to reduce the prices of products and services related to adventure sports		
Allocation of appropriate funds and credits for the purchase of sports equipment and goods		
Providing a discount code for buying sports goods	Economic solutions	
Reducing and managing the costs of adventure sports		
Supervise the sale of sports goods		
Monitoring the costs of renting a house, villa, etc.		

Quantitative section

Table 4: Cronbach's alpha coefficient of the adventure sports development strategies scale

Row	Components	Cronbach's alpha coefficients
1	Social solutions	0.81
2	Environmental solutions	0.70
3	Political solutions	0.71
4	Economic solutions	0.74

Internal consistency was used to check the reliability of the adventure sports development strategies scale. The internal consistency of the scale was determined through Cronbach's alpha coefficient. Cronbach's alpha coefficient for adventure sports development solutions is in the range of 0.70 to 0.81.

In order to investigate the factor structure of the scale of adventure sports development strategies, the questions of the questionnaire were analyzed using exploratory factor analysis using principal components. KMO coefficient and Bartlett's test were used to ensure the appropriateness of the data. The value of KMO always fluctuates between 1 and 0. If its value is less than 0.5, the data will not be suitable for factor analysis, and if its value is between 0.5 and 0.69, factor analysis should be performed with caution, but if its value is greater than 7. If the correlation between the data is 0.0, it is

suitable for factor analysis. Bartlett's test also tests the hypothesis that the observed correlation matrix belongs to a community with uncorrelated variables. The KMO coefficient is equal to 0.86 and Bartlett's test (1342/704) was also confirmed to check the sphericity of the data ($P < 0.001$); Therefore, the research variables were suitable for factor analysis.

Exploratory factor analysis:

The results of exploratory factor analysis showed that four factors explain 51.935% of the total variance. In this analysis, it was found that the first factor (social solutions) explains 29.467 percent of the common variance. The second factor (environmental solutions) explains 8.830% of the common variance, the third factor (political solutions) explains 7.121% of the common variance, the fourth factor (economic solutions) explains 6.517% of the common variance.

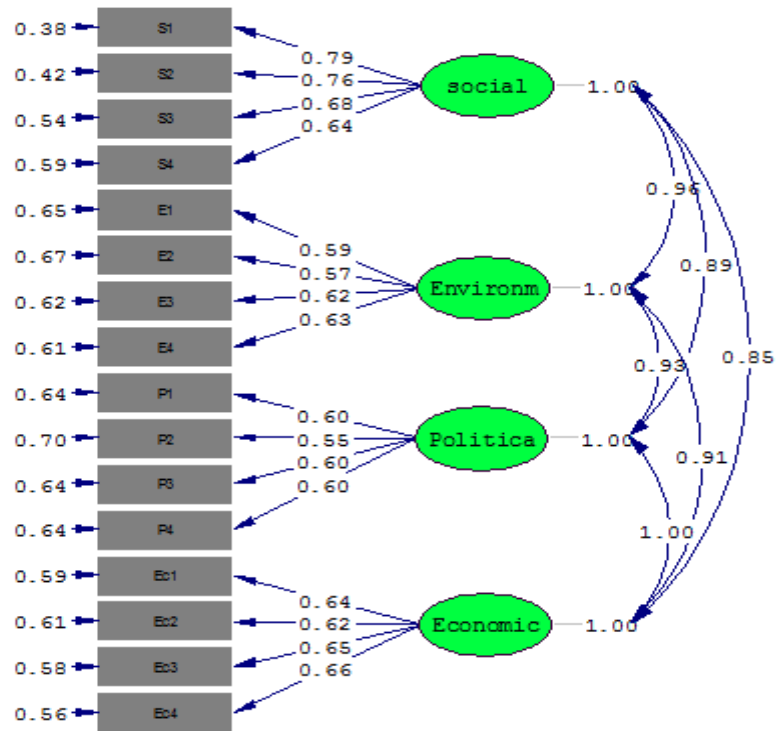
Table 5: factor loading of adventure sports development strategy questions

Row	Components	The value of T	operational burden	Items
1	Social	17.32	0.79	Holding sports training workshops to train coaches and leaders of adventure sports tours
2		16.54	0.76	Design and evaluation of electronic educational software for adventure sports to educate people and obtain the information

	solutions			they need.
3		14.04	0.68	Advertising introducing adventurous sports through virtual networks and designing sports websites to encourage people to do sports
4		13.08	0.64	Creating a suitable platform for using the experiences of champion athletes
5	Environmental solutions	11.74	0.59	Providing comfort facilities for sports residences
6		11.26	0.57	Development of communication routes to the possibility of sports and recreation
7		12.37	0.62	Development of means of transportation to sports and entertainment places
8		12.59	0.63	Health development of residential centers and adequacy of health services
9	Political solutions	11.78	0.60	Practical use of the potentials in the nature of the province and its expansion into adventure sports
10		10.71	0.55	Law to support the development of adventure sports
11		11.86	0.60	Adoption of laws to reduce the prices of products and services related to adventure sports
12		11.78	0.60	Allocation of appropriate funds and credits for the purchase of sports equipment and goods
13	Economic solutions	12.93	0.64	Providing a discount code for buying sports goods
14		12.47	0.62	Reducing and managing the costs of adventure sports
15		13.14	0.65	Supervise the sale of sports goods
16		13.46	0.66	Monitoring the costs of renting a house, villa, etc.

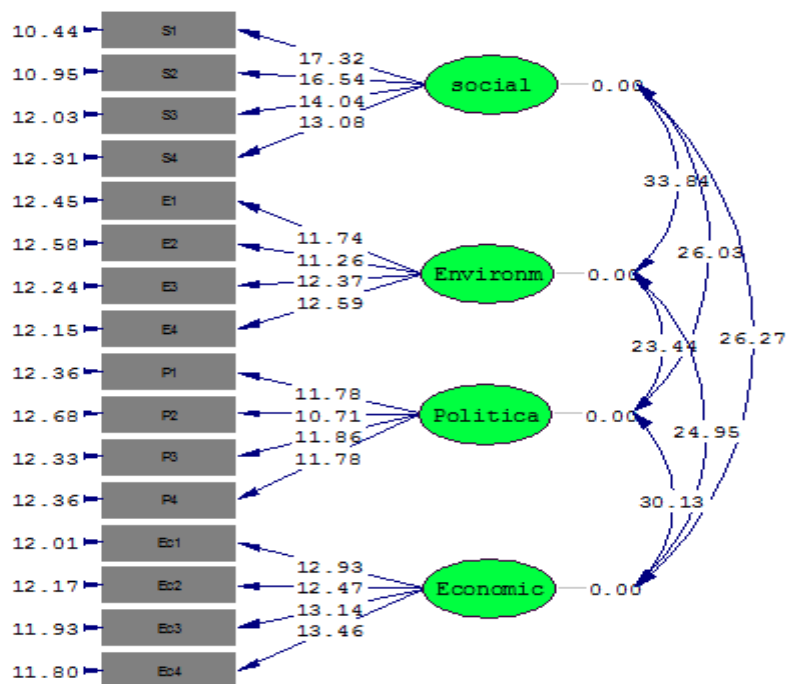
Next, in order to check the construct validity, the first-order confirmatory factor analysis method was used. In first-order confirmatory factor analysis models, the scores of each study item in a variable actually reflect the condition of that item in a more underlying factor that cannot be directly measured due to its hiddenness. To estimate the model from chi-square indices (χ^2), chi-square ratio index to degree of freedom (df/

), comparative fit index (CFI), relative fit index (RFI), non-normalized goodness of fit index (NNFI), square root error Mean approximation (RMSEA) was used. Regarding CFI, RFI and NFI indices, some researchers believe that the minimum acceptable value is 0.90 and values above 0.95 indicate excellent model fit. Also, regarding the RMSEA index, a value less than 0.080 indicates a good fit of the model.



Chi-Square=165.64, df=98, P-value=0.00002, RMSEA=0.043

Figure 1: Standard first-order factor analysis model of adventure sports development strategies



Chi-Square=165.64, df=98, P-value=0.00002, RMSEA=0.043

Figure 2: T significance value of the standard model of first-order factor analysis of adventure sports development strategies

Table 6: Values of fit indices of the first-order sports development strategies: confirmatory factor analysis model of adventure

RMSEA	NNFI	RFI	CFI	df/ χ^2	χ^2
0.043	0.99	0.97	0.99	1.69	165.64

As can be seen in the table, the model of adventure sports development solutions has a good fit and as a result, it has good construct validity.

Discussion

The present study was conducted with the aim of investigating the development strategies of adventure sports in Ardabil province. Data analysis in the qualitative section was systematically examined. According to the divisions and codings that were done, social, political, economic and environmental solutions are considered the most important and main solutions. In the quantitative part, the results obtained from the internal correlation coefficient showed that the solutions for the development of adventure sports have good reliability. The results of exploratory factor analysis revealed 4 factors with eigenvalues greater than one. The fit indices of the confirmatory factor analysis model also confirmed the 4-factor model of these solutions. Cronbach's alpha coefficient for adventure sports development solutions is in the range of 0.70 to 0.81.

Conclusion

One of the solutions of the experts and experts in the social dimension is holding sports training workshops to train coaches and leaders of adventure sports tours, designing and evaluating electronic educational software for adventure sports to educate people and obtain the information they need, advertisements introducing adventure sports through virtual networks and design Sports sites to encourage people towards sports and create a suitable platform for using the experiences of champion athletes The second solution of experts for the development of adventure sports in the environmental dimension includes providing comfort facilities for sports residences, development of communication routes to sports and recreation facilities, development of

transportation means to sports and recreation places, and development of health in residence centers and the adequacy of health services. Was.

The third solution, from the point of view of experts in the political dimension, is the practical use of the potentials in the nature of the province and its expansion to adventure sports, the law to support the development of adventure sports, the approval of laws to reduce the prices of products and services related to adventure sports, and the allocation of appropriate budgets and credits for the purchase of equipment. And it was sports goods.

And finally, the fourth solution of experts in the economic dimension included providing a discount code for buying sports goods, reducing and managing the costs of adventure sports, monitoring the sale of sports goods and monitoring the costs of renting houses, villas, etc.

References

- [1] Badri, Seyyed Ali; Vathoghi, Leah (2008). Locating the studied ski tourism spots in Ardabil Province, *Geographical Research Quarterly*, No. 707, page number 80659-80690.
- [2] Ingrassia, M., Mazza, F., Totaro, P., & Benedetto, L. (2020). Perceived Well-Being and Quality of Life in People with Typical and Atypical Development: The Role of Sports Practice. *Journal of functional morphology and kinesiology*, 5(1), 12.
- [3] Eime, R.M.; Charity, J.M.; Harvey, J.T.; Payne, W.R. Participation in sport and physical activity: Associations with socio-economic status and geographical remoteness. *BMC Public Health* 2015, 1–12.
- [4] Kellett, P., & Russell, R. (2009). A comparison between mainstream and action sport industries in Australia: A case study of the skateboarding cluster. *Sport Management Review*, 12(2), 66-78.
- [5] Sreerag, M., & Raizada, S. (2020). Sports Development Prospects of Sports Event

Volunteering: An Insight from Maharashtra
Open. Annals of Tropical Medicine and Health, 23, 231-748.