



## Resilience of Sports Businesses in the COVID-19 Crisis and Determining Scenario-based Strategies (Case Study: Private Sports Clubs of Kurdistan Province of Iran)

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### ARTICLE INFO

**Article type:**  
*Original article*

**Article history:**

Received: 25 March, 2023

Received in revised form: 20  
October, 2023

Accepted: 26 October, 2023

Published online: 25 May,  
2024

**Keywords:**

Futures study

Resilience

Scenario planning

Situation analysis

Sport clubs

### ABSTRACT

This study aimed to investigate the resilience of sports clubs as business enterprises in the crisis caused by the Coronavirus epidemic. Thirty-five experts in the field of sports club management were interviewed in three rounds of interviewing. In the first round, the main questions for the interview was determined, and then two series of interviews were carried out with experts. Basis of the analysis in the second one was content analysis approach. A summary of the answers given to the sample and interviewing were conducted again. Kolmogorov-Smirnov and one-sample t-tests were used to measure the resilience. In the next study section, the propulsive forces identified with the Delphi technique and prioritized based on the degree of importance and uncertainty, and Micmac was used to write possible scenarios. Results indicated that resilience of sports clubs was not in a good condition in the presence of crises and challenges. The findings showed that poor management of sports clubs and low income were the most influential critical factors in resilience. A low partnership index with a total of 201619 had the highest impact. Organizations that responded quickly and actively and were user-friendly under adverse economic conditions were more likely to succeed.

## Introduction

The outbreak of coronavirus has been the most prominent global crisis since World War II. Coronavirus pandemic has posed a severe challenge to all societies, Because it has changed the social interactions of individuals and their lifestyles (Li et al., 2020). COVID-19 pandemic became widespread in December 2019 in Wuhan, China. Older people with acute medical problems, such as cardiovascular disease, diabetes, chronic respiratory disease, and cancer, are at greater risk of

**How to Cite:** Izadi, B., Khoshpaïam, M., & Khazaie, S. (2024). Resilience of Sports Businesses in the COVID-19 Crisis and Determining Scenario-based Strategies (Case Study: Private Sports Clubs of Kurdistan Province of Iran). *Journal of New Studies in Sport Management*, 5(2),1131-1144. doi: 10.22103/jnssm.2023.21272.1177



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Publisher: Shahid Bahonar University of Kerman

DOI: 10.22103/jnssm.2023.21272.1177



developing the coronavirus than others (World Health Organization, 2019). COVID-19 pandemic has forced authorities worldwide to take action to develop public safety measures. These measures and the imposition of restrictions led to the formation of a new type of consumerism (Ozili & Arun, 2020). From the beginning of 2020, one of the industries that were strongly influenced by health policies was the sports industry (Parnell, Bond, Widdop, & Cockayne, 2021). Main products and services of the sports industry heavily influenced by communities, such as sporting events and activities in sports venues (Babiak & Trendafilova, 2011). Naturally; the outbreak of this disease has caused fundamental changes in the structure of many industries. Policies and restrictions created a new trend in the market called controlled consumerism (Ozili & Arun, 2020). Controlled consumerism is a state in which business activities have limited resources, and fewer products and services are offered (Ozili & Arun, 2020). Given; the complex nature of the sports industry, whose services and products can bring people together, and the lack of policies of social constraint and distance, this industry can be a potential threat to increase the spread of the virus worldwide. Sport is one of the industries that has affected by the conditions created by Corona, and the usual sports, educational activities and related places have faced critical conditions. Assessing the socioeconomic effects of COVID-19 has shown that in addition to irreversible effects, economic losses in the sports industry are doubled (del Rio-Chanona, Mealy, Pichler, Lafond, & Farmer, 2020). According to the consumerist perspective, people limit and reduce access to products and services to meet their needs and desires (Stanton et al., 2020). Findings also show that the recession caused by an epidemic crisis affects past performance outcomes, skills and capabilities, and population rates (Kitsos & Bishop, 2018).

Since the crisis of 2008, economic resilience has become a familiar and significant term at the theoretical and experimental level, so this term has commonly used in academic research in the field of geographical and regional economics (Kitsos & Bishop, 2018). Resilience is not always a system of going back to the past or equilibrium, however give the possibility of adaptation and change in the current situation, as well as the possibility of survival and change in the future. Explaining resilience to threats is recognizing how social, economic, institutional, political, and executive capacities affect the increase of resilience and identifying its various dimensions in societies (Mitchell & Harris, 2012). (Csató, 2020) points out that the rankings and quotas provided as criteria for the participation and entry of athletes in the Olympic and World competitions take place in unfair conditions with the suspension of sports competitions. Therefore, he suggests that in order to carry out the games relatively after the end of the restrictions, quota acquisition must have been done again and new strategies and regulations should be developed to deal with these conditions.

(Parnell et al., 2021) examined the effects of Corona on sports and sports competitions and stated that sports club managers not currently prepared to face such a crisis. This study showed that Corona had caused fundamental changes in the overall performance of clubs and sports organizations. Also; risk assessment and proper management can better performed to deal with similar crises. (Timpka, 2020) stated that many countries have taken measures to deal with the crisis for the sports community. Swedish government, for example, has provided loans to affected sectors to support affected clubs and sports venues. NGOs have also volunteered to help. Study found that social responsibility and government assistance in the post-corona era are essential in the sports industry. According to the British Center for Health, the probability of getting affected by COVID-19 in sports clubs predicted to be 2.8%. at the same time; this figure is estimated at 11.2% in supermarkets and about 7.4% in restaurants and cafes. According to this detailed tracking study, only 930 out of 33,000 people developed COVID-19 in sports clubs.

(Toresdahl & Asif, 2020) concluded that the current focus on preventing the spread of Coronavirus is only through maintaining social distancing and other standard health measures. For this purpose, in order to coordinate with the current situation, sports activities should done by the presented health protocols, and it is better to use innovation in sports activities. (Hammami, Harrabi, Mohr, & Krusturup, 2022) stated in their research that corona has changed the general form of sports, and with the formation of home quarantine, the house is the main environment for sports activities, including the effects of corona and he has chosen the slogan "Staying Active at Home" for his research. Corona is also facing a financial crisis in the sports community, which has included the unemployment of coaches, managers and staff of sports clubs for several months, and compensating for this huge financial loss is another pandemic problem. (Nicola et al., 2020) stated that there is a huge crisis in

the sports industry, and this industry is struggling with many problems. In light of the issues raised in this study, we seek to assess the resilience of private sports clubs in the COVID-19 crisis and, with a futuristic approach, identify key factors and drivers in the future status of sports clubs and scenario development.

### The Activity of Sports Clubs in Iran

Surveys show that there are about 29,000 publicly and professionally active sports clubs across the country of Iran, and according to official statistics provided by the Ministry of Sports and Youth, 25,782 clubs have official licenses. About 150,000 people work as coaches (men and women), and on average, if each club employs at least ten staff (men and women) in different administrative ranks, they will have about 250,000 to 300,000 active staff. Consequently; they have been facing a shutdown for about 15 months due to the decisions of the Corona Prevention and Control Headquarters. As a result of the closure of the clubs, they lost their jobs and financial resources and became utterly unemployed.

On the other hand, it must also be borne in mind that this volume of unemployment, in the private sector alone, will cause social harm to the government, the family, and even society. If these 25,000 licensed clubs are considered as 25,000 business units, considering the costs in the club management sector as well as the lack of revenue generation and in the optimistic case, earning the minimum income will cause a long distance and a significant difference between the number of expenses and the amount of income of the clubs. On the other hand, about 6,000 clubs have been completely shut down or changed their use and jobs so far, which is one of the main reasons for the lack of rational and practical support based on expert work in the government. According to the latest reports of the Research Center of the Islamic Consultative Assembly in 1400, the current situation of sports clubs in the Corona period is as follows:

1. The closure and change of use of clubs have accelerated;
2. Countless coaches have been unemployed (estimated at 200,000);
3. Inactivity has increased (33.5%);
4. Club staff have been unemployed (estimated at 300,000);
5. Risk of developing severe corona disease has increased due to inactivity (according to the British Journal);
6. The willingness of the private sector to invest in sports has decreased significantly;

A critical and thought-provoking point is that the above cases show that the Iranian club management industry is at risk of bankruptcy. Of course, another point is the increase in the expenses received from the clubs' clients, which is due to the continuous closures and financing of the club. Another point is the lack of government support that causes the transfer of funds from the pockets of the people or their non-referral to the club. Pandemic of corona disease has caused a significant reduction in the population covered by active athletes in the championship field from 3.5 million to about 1 million (Ministry of Sports and Youth, Research Center of the Islamic Consultative Assembly, 2021).

**Table 1.** Statistics of Sports Clubs in Provinces across the country of Iran

Province	Number of Women's Clubs	Number of Men's Clubs	Number of Dual-purpose Clubs	Total
East Azarbaijan	119	503	583	1205
West Azarbaijan	154	285	236	685
Ardebil	52	193	145	390
Alborz	233	350	818	1401
Isfahan	250	405	808	1463
Ilam	79	207	112	398
Bushehr	137	490	178	805
Tehran	673	1324	4106	6106
Chahar Mahal Bakhtiari	43	152	260	455
Southern Khorasan	9	86	69	164
North Khorasan	40	45	83	168



Khorasan Razavi	320	619	818	1757
Khuzestan	199	524	358	1081
Zanjan	57	99	165	321
Semnan	63	153	137	353
Sistan and Baluchestan	58	95	43	196
Fars	125	344	543	1012
Qazvin	59	210	168	437
Qom	30	54	186	270
Kurdistan	90	146	177	413
Kerman	192	278	230	700
Kermanshah	80	281	196	557
Kohkiluyeh and Boyer-Ahmad	37	130	81	248
Golestan	36	68	137	241
Guilan	109	539	507	1155
Lorestan	148	356	113	617
Mazandaran	192	582	742	1516
Markazi	70	159	149	378
Hormozgan	50	284	101	435
Hamedan	164	44	99	307
Yazd	53	108	387	548
Total	3931	9113	12738	25782

- Minimum activity of 100 people in each club = 25782 people
- Minimum Capital of 200 million Iranian Tomans in each club = 5,156,400,000,000
- Minimum area of 150 meters for each club = 3,867,300 square meters of sports space
- Minimum active staff in each club ten people = 257,820

### Area of Study

Kurdistan province, with an area of 28,203 km in western Iran, adjacent to Iraq, is located between 34 degrees 44 minutes to 36 degrees and 30 minutes north latitude and 45 degrees and 31 minutes to 48 degrees and 16 minutes east longitude of the Greenwich meridian. It covers 1% of the total area of the country of Iran and is ranked 16th in terms of area. This province is limited from the north to the provinces of West Azerbaijan and part of Zanjan, from the south to Kermanshah province, from the east to Hamedan province, and another part of Zanjan province, and from the west to Iraq. According to the latest divisions of the country of Iran, this province includes ten cities, 29 towns, 31 districts, 1697 inhabited villages and 187 uninhabited villages. According to the 2016 population and housing census, the population of Kurdistan province was 1,603,011 people, of which 66% are urban, and 34% are rural. The relative population density equals 51.2 people per square kilometer (Statistical Yearbook of Kurdistan Province, 2016).

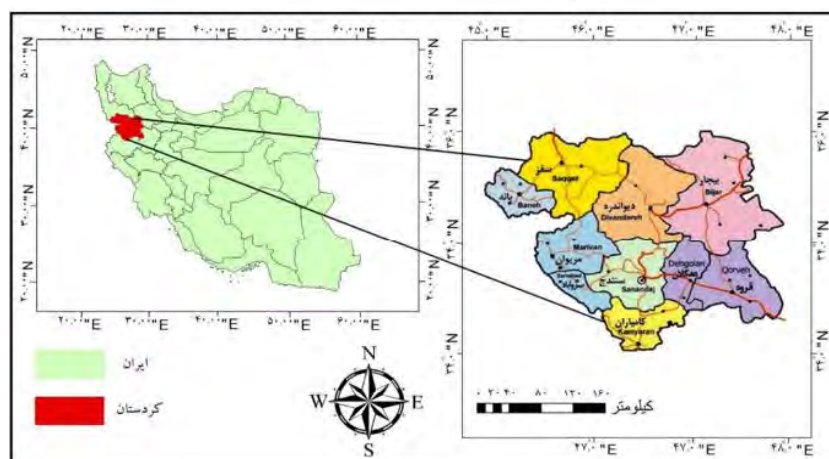


Figure 1. Location of Kurdistan province of Iran

In Kurdistan province, by the end of the first half of 2021, 413 private sports clubs are active, of which 177 clubs are active in both men's and women's (dual-purpose) sections, as well as 146 clubs for men and 90 clubs for women. In the meantime, the critical role of the private sector in promoting sports and encouraging citizens to increase their sports participation through marketing and advertising activities is undeniable.

### **Review of Literature**

There have been samples in the history of the world that have devastated all parts of the world until the COVID-19 pandemic, the crisis of 2008 considered to be one of the newest, longest, and most essential recessions of the capitalist era (Ratten, 2020). The leading causes of crises can be very diverse, and their effects vary depending on the type of organization (Narjoko & Hill, 2007). However; although crises occur cyclically, it will be very challenging to identify the dimensions and extent of their impact, and it is not easy for organizations to adapt to sudden and dramatic changes (Lee, Ginn, & Naylor, 2009). We are currently going through a difficult phase, because the crisis caused by COVID-19 is one of the most critical issues that has recently put pressure on sports at the international level (Ratten, 2020). Most organizations are affected by environmental uncertainty, environmental hostility, and complexity. Each of these environmental characteristics increases during a crisis. In a simple definition, resilience defined as the ability of a system to absorb turbulence and reorganize while changing, so that the system retains the same function, structure, characteristics, and feedback (Khandwalla, 1972). In the subject of resilience, sports subsystems must be designed that they can absorb internal and external risks and adapt to a highly evolving environment while maintaining stability and functions. Resilience is a system of popular ideas including sustainable ecosystems (Garmestani, Allen, Arnold, & Gunderson, 2014), engineering infrastructure (Tierney & Bruneau, 2007), psychology (Lee et al., 2009), behavioral sciences (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008) and reducing the risks of various disasters (Cutter et al., 2008). Uncertainty, entanglement, and impossibility of accurate prediction are the most essential features of today's world and the sports industry in the present century. It requires planning to solve the problems of private sports clubs. Scenario-based planning is a systematic way to think creatively and discover uncertain and impossible future (Goodwin & Wright, 2001). Planning style leads to relatively more reliable perspectives (Varum & Melo, 2010). Scenarios are one of the most widely used and valuable tools in future research projects and strategic planning for the future.

Among these, some significant challenges for sports organizations have been globalization, changing consumer demands, and digital transformation (Stegmann, Ströbel, & Nagel, 2019). In recent months, these types of organizations have faced an unpredictable situation that has shaken the foundations of the sport. The outbreak of COVID-19, which is a world pandemic disease, is still under study. In this regard, and with the need for accountability, the governments of most countries have forced to take measures and restrictions, which are necessary to control the virus that has changed the lives of many people, organizations, and institutions (del Rio-Chanona et al., 2020). Although; sport is an important part of the economic, health, and social levels, it has not been an exception to these restrictions. Sports sector has been particularly affected by the COVID-19 crisis in a way that has never seen before (Ratten, 2020). All physical activities, face-to-face sports, and group sports were abruptly and indefinitely restricted in many countries and often turned into home physical exercises (Hammami et al., 2022). As a result, sports organizations have forced to redesign themselves to provide quality service to users. Essential events related to the masses of people can contribute to the rapid spread of the disease (Memish et al., 2019), just as physical contact between athletes and physical proximity between fans can be a risk factor for the spread of the virus. Hence; governments have forced to introduce and maintain social and motor constraints to control the spread of the disease. In this regard, the sports sector was forced to close venues, ban travel, and cancel sports competitions and leagues (Stanton et al., 2020).

Thus, sports clubs forced to re-establish themselves to continue their sports and social activities. This trend accompanied by adaptation and crisis management, in which sports clubs must focus their efforts on maintaining the quality of service they provide to their users and athletes. To this end, it is necessary to take risky, innovative, and preventive measures (Ratten, 2020). Crises or adverse

conditions can provide opportunities to grow and gain a competitive advantage over competitors, known as the "creative demolition process" (Sharma, Leung, Kingshott, Davcik, & Cardinali, 2020). Creativity and innovation can be encouraged (Mallor, García Olaverri, Gómez Fira, & Mateo Collazas, 2008), and recession can also be seen as an opportunity to generate a competitive advantage. This can be expressed by the phrase "the necessity of individual reason." In this regard, sports organizations need innovative and preventive behaviors to create value, gain competitive advantage and maintain pre-crisis performance levels. In addition, an active organization must conduct an analysis of external and internal environment to develop pre-competitive strategic measures. Many authors have analyzed the active and dynamic nature of the organization and its relationship to ultimate performance in critical situations (Tubagus, 2018), (Alonso-Almeida, Bremser, & Llach, 2015). Crisis can create opportunities in the market, the formation of which, of course, is best due to the creation of innovative and avant-garde thinking (Eggers, 2020). In order to achieve the goals of the organization lying at the heart of the strategic behavior of managers, it is therefore essential to know the organizational factors and variables that cause strategic thinking in managers and employees (Nazari et al., 2022).

In this regard, the gaps in the competition environment must be bridged from a creative and active perspective to achieve and maintain competition in the sports sector (Ratten, 2020). In this regard, organizations with a fast, active, and user-friendly response under adverse economic conditions have a better chance of success (Laitinen, 2000). However; Before and during the crisis, this case has been paid less attention in non-profit sports organizations. Therefore; there is a research gap in sports and organizational literature in this area.

## **Methodology**

This study adopts an exploratory research design of private sports clubs' industry. Qualitative research was conducted through in-depth interviews with experts in the field of sports management and active members of Iranian society. Due to a better knowledge of the economic, cultural, and sports conditions of the studied province, about 50 percent of samples selected include expert management professors working in the universities of Kurdistan province. Since the virtual world provides the possibility of benefiting from the opinions of a wide range of experts regardless of geographical distance, the interviews were conducted in two ways. The questions extracted from the first round were sent to the experts both in written form and in the form of an audio file, and they were asked to answer the questions in any way they wished, either in the form of an audio file or in the form of a written comment.

In general, three rounds of questioning were conducted. In the first round, the main questions for the interview were determined, and then two series of interviews were conducted with experts. The basis of the analysis in the second was thematic content analysis. After the second round, a summary of the answers was given to the sample, and questioning was done again, which was the basis for decision-making based on the output of the third round of analysis criteria.

In the next section, by studying and reviewing articles and research related to the subject of resilience, the most critical dimensions of resilience collected. At this stage, an attempt made to collect resilience indices at three levels: macro level: Good policy and governance - GDP or per capita (Briguglio et al. 2009) ; variables of the overall resilience index of the World Economic Forum), national level: United States Agency for International Development (USAID) and the World Economic Forum's Approach, and regional level: Yorkshire Index, (Adger, Hughes, Folke, Carpenter, & Rockstrom, 2005).

Macro-level indicators of resilience also have three general categories of institutions (rules and regulations), resources (tangible and available assets), and facilitators (tangible assets and social patterns), which we will access by studying the resources of the United States Agency for International Development. Also, using the three stages of constructing the USAID Resilience Index and the Angeon and Bates Resilience-Vulnerability Model, an attempt was made to design a research questionnaire for interviewing specialists and experts (Bates, Angeon, Ainouche, 2014). In the next stage, by designing a questionnaire, 35 people who specialized in sports issues were selected and questioned. In this regard, to calculate the validity of the research tool, it was calculated by Cronbach's

alpha with the approval of academic experts. Also, to calculate the reliability of the research tool, the method of intra-subject agreement and the agreements reached between the questions of the questionnaire were used with the participation of 3 specialists and experts being aware of the subject.

For the validity of the research, the collaborative method of research and adaptation by members was used (Creswell & Miller, 2000). For this purpose, the participants were simultaneously helped in analyzing and interpreting the data, and two experts reviewed the first stage of the analysis process and the obtained categories. Also, in order to confirm the reliability of the research, the recoding method was used by another researcher. For more certainty, Scott's formula was used to determine reliability. For this purpose, 10% of pages along with operational definitions were given to another researcher for coding. Coding of categories and subcategories as well as indicators were done according to the guidelines (Creswell & Miller, 2000). The percentage of agreement between the two coding was calculated through Scott's reliability coefficient. If the agreement coefficient between them is more than 70%, it can be said that there is agreement between the coders (Scott, 1955). Since Scott's reliability coefficient is more than 0.85%, these numbers show the high reliability of the research. In order to analyze the data of this study, Kolmogorov-Smirnov, Friedman, and one sample t-test in SPSS software used. In the other part of the research, future study techniques such as scenario planning, and analysis of propulsive forces according to the opinion of specific experts were used. Then these factors are prioritized based on the degree of importance and uncertainty, and the most critical factors are also identified (Table 7). In order to write possible scenarios, two groups of influential and influential variables have used.

## Results

The Kolmogorov-Smirnov test used to determine the level of significance of the data. If the value of the significance level is greater than the error value, the null hypothesis will be accepted. If the significance level value is less than the error, the research hypothesis will be accepted.

**Table 2.** The result of the Normality Test for the Distribution of Resilience Dimensions in Sports Clubs in Kurdistan Province

Dimensions	The Significance Level	Error Value	Conclusion
Physical-Infrastructural	0.195	0.05	Normal
Economical	0.288	0.05	Normal
Managerial	0.241	0.05	Normal
Sociocultural	0.194	0.05	Normal
Health	0.189	0.05	Normal

As seen in Table (2), the significant number for the studied variables is all greater than 0.05. Therefore; parametric statistical tests will used to test the research hypotheses.

**To what extent have the physical infrastructure, economic, managerial, sociocultural, and health dimensions been influential in the resilience of sports clubs?**

A one-sample t-test should use for testing. As seen in Table (3), the number of sample members, the mean of the data, and the standard deviation of the reported data, as well as the level of significance and the value of T also mentioned.



**Table 3.** Results of One Sample T-test on Resilience Indices in Sports Clubs of Kurdistan Province

Dimensions	Test Value= 4					
	M	SD	T	Sig	Confidence Interval of 95% the Difference	
					Lower	Upper
	0.30383	5.971	0/000	0.2460	0.1782	0.3582

**Table 4.** One Sample T-test on Resilience Dimensions in Sports Clubs of Kurdistan Province

Dimensions	N	M	SD	df	T	Sig	Confidence Interval of 95% the Difference	
							Lower	Upper
							Physical-Infrastructural	35
Health	35	3.472	0.5541	34	6.326	0.000	0.3229	0.6225
Sociocultural	35	3.431	0.5537	34	5.783	0.000	0.2821	0.5815
Economical	35	3.740	0.6290	34	8.734	0.000	0.5708	0.9110
Managerial	35	3.268	0.5503	34	3.614	0.001	0.1194	0.4170

According to Table (4), the value of t obtained from the test in all the studied components is 1.96% higher than the critical value, and as a result, the null hypothesis rejected and the first hypothesis accepted at the 99% confidence level.

#### **Friedman Test and Measurement of the Most Effective Resilience Characteristic in Sports Clubs**

In this section, we use the Friedman test to see which of the characteristics of the five factors in the questionnaire will have the most impact. In order to obtain the rank of importance of each of the mentioned dimensions, the Friedman test used to measure and prioritize the dimensions of resilience. The result given in Table (4), which includes the average rank and priority of the desired index. The results of the Friedman test show that physical-infrastructure resilience and economic resilience with coefficients of 3.30 and 3.17 as the most critical aspects of resilience from the perspective of experts are the priority, and other dimensions in the presented order in Table (6) are essential and they placed in the following priorities. The result of this test, with a value of 6.449 and at the level (sig = 0.000), is significant.

**Table 5.** Significance of the Friedman Test in terms of Prioritizing Factors Affecting Resilience in Sports Clubs in Kurdistan Province

	Dimensions
N	35
Chi-Square	6.449
Df	4
Asymp.Sig	0.001

**Table 6.** The result of the Friedman Test to Prioritize the Factors Affecting Resilience in Sports Clubs of Kurdistan Province

Dimensions	N	M	Ranks	
			Rank	Mean of Ranks
Physical-Infrastructural	35	3.39	1	3.30
Health	35	3.30	3	3.07
Sociocultural	35	3.10	5	2.72
Economical	35	3.38	2	3.17
Managerial	35	3.11	4	2.74



Therefore, the characteristics of each dimension were ranked based on their importance and effectiveness.

## Resilience Crisis Scenarios in Sports Clubs in Kurdistan Province

### Specifying the Main Topic of the Scenario

Using scenario planning to evaluate strategies is one of the critical applications of this method. By placing a strategy in front of scenarios, it becomes possible to gain insight into the effectiveness of the strategy in a range of possible situations and to make the necessary modifications or contingency planning; in the scenario-based planning process, the most crucial step in identifying future uncertainty related to the focal issue (Mallor et al., 2008). Scenario planning helps to plan strategies more accurately and for unexpected situations.

### Identifying Key Forces about the Sports Club Resilience Crisis

Identifying the critical issue or decision is the first step in scenario planning, and making a list of key factors affecting the issue is the second step. In this study, using the questionnaire design, interviews with experts, and also using the Delphi technique, the required data collected. At this stage, experts and elites asked to identify the most critical factors in the crisis of club resilience within the next ten years. Finally; according to the type and importance of the subject, 31 variables were determined (Table 7).

### Specifying propulsive forces

After the critical factors have been identified by the Delphi method, in the third stage, we will identify the influential driving forces. At this stage, by creating a matrix of key factors, the driving forces identified among the key factors. The 31 factors identified by the elite set in a 31-by-31 matrix. To identify the driving forces among the key factors, the cross-impact method has used with the MICMAC software. In a cross-matrix, the sum of the row numbers of each factor shows the amount of influence, and the sum of the columns of each factor shows the degree of its influence from other factors. Based on 708 values calculated in the initial matrix of cross-effects by elites, and experts, 183 cases with high impact, 142 cases with medium impact and 68 cases with low impact, 92 cases were assessed as ineffective.

**Table 7.** Direct Impact and Effectiveness of Factors (MICMAC software output)

N°	VARIABLE	TOTAL NUMBER OF ROWS	TOTAL NUMBER OF COLUMNS
1	Social	54	59
2		38	78
3		45	52
4		52	67
5	Increasing the immigration opportunities for athletes and coaches	50	59
6	Ability to adapt to tensions and disturbances	64	61
7	Lack of a healthy competitive environment between sports clubs	48	74
8	People's pessimistic attitude toward the private sector in sports	56	78
9	Low level of awareness of people about sports and physical activity	51	80
10	Low social security	38	52
11	Institutional	34	58

12		Educated trainers and volunteers	43	54
13		Strict and cumbersome laws of government institutions in establishing and managing sports venues	35	48
14		Lack of appropriate policies to increase public awareness in the field of sports and physical activity	51	56
15		Dissatisfaction with the performance of relevant institutions in sports	56	45
16		Weak responsibility	48	35
17		Weak management of sports clubs	65	67
18	Economical	Financial and technical incentives and insufficient banking facilities	62	52
19		High costs of maintenance and repair of sports facilities	59	3
20		Low income	65	37
21		High cost of setting up and establishing sports clubs	63	2
22		Poverty	63	59
23		Unemployment	60	56
24		Inflation	57	21
25		Low capability and capacity for compensation	57	61
26	Environmental	No dispersion of sports clubs	37	61
27		Lack of coverage and service of clubs in many sports	47	53
28		Failure to use up-to-date and worn-out equipment and facilities in sports clubs	63	69
29		Current status and labor law and insurance	11	13
30		Lack of urban adaptation to encourage citizens to play sports	19	27
31		The emergence of underground and illegal sports clubs	47	1
<b>Totals</b>			1538	1538

According to the research findings, the variables of poor management of sports clubs and low income, with a score of 65, had the highest impact on other variables. Also; according to Table (7), the variables of low level of awareness of people about sports and physical activity in sports clubs, weak social capital, the pessimistic attitude of people towards the private sector in sports, and not using up-to-date equipment and worn-out places and equipment in sports clubs, with scores of (80), (78), (78), (69), respectively, were the most affected by other variables.

### Status of Indicators on the Output of MICMAC Software

Depending on the policies that planners use, these variables can be upgraded to influential variables, determinants, or goal or risk variables. Among the set of variables in Table (7), it should be said that the high-cost index of setting up and establishing a sports club with a total of 167792 calculated line values has the most indirect effect on sports club resilience in the framework of a future study. Also; the variables of low income and poverty with 165689 and 162264 line points, respectively, had the highest indirect impact on other variables. Among these, the variables of low social participation, weak social capital, lack of sense of spatial belonging, lack of use of up-to-date equipment, and worn-out places and devices in sports clubs with 201619, 195419, 172019 and 170481 values, respectively, the calculated columns had the highest effect of other variables.

Also, in terms of impact matrix and potential direct and indirect dependence, it can be said that the high-cost index of setting up and establishing sports clubs, in the first place, direct impact and non-use of equipment and outdated places and devices in sports clubs rank first in indirect influence. Also; the variable of weakness of social participation is in the first rank of the most indirect dependence,

and the variable of high cost of setting up and establishing a sports club is in the first rank of the most direct dependence; Also, the variables of low income and poor management of sports clubs are in the next rank of direct impact.

## Discussion and Conclusion

The output of this article is highly consistent with the facts surrounding the resilience of sports clubs during the coronavirus or other crises. So, in the framework of prospective studies and scenario approach, the general state of resilience can be measured using MICMAC software. Also, the high percentage of fill factor (80%) in the research variables confirms the validity and reliability of the research tools at an almost high level. For this purpose, the present study, while measuring the direct effects of variables, has included the dimensions of effectiveness, indirect and potential dependence of variables in the spatial arrangement of variables, and the formulation of fundamental driving forces and final scenarios.

The current situation of sports clubs in the Corona period shows the change of acceleration in the use of clubs. Many sports coaches have been fired. The risk of severe corona and non-communicable diseases has increased due to inactivity. Since the outbreak of this disease, 6,000 clubs across Iran have been closed or changed their use, and the population of organized athletes has decreased.

The analysis of the obtained data also confirmed that the resilience in sports clubs was unstable in the conditions of the Corona crisis. So, the continuation of the current situation would lead to a disastrous scenario in sports clubs, including the weakening of social capital, the aggravation of physical injuries and public health, and the reduction of social participation in sports. From an economic perspective, which is the primary motivation for the establishment and development of businesses and enterprises (Saaty, 2004), the continuation of these conditions for sports clubs means that the industry in Iran is directly at risk of financial bankruptcy. In developed countries, including Germany, according to the German Federal Reserve (Deutsche Bundesbank, 2020), a part of the European Central Bank system, and according to the COVID-19 anti-pandemic guidelines in exchange for the closure of sports clubs in the country they received a loan equivalent to 60% of their last year gross profit. This is the cost that these countries pay for the survival of sports businesses that guarantee the health and well-being of their people. According to the Imperial College London (2020), if there is a coronavirus in the pool water, the chlorine in the water with a PH of 7 to 7.7 can completely deactivate it within 30 seconds. According to the US Centers for Disease Control and Prevention (CDC), the center has not received any reports of coronavirus transmission through pool water, hot tubs, and hydrotherapy pools. Therefore; the hypothesis of virus transmission through pool water lacks scientific validity. This center goes on to say that indoor pools can continue their activities with social distancing, using fabric masks, and proper ventilation with Merv-13 filtration.

**Table 8.** Status of Key Propulsion Forces in Sports Club Finances in Horizon 2031 (in 10 years)

<b>Key Factor</b>	<b>Middle Scenario</b>	<b>Disaster Scenario</b>	<b>Optimal Scenario</b>
People's income status	Continuation of the current unfavorable situation and low-income and high inflation	Further inflation and income stability	<b>Improving economic growth, rising incomes, and declining inflation</b>
Weak management of sports clubs	Continuation of the current situation and limited attention to issues related to the management of sports clubs and their role in the growth and development of resilience	Limiting the duties of sports club managers and not paying attention to their role in improving resilience	<b>Designing a specific structure of sports clubs, improving management skills, decision making and risk management, public relations development</b>
Use of up-to-date and worn-out equipment of places	Continuation of the current situation regarding worn-out equipment	Acquired abnormalities and chronic injuries as a result of repeated use of	<b>Frequent visits to places and equipment, approval and allocation</b>

and devices in sports clubs		non-standard equipment, rising treatment costs, and irreversible injuries	<b>of necessary funds for the renovation of places</b>
Financial and technical incentives and banking facilities	Continuation of the current unfavorable situation in the payment and provision of financial incentives	Not paying attention to the issue of financial incentives and not paying or paying with heavy collateral	<b>Reducing barriers to the repayment of incentives and breathing loans to sports club managers</b>
Inflation	Continuation of the current unfavorable situation of inflation and limited attention to the vulnerable	Further increase in inflation and decrease in purchasing power of citizens and lack of planning to improve the situation	<b>Planning to improve the situation and reduce inflation, in the field of policy-making, paying attention to the critical issue of inflation expectations and paying attention to the reasons and roots of occurrence and strategies to reduce inflation</b>
Scattering of sports clubs	Continue the current situation	More concentration of sports clubs in city centers, increase in urban traffic, decrease in services, increase in rent and costs and club fees	<b>Granting land for sports use in urban areas with low sports facilities, special facilities for decentralization</b>

The findings of the present study showed that the resilience of sports clubs in Kurdistan province is below average in terms of experts, which indicates the unfavorable conditions of sports clubs in terms of resilience. Findings showed that the economic index has the highest average of 3.740 and the lowest average of 3.109 and 3.268, which belong to social and managerial incapacities, respectively. Considering the average value of resilience, which is below the theoretical average of 4, it can say that the resilience of sports clubs in Kurdistan province is not in good condition, and the elites and experts of sports clubs are dissatisfied with this regard. In the futuristic and resilience scenario of the sports club of the present study, it tried to use 31 indicators and the model of MICMAC futuristic studies so that the desired model for the future of sports clubs' resilience in Kurdistan province could offered. Therefore; the effective indicators on the future of resilience performed in the framework of a matrix of  $31 \times 31$  and 31 variables. Then by weighing them, the results of the interaction analysis matrix were calculated. Finally; by evaluating these factors, six key factors identified as having the most positive and negative effects on resilience. In this regard, according to the scenario table, attention to economic development, improving the level of managerial knowledge in sports clubs, granting facilities and financial incentives due to the high capacity of sports clubs in community health, government planning to raise awareness of community to adapt global tensions are the basis for achieving the desired scenario with a future research approach. Mandalizadeh et al. (2022) point out that after the COVID-19 pandemic, it seems consideration of crisis management, sports knowledge, and technology through participating in the workshop would be necessary to improve the skills and techniques, and abilities of managers for encountering the crisis. If we want to close sports clubs according to the translated protocols of developed countries, it is not a bad decision, the wrong decision is that we do not have a way to compensate for the damages and their incomes. Based on this, closing sports clubs does not seem to have been the right policy. It is essential to note that in this study, exploratory factors not considered barriers to reparation but as factors influencing or influencing resilience. Therefore; it suggested that ability to adapt to training in a normal situation is important. Scenario planning helps managers to more profound broader perspectives on the future, as this affects their organization and provides a deeper vision than what is available in the analysis of the external environment.



## Acknowledgments

We appreciate all the participants and club managers who helped us in this study.

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