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# CHALLENGES AND OPPORTUNITIES OF SPORTS INDUSTRY DURING THE COVID-19 PANDEMIC

## *Retos y oportunidades de la industria del deporte durante la pandemia del covid-19*

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**ABSTRACT:** This paper aims to analyze the role of the Iranian sports industry, in the face of COVID-19, and how it faces the possibility of renewing itself and becoming a reference sector within the country's economy. The method of this research is qualitative-quantitative, and the method of data collection is the Delphi method. There are multiple social damages that have been obtained with the Corona virus, and it is the fitness industry that can help to diminish these obstacles that have arisen. Findings show that in this pandemic context, areas such as sports clubs, as well as the organization of sporting events or sport facilities, among others, are most at risk. Accurate identification of the effects of the coronavirus outbreak on the sport industry can lead to the process of adapting the sport industry's activities to the current situation and prepare sport managers and society to cope with similar events in the future. This paper tries to provide strategies to the fitness sector, both economic and social, in the face of the exceptional health situation that the world has experienced. Strategies such as subsidies, promotion of sports culture, etc.

**KEY WORDS:** Sports Management, Epidemic, Sports Business, Delphi.

**RESUMEN:** *Este trabajo pretende analizar el papel de la industria deportiva iraní, ante la COVID-19, y cómo afronta la posibilidad de renovarse y convertirse en un sector de referencia dentro de la economía del país. El método de esta investigación es cualitativo-cuantitativo, y la recogida de datos es a través del método Delphi. Son múltiples los daños sociales que se han obtenido con el Coronavirus, y es la industria del fitness la que puede ayudar a disminuir estos obstáculos que se han presentado. Los resultados muestran que, en este contexto de pandemia, áreas como los clubes deportivos, así como la organización de eventos deportivos o las instalaciones deportivas, entre otros, son los de mayor riesgo. La identificación precisa de los efectos del brote de coronavirus en la industria del deporte puede conducir al proceso de adaptación de las actividades de la industria del deporte a la situación actual y preparar a los gestores del deporte y a la sociedad para hacer frente a eventos similares en el futuro. Este trabajo trata de aportar estrategias al sector del deporte, tanto económicas como sociales, ante la excepcional situación sanitaria que se ha vivido en el mundo. Estrategias como las subvenciones, la promoción de la cultura deportiva.*

**PALABRAS CLAVE:** *Gestión del deporte, Epidemia, Negocio deportivo, Delphi*

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## 1. Introduction

Today, the sports industry as an economic unit in the production and consumption of sports goods and services and economic development of different societies and is one of the factors influencing the growth of the national economy and one of the most lucrative industries in the 21st century (Rossi, Breuer, & Feiler, 2019). Today, sport goes beyond just physical activity and has a relatively high development in different countries and as an economic sector of various dimensions, plays a key role in the production and consumption of sports goods and services and economic development of different societies. To the extent that sport is considered as an important trade and industry in most countries and the authorities in developed countries consider sport as an important trade and industry along with other industries. Sport in the United States is an industry in which more than $ 140 billion has been invested (Inoue, Heffernan, Yamaguchi, & Filo, 2018).

In recent years, factors such as international sanctions, declining crude oil exports, devaluation of the national currency, etc. as external factors have affected Iran's sports industry and this has caused that this industry does not develop as fast as other industries (Negin Taji, Javanshir, &, Chagar, 2017). On the other hand, the Coronavirus (COVID-19) epidemic has affected all aspects of the lives of people around the world. According to the International Monetary Fund (2021), the COVID-19 pandemic has launched a worldwide shock, has plunged public health into emergency, has killed thousands, and has plunged the global economy into the deepest recession, sport is no exception to this rule. Social distancing to limit the spread of COVID-19 affects the schedule of individual and team competitions in various sports (from the athlete himself to media coverage and advertising, etc.). In addition, to the closure of leagues and sporting events around the world.

### 1.1. Sport Industry in Iran

Sport as an industry creates a variety of innovative products and services. This is a market industry in which the services required by customers are in every way related to sport (Smith, 2014). The sports industry plays an important role in the development of the economy by providing advanced and accessible facilities, equipment, goods, services and financial support. Moulin (1983) first mentioned sport as an industry; He points out that any professional or non-professional sports activity that increases the added value of sports goods and services is considered a sports industry. In general, the sports industry is a set of activities related to the production and marketing of sports goods and services that play a role in promoting added value (Pitts & Statler, 1996). Researchers' attention to the discussion of the sports industry over the past fifty years shows the economic growth of this industry. Echenfelder and Li (2011) in a general and comprehensive model divided the sports industry to the two parts, the first part includes the production of sports activities and the second part support the first part and include supervising sports offices and institutions, manufacturers of sports goods, sports facilities and buildings, sports media, sports management companies, councils and officials. Influential components and

areas in the sports industry can be media tools including television, radio, newspapers, magazines, etc. (Hosseini et al., 2013) sport Tourism (Prayag & Ryan, 2011; Gozalova et al., 2014), sports professional clubs (Debura, 2007), social, economic, political-legal factors, environment, culture and international environment (Saffari & Gharah, 2016), broadcast television and attract sponsors for professional and championship sports (Lee & Rose, 2012; Abratt, Clayton & Pete, 2015) among many other areas.

The sports industry in Iran includes a variety of sports activities and includes various individuals, organizations and companies that are somehow related to these activities. Among the influential components on the sports industry in Iran can be found in social networks and mass and national media (Ghasemi & Kashkar, 2011; Goodarzi et al., 2015; Irajpour et al., 2016); sports clubs, sports places and fitness, the size of the market of goods and sports products (Seyed Ameri & Mohammad Alaq, 2012); training of experts and professional managers, government financial support for sports and culture-making (Shahbazi, Shabani, Moghaddam & Saffari, 2013); Accessibility, quality, safety and beautiful design of sports facilities and infrastructure (Ehsani et al., 2014); social, economic, political-legal factors, environment, culture (Saffari & Qarah, 2016); private and public sponsors and standard sports stadiums (Shabani, Rezaei Sufi & Farahani, 2014; Dosti, 2016). Aghaii Shahri, Memmari and Saadati (2018) while recognizing the areas and infrastructure of Iran's sports industry pointed out to sports places and facilities, sports organizations, business, event, tourism, human resources, goods and services, marketing, sports medicine, economic activity, government and fitness. But the most complete and comprehensive model of Iran's sports industry was presented by Khosromanesh et al. (2019). They designed the Iranian sports industry in a three-part model, sporting activities, product and promotion as the main categories and eight other categories as backer: (1- government institutions; 2- consultants; 3- educational centers; 4- income-generating supporters; 5- cultural creators; 6- sports places and fitness; 7- sports goods and equipment; 8- media)

### 1.2. Effects of Covid-19 on the sport industry

The impacts of Covid-19 on health, education, financial and business institutions around the world continue, and the sports ecosystem is no exception. The COVID-19 has had a negative influence on the sports industry's advertising revenue, according to Consumer News and Business Channel (CNBC) (Young, 2020). And analysis shows that the National Basketball Association (ANBI), the National Hockey League (ANC) and the Major League Baseball (AML) in the United States have spent $1 billion in advertising for companies that have been destroyed by the COVID-19. For the first time in nearly two decades, the sports world has lost $160 billion, the New York Times reported (Futterman, Draper, Belson, & Blinder, 2020). Due to the lack of sporting events, this will have negative consequences and the loss of more opportunities.

This epidemic has caused various sports in Iran to be closed or semi-closed. Professional leagues in various disciplines have all been closed, and public sports clubs and gyms have

been closed. On the other hand, with the closure of schools, basic sports have also been closed. The closure has raised concerns about the sports business (Rizvandi, Sadegh, Jalilvand, 2020). In the current situation of the country, and especially considering that all sports clubs in the field of health (about 28,000 clubs) in the country, most of which are private clubs, have been closed, business and affairs. The salaries of nearly 100,000 coaches, assistant coaches, salon managers and service staff, etc. have been jeopardized due to closures and non-realization of fees received, and in professional clubs, the risk of complete cancellation of competitions or modification of contracts with there are also sponsors and player contract payments (Norouzi Seyed, 2020). In addition to the cases mentioned by the business sector related to the production and provision of services, sports goods and equipment also face many economic problems during the COVID-19.

In this situation that has been going on for some time now, the pandemic has taught global society that there are certain values and emotional aspects that should never be lost. Emotional stability is essential to face all the alien and negative situations with which we have to coexist, aspects such as resilience, well-being and emotions are key to confront this situation. Nair et al. (2020) in their paper analyzing the pandemic context, reinforce that aspects such as resilience and subjective well-being are essential to combat COVID-19. Taking these variables to the business environment, and as tools to combat this pandemic that has done so much damage to the global economy, their application contributes to a positive market recovery. According to Salisu et al. (2020), within this business context, resilience is the ability of the entrepreneur to adapt to change. Businesses live in a continuous resilience, as it is a very changing environment influenced by various factors that force entrepreneurs to adapt and strengthen themselves in order to move forward. Liu et al. (2020) refer to resilience, classifying this concept as necessary, allowing companies, faced with health challenges such as the one experienced, to cope with them and combat the social effects that may arise. These same authors, in their paper, argue that one of the activities that COVID-19 has indirectly promoted is entrepreneurship from its different aspects, since this pandemic and its consequences have forced the business sector to renew itself and recycle its knowledge, and present opportunities for entrepreneurship, since it allows the creation of innovative and creative solutions for companies.

Although it is a recent situation, there are also other studies that analyze the impact of COVID-19 on the sports industry (Dwyer, Pasini, De Dominicis, & Righi, 2020; Mohr, Nassis, Brito, Randers, Castagna, Parnell, & Krustrup, 2020). These studies try to analyze how this new epidemic has affected this powerful industry and how it faces a great challenge, in which through different scenes and constant actions it can become an opportunity for the sector. In the present study, researchers examine the extent to which the spread of the COVID-19 has affected the sports industry; this impact can be negative and pose challenges from various aspects; on the other hand, it can bring positive and opportunities for individuals, organizations and companies in this field.

## 2. Objectives

This section sets out the objectives of this paper, in order to try to establish the points to be followed. The objectives that have been established are:

-To understand the effects of the Coronavirus pandemic on the fitness industry.

-To establish practical implications for sports management in this context, and to be able to reduce the negative effects of COVID.

-To understand the extent to which the pandemic affects each established area of the fitness industry.

-To analyse through a qualitative-quantitative methodology the situation of the fitness industry in the aftermath of the pandemic.

## 3. Method

### 3.1. Fuzzy Delphi method

The Delphi method (Dalkey & Helmer, 1963) is a research method that seeks to establish consensus on a complex problem amongst a group of experts in a particular field. Experts' opinions are converged, typically via several rounds of questionnaires (Okoli & Pawlowski, 2004). The approach is well-established in studying sport organizations (Abdolmaleki et al., 2020; Abdolmaleki et al., 2018; Anderson et al., 2019; Costa, 2005; Saeidi Majd et al., 2021). The Delphi method is an effective process of establishing consensus expert opinions in a given field. However, the method does have weaknesses including: 1) multiple survey cycles are time consuming for both participants and researchers; 2) multiple surveys are expensive to administer and analyze; 3) repeated expert cooperation is required before consensus emerges, needlessly increasing the difficulty of coordination and communication; 4) lack of complete consensus amongst experts makes it easy to misinterpret the collective position, especially for complex contexts; 5) the analytical process can weaken or exclude minority opinions (Hsu & Yang, 2000; Ishikawa et al., 1993).

To overcome these limitations, Murray et al. (1985) proposed integrating fuzzy set theory (Zadeh, 1965) with the Delphi method. Fuzzy set theory enables representation of the uncertainty and imprecision in real world systems. The key underlying principle of fuzzy set theory is that while some sets have sharply-defined inclusion criteria, that is not the case in many applications and it can be useful to consider set membership along a continuum from totally not a member to totally a member (Zadeh, 1965). Thus, fuzzy theory has capacity to represent vague or imprecise data, directly incorporating a measure of uncertainty (Naghadehi et al., 2009; Kahraman et al., 2004). Applied to the Delphi method, membership degree establishes the membership function of each expert's perspective on each study element. Further refining the Fuzzy Delphi method, Ishikawa

et al. (1993) introduced the max-min algorithm and fuzzy integration, which allow compilation of expert opinions into fuzzy numbers.

Consistent with previous Fuzzy Delphi studies, we deployed a four-step approach to data analysis. In the first step, we established an initial list of sport industry areas which could be affected by COVID-19 and drawing candidate factors from the academic literature. During this review, we identified 3 areas (sports activities section, sports products section and sports promotion section) as potentially effective in Iran sport industry. As an initial filtering step, five sport management experts (who are faculty member in sport management with publications and practical experiences in sport industry) evaluated each of the areas. According to the current situation in the country, experts suggested that some external factors (such as international sanctions, the devaluation of the national currency and etc.) could worsen the situation of the Iranian sport industry during the COVID-19 pandemic, so they suggest in this study, these factors were examined. By summarizing their opinions, we obtained 5 main research questions. All these questions were agreed upon. All items were retained.

The questions are:

1) What parts of the Iran's sports industry are at risk with the COVID-19 epidemic?

2) What opportunities have arisen for the sports industry with the COVID-19 epidemic?

3) What are the consequences of prolonging the course of this disease in the sports industry?

4) What external factors can add to the deteriorating economic situation of Iran's sports industry in this period?

5) What are the tactics needed to reduce the negative effects of the COVID-19 epidemic?

The second step involved collecting expert opinions of the importance of each question.

### 3.2. Data collection and Participants

Arguably the most important decision within a Delphi study is the selection of panelists. To be included in the theoretical sample, individuals must have the following characteristics:

1- At least a university degree, master of sport management or related field to sport industry.

Table1. Characteristics of theoretical sample

| Characteristics | | Number | Mean | Standard division |
|---|---|---|---|---|
| **Age** | Under 40 | 3 | 51.22 | 11.18 |
| | 40-50 | 7 | | |
| | 50-60 | 5 | | |
| | More than 60 | 3 | | |
| **Sex** | Men | 14 | - | - |
| | Women | 4 | | |
| **Years of experience** | 5 years | 3 | 11.27 | 5.34 |
| | 5-15 | 10 | | |
| | More than 15 | 5 | | |

2- At least 5 years of management or/and marketing experience in sport industry.

Diverse participants with disparate values are generally preferable (Hussler et al., 2011). 18 invitees accepted our invitation. The panelists all had expertise in sport management and marketing. This number was consistent with the widely accepted size of 12–20 participants for a Delphi panel (Dalkey et al., 1970; Abdolmaleki et al., 2018).

Interview was the main method of data collection. Through in-depth interviews, participants were also asked to comment on the effects of the coronavirus outbreak on the sporting industry dimensions. Individual's participation in this study was completely optional and they participated in the research with complete satisfaction. The number of interviews continued until theoretical saturation was reached. Because this research was done during the corona virus epidemic, also due to the observance of safety and health points, most of the interviews (14 interviews) were done by phone and online using social pages, and 4 interviews were conducted in accordance with health protocols in person. Initially, researchers interviewed with participants in the study in person; however, after the outbreak of coronavirus intensified, the interviewers continued with individuals through virtual networks and the use of various applications and conducted the interview process. The interview began by describing the demographic characteristics of the interviewees and then the main research questions were presented. Finally, the interviewees were asked the open-ended question like, "Do you think there is anything you have not done in this area?".

The duration of the interview was between 35 and 70 minutes, which in the present study, the average interview with the samples was 30 minutes. It is necessary to mention that to record the information obtained from the interviews, in addition to taking notes, a special sound recording device was also used. Due to ethical issues, the researcher obtained permission from the interviewees to record the interview prior to the start of each interview.

The place of the interview was also the place agreed upon by the interviewee and the researcher. Content analysis method was used in data analysis. In general, content analysis seeks to extract the themes and concepts in the interview, and the network of themes that is created at the end leads to the structuring of these themes. The encoding process is designed to prioritize valid data encoding. We mean determining the exact codes or themes in the data that vary by agreement of the coders. Coding is guided by a code / coding guide framework that contains a list of codes or themes with a label or name, a definition of information on how to define code/content, and a description of any monopoly or authority to determine code or content and examples of data (Boyatzis, 1998).

In this study, the researcher began the initial coding by repeated several times of reading the interviews to gain a general understanding of the interviews. Then, the different parts of each interview are read and compared with the general idea of studying that interview. Next, the researcher has continued the work by analyzing each word, phrase, sentence and paragraph. In the next step, the concepts were put together based on commonalities or semantics. In other words, the original code and categories created in open coding are

compared with each other, and while integrating code that is conceptually similar, the related categories are centered around each other are shared (Brown et al., 2017).

In all questions, participants were asked to rate the effectiveness of each area on a 7-point scale from "ineffective" to "completely effective." In Fuzzy Delphi Method, the maximum and minimum values of experts' opinions are considered as the two end points of the triangular fuzzy number and the geometric mean is considered as the degree of membership of the triangular fuzzy numbers to achieve the effect of statistical non-equilibrium and avoid the effect of very high values. Therefore, the Fuzzy Delphi method can have a better effect on the selection of criteria. Another advantage of this method is its simplicity, which can include all the opinions of experts in one review. In the third step, the expert opinions collected from the questionnaires were organized into estimates and triangular fuzzy numbers were established to permit further evaluation. Triangular fuzzy numbers are established by allocating different weights (in the range between zero and one) to the minimum, maximum, and most likely value. A triangular fuzzy number is shown in Figure 1. The most likely value is best represented by the geometric average of the experts' opinions (Saaty, 1999), a common approach in practical studies using fuzzy Delphi techniques (Wu & Fang, 2011). Thus, we adopted the geometric average for the most likely value score. That is, for each business strategy attribute, we established a fuzzy weight represented by the triple: $\tilde{A} = (L_A, M_A, U_A)$ where $L_A$ represents the lower bound, $M_A$ the geometric mean, and $U_A$ the upper bound of expert opinions. That is, for all experts $i$:

$$L_A = min(X_{Ai});$$
$$U_A = max(X_{Ai});$$
$$M_A = (\prod_{i=1}^{n} X_{Ai})^{1/n}$$

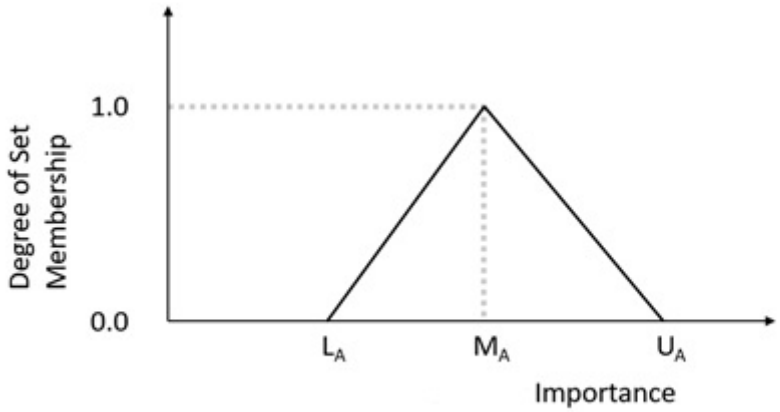


Figure 1. Triangular Fuzzy Number

Finally, in the fourth step, de-fuzzification was used to filter the criteria. De-fuzzification converts from fuzzy numbers to crisp representations that can be evaluated relative to pre-established criteria. Based on previous studies (Abdolmaleki et al., 2021; Saeidi Majd et

al., 2020; Abdolmaleki et al., 2018). In this study, the geometric mean D(Ã) of each indicator's triangular fuzzy number was used to denote the consensus of the expert group on the indicator's appraisal value, so that the impact of extreme values could be avoided. For the threshold value *r*, the 70/30 rule was adopted with *r* set as 0.7. This indicated that among the factors for selection, "30% of the factors account for an 70% degree of importance of all the factors" (Hsu and Yang, 2000). The selection criteria were:

$$D(\tilde{A}) = \frac{(L_A + (4 \times M_A) + U_A)}{6}$$

If D(Ã) ≥ 0.7, then the factor is retained
If D(Ã) < 0.7, then the factor is deleted

Also, 95% confidence interval was used to evaluate the importance and percentage of fulfillment of the first and second questions. Correlated *t*-test was used to differentiate the effect of COVID-19 at present and in the next six months.

## 4. Research findings

### 4.1. Question 1. What parts of the Iran's sports industry are at risk with the COVID-19 epidemic?

In the first question, the members of the group were asked about the dangers caused by the COVID-19 in different parts of the Iran's sports industry. The result of the answers to the open source questions in the first stage was the extraction of 11 domains that were completely at risk. Based on the model of Khosromanesh et al., (2019), these 11 areas in the three main sectors of the sports industry were identified as shown in Table 2.

Table 2. Results of Fuzzy Delphi method of question 1

| Area | Item | Index D(A)~ |
|---|---|---|
| Sports activities section | Private sports businesses: a variety of amateur and professional sports clubs, organizers of sporting events | .83 |
| | Government sports organizations: Ministry of Sports and Youth, General Departments of Sports and Youth of the province and cities | .87 |
| | Non-profit sports organizations: federations and sports delegations of provinces and cities, municipal sports organizations, National Olympic and Paralympic Committee | .77 |
| | Sports training centers: school sports, universities, National Olympic Academy, sports academies in various fields, private trainers | .79 |
| Sports products section | Sports equipment: workshops for the production of sports equipment in various sports, sports equipment stores | .88 |
| | Sportswear: Sportswear factories, sportswear stores | .86 |
| | Functional section of sports: physical fitness and health coaches, medical-sports centers, sports venues, public sports | .88 |

| | | |
|---|---|---|
| Sports Promotion Section | Media: Radio and television (no content), newspapers and print sports publications, live broadcast of radio and television competitions, live guest-oriented programs | .81 |
| | Sponsors: Sponsors of single discipline sporting events, Sponsors of multidisciplinary sporting events, sponsors of professional sports clubs, Personal sponsors of athletes, sponsors of leagues | .80 |
| | Advertising and validation: sports tourism, athlete validation, team validation, sports organization validation, environmental advertising of sporting events | .74 |
| | Promotional sports events: national and club friendly games in various disciplines | .80 |

The results of the answers to the open source questions in the second stage were the extraction of 11 areas that were considered the most important areas by sports management experts. The average importance of each of the 11 areas was calculated in the last step. In addition, the average of member evaluations of the devastating effects of the COVID-19 epidemic in the sports industry was measured. The mean significance estimation at the 95% confidence interval is shown in Table 2. A review of Table 3 shows that all 11 areas were assessed as important and that group members had an almost high level of confidence in their effectiveness.

Table 3. Importance and probability of impact for different areas of the sports industry

| **Item** | **Significance (mean and standard deviation)** | **Confidence Interval (probability 95%)** |
|---|---|---|
| Private sports businesses: a variety of amateur and professional sports clubs, organizers of sporting events | 6.54 (.73) | 67.72 - 83.89 |
| Government sports organizations: Ministry of Sports and Youth, General Departments of Sports and Youth of the province and cities | 6.32 (.79) | 43.23 – 63.42 |
| Non-profit sports organizations: federations and sports delegations of provinces and cities, municipal sports organizations, National Olympic and Paralympic Committee | 6.22(.84) | 45.86 – 67.45 |
| Sports training centers: school sports, universities, National Olympic Academy, sports academies in various fields, private trainers | 6.38 (.77) | 62.21 – 75.52 |
| Sports equipment: workshops for the production of sports equipment in various sports, sports equipment stores | 6.18 (.82) | 48.32 – 59.36 |
| Sportswear: Sportswear factories, sportswear stores | 6.17 (.92) | 54.13 – 57.34 |
| Functional section of sports: physical fitness and health coaches, medical-sports centers, sports venues, public sports | 6.49 (.76) | 42.78 – 85.65 |
| Media: Radio and television (no content), newspapers and print sports publications, live broadcast of radio and television competitions, live guest-oriented programs | 5.79 (1.39) | 24.15 – 48.21 |
| Sponsors: Sponsors of single discipline sporting events, sponsors of multidisciplinary sporting events, sponsors of professional sports clubs, personal sponsors of athletes, Sponsors of leagues | 6.08 (.98) | 36.10 – 57.32 |

| | | |
|---|---|---|
| Advertising and validation: sports tourism, athlete validation, team validation, sports organization validation, environmental advertising of sporting events | 5.44 (1.12) | 38.45 – 47.22 |
| Promotional sports events: national and club friendly games in various disciplines | 4.96 (1.77) | 39.74 – 44.16 |

## 4.2. Question 2. What opportunities have arisen for the Iran's sports industry with the outbreak of the COVID-19?

In the second question, the members of the group were asked about the opportunities created by the COVID-19 in different sectors of the Iran's sports industry. The result of the answers to the open-source questions in the first stage was the extraction of 11 domains that were completely at risk. Based on the model of Khosromanesh et al., (2019), these 11 areas in the three main sectors of the sports industry were identified as shown in Table 4.

Table 4. Results of Fuzzy Delphi method of question 2.

| **Area** | **Item** | **Index** *D(A)~* |
|---|---|---|
| Sports activities section | Private Sports Businesses: Set up online private sports businesses | .72 |
| | Government and non-profit sports organizations: (launching telecommuting), holding online sports events | .76 |
| | Sports training centers: online training, development of mobile sports training software | .80 |
| Sports products section | Production of appropriate sports equipment at home, development of virtual stores of sports equipment and clothing, online sales, strengthening the distribution system | .77 |
| | Functional part of sports: online personal and group coaching, production of software related to health and wellness, development of products related to online and offline sports, production of hardware and software for online and offline sports | .71 |
| Sports promotion section | Sponsorship of online sporting events, environmental advertising in online and offline games, electronic word-of-mouth advertising, electronic validation | .77 |

Within the second stage, the results showed 6 areas considered the most important by sports management experts. Responses were also analyzed based on the opportunities offered by COVID-19 within the context of the sports industry. The estimate of the mean importance in the 95% confidence interval is shown in Table 4. Looking at Table 5, although members concluded different levels of confidence in their effectiveness, all 11 areas were evaluated as almost important.

Table 5. The importance and potential impact of the opportunities created for different areas of the sports industry

| Item | Significance (mean and standard deviation) | Confidence Interval (probability 95%) |
|---|---|---|
| Private Sports Businesses: Set up online private sports businesses | 6.27 (.69) | 54.43 – 79.48 |
| Government and non-profit sports organizations: (launching telecommuting), holding online sports events | 6.15 (.83) | 93.44 – 65.39 |
| Sports training centers: online training, development of mobile sports training software | 6.03 (.92) | 88.13 – 64.41 |
| Production of appropriate sports equipment at home, development of virtual stores of sports equipment and clothing, online sales, strengthening the distribution system | 5.13 (1.24) | 35.42 – 50.24 |
| Functional part of sports: online personal and group coaching, production of software related to health and fitness, development of products related to online and offline sports, production of hardware and software for online and offline sports | 5.49 (1.11) | 25.24 – 57.29 |
| Sponsorship of online sporting events, environmental advertising in online and offline games, electronic word-of-mouth advertising, electronic validation | 5.03 (1.67) | 73.48 – 44.21 |

## 4.3. Question 3. What are the consequences of prolonging the course of this disease in the sports industry?

In the third question, the members of the group were asked about the negative consequences of prolonging the period of this disease in different sectors of the Iran's sports industry. Based on the opinion of the Delphi panel and the opinion of experts in this study, items that are directly related and affect one of the sections of the sports industry were placed in a direct category. Those items that are not directly related to the sports industry and are more related to people's health and well-being were placed in the indirect category. The result of the answers to the open source questions in the first stage was the extraction of 11 domains that are directly and indirectly affected, as described in Table 6.

Table 6. Results of Fuzzy Delphi method of question 3

| Effect | Item | Index $D(A)^{\sim}$ |
|---|---|---|
| Direct | Manpower unemployment | .89 |
| | Burning and destruction of sports facilities, facilities and equipment due to lack of proper and timely care | .78 |
| | Reduce the production and export of sports products and services | .83 |
| | Severe decline in sports education | .74 |
| | Bankruptcy of private sports businesses | .81 |
| | Reluctance of sports sponsors to invest in sports | .77 |

| | | |
|---|---|---|
| | Leaving the job of specialized personnel | .84 |
| | Significant decline in physical and mental fitness of professional and elite athletes | .83 |
| Indirect | Reduction of sports from the family basket due to inflation caused by unemployment in the country | .89 |
| | Increased mortality and health-related costs | .84 |
| | Increased physical and mental illness associated with sedentary lifestyle | .80 |

The gap between the current level of impact and the impact if the current situation continues in the next six months was measured by the difference between the scores of each. Before performing the statistical test, first Shapiro-Wilk test was used to check the normal distribution of data, the results of this test are given in Table 7.

Table 7. Shapiro Wilk test results for question 3

| **Variables** | **W** | **d.f.** | **Sig.** |
|---|---|---|---|
| Total direct effects | .95 | 18 | .41 |
| Total indirect effects | .94 | 18 | .34 |

Considering the significance for the variables in Table 7, it is observed that the distribution of data is normal, so for the next tests, parametric test should be used. Significance of mean difference was assessed by paired t-test. The average for each item and the gap between the current impact and the impact in the next six months is shown in Table 8.

Table 8. Comparison of the gap between current impact and impact if the situation continues for the next six months with correlated *t*-test

| **Item** | **Current status (mean and standard deviation)** | **Next 6 months (mean and standard deviation)** | **The distance between the current situation and the next 6 months** | ***t*-value** |
|---|---|---|---|---|
| Manpower unemployment | 4.55 (2.35) | 6.50 (.85) | -1.95* | -3.98 |
| Burning and destruction of sports facilities, facilities and equipment due to lack of proper and timely care | 3.83 (1.82) | 6.38 (.91) | -2.55* | -6.17 |
| Reduce the production and export of sports products and services | 4.94 (1.58) | 6.50 (.78) | -1.56* | -4.38 |
| Severe decline in sports education | 5.94 (.87) | 6.61 (.60) | -.65* | -3.68 |
| Bankruptcy of private sports businesses | 4.50 (2,12) | 6.83 (.38) | -2.33* | -4,40 |
| Reluctance of sports sponsors to invest in sports | 4.38 (1.85) | 6.33 (.84) | -1.95* | -4.67 |
| Leaving the job of specialized personnel | 4.50 (1.33) | 6.38 (.69) | -1,88* | -5.23 |
| Significant decline in physical and mental fitness of professional and elite athletes | 5.22 (1.06) | 6.22 (.80) | -1.00* | -3.57 |

| | | | | |
|---|---|---|---|---|
| Reduction of sports from the family basket due to inflation caused by unemployment in the country | 5.16 (1.38) | 6.50 (.70) | -1.34* | -5.49 |
| Increased mortality and health-related costs | 4.22 (1.43) | 6.33 (.68) | -2.11* | -6,35 |
| Increased physical and mental illness associated with sedentary lifestyle | 4.94 (1.95) | 6.88 (.32) | -1.94* | -4.67 |

* Means at a level less than 0.01.

The results of Table 8 show that all 11 aspects of the negative impact of COVID-19 on the Iran's sports industry were highly evaluated. The difference was significant for all cases. For three of the 11 cases, the current average was at least two standard deviations from the impact in the next six months. Finally, the researcher was able to identify vulnerable areas of the Iran's sports industry.

### 4.4. Question 4. What external factors can add to the deteriorating economic situation of the Iran's sports industry in this period?

In the fourth question, the members of the group were asked about external factors that could worsen the economic situation of the Iran's sports industry in the context of the COVID-19 epidemic. The result of the answers to the open source questions in the first stage was the extraction of 11 areas that worsen the economic situation of the Iran's sports industry, which were identified as described in Table 9.

Table 9. Results of Fuzzy Delphi method question 4

| **Item** | **Index** *D(A)~* |
|---|---|
| US and UN international sanctions | .71 |
| Being on the FATF blacklist | .85 |
| Unemployment in other parts of the country | .87 |
| Inflation | .84 |
| Devaluation of the national currency against international currencies | .79 |
| Rising poverty due to unemployment and inflation | .82 |
| Loss of people's social trust in the government | .72 |
| Corruption (waste of financial resources) | .82 |
| Migration of specialized forces (in the section of elite athletes and in the section of educated people in sports sciences) | .79 |
| Sharp drop in oil prices (due to the country's financial reliance on oil) | .83 |
| Reduction of the country's international flights and increase of the price of foreign airline tickets (creating problems for participating in various sporting events) | .80 |

The gap between the current level of impact and the impact if the current situation continues in the next 6 months was measured by the difference between the scores of each.

Before performing the statistical test, first Shapiro-Wilk test was used to check the normal distribution of data, the results of this test are given in Table 10.

Table 10. Shapiro Wilk test results for question 4.

| Variables | W | df | Sig. |
|---|---|---|---|
| US and UN international sanctions | .95 | 18 | .41 |
| Being on the FATF blacklist | .94 | 18 | .34 |
| Unemployment in other parts of the country | .90 | 18 | .08 |
| Inflation | .91 | 18 | .10 |
| Devaluation of the national currency against international currencies | .92 | 18 | .21 |
| Rising poverty due to unemployment and inflation | .95 | 18 | .50 |
| Loss of people's social trust in the government | .91 | 18 | .09 |
| Corruption (waste of financial resources) | .94 | 18 | .35 |
| Migration of specialized forces (in the section of elite athletes and in the section of educated people in sports sciences) | .92 | 18 | .19 |
| Reduction of oil prices (due to the country's financial dependence on oil) | .97 | 18 | .64 |
| Reduction of the country's international flights and increase of the price of foreign airline tickets (creating problems for participating in various sporting events) | .91 | 18 | .09 |

Considering the significance for the variables in Table 10, it is observed that the distribution of data is normal, so for the next tests, parametric test should be used. Significance of mean difference was assessed by paired *t*-test. The average for each item and the gap between current impact and impact in the next six months is shown in Table 11.

Table 11. Comparison of the gap between current impact and impact if the situation continues for the next 6 months with correlated *t*-test

| Item | Current status (mean and standard deviation) | Next 6 months (mean and standard deviation) | Interval between current status and next six months | *t*-value |
|---|---|---|---|---|
| US and UN international sanctions | 5.27 (1.99) | 5.55 (1.82) | -0.28 | -1.09 |
| Being on the FATF blacklist | 5.50 (1.46) | 5.88 (1.52) | -0.38 | -1.94 |
| Unemployment in other parts of the country | 4.72 (1.60) | 6.11 (1.18) | -1.39* | -3.23 |
| Inflation | 5.33 (1.45) | 6.44 (.98) | -1.11* | -3.08 |
| Devaluation of the national currency against international currencies | 5.44 (1.24) | 6.38 (.77) | -0.94* | -3.30 |
| Rising poverty due to unemployment and inflation | 5.27 (1.60) | 6.55 (.61) | -1.28* | -3.55 |

| | | | | |
|---|---|---|---|---|
| Loss of people's social trust in the government | 5.16 (1.33) | 6.50 (.70) | -1.34* | -5.21 |
| Corruption (waste of financial resources) | 5.66 (1.02) | 6.66 (.76) | -1.00* | -4.37 |
| Migration of specialized forces (in the section of elite athletes and in the section of educated people in sports sciences) | 5.00 (1.68) | 6.27 (1.07) | -1.27* | -4.10 |
| Reduction of oil prices (due to the country's financial dependence on oil) | 5.22 (1.26) | 6.33 (.68) | -1.11* | -3.56 |
| Reduction of the country's international flights and increase of the price of foreign airline tickets (creating problems for participating in various sporting events) | 4.77 (1.62) | 5.33 (1.78) | -0.56* | -3.34 |

* Means at a level less than 0.01.

The results of Table 11 show that all 11 aspects of the negative impact of COVID-19 on the Iran's sports industry were highly evaluated. There was no significant difference between the current situation and the next 6 months in terms of the COVID-19 for US and UN international sanctions items and Iran's inclusion in the FATF blacklist, but the difference was significant for 9 of the other 11 cases.

### 4.5. Question 5. What are the tactics needed to reduce the negative effects of the COVID-19 epidemic?

In the last question, the members of the group were asked about the tactics needed to reduce the negative economic effects of the Iran's sports industry in the face of the COVID-19 epidemic. The result of the answers to the open source questions in the first stage was the extraction of 6 tactics that reduce the negative effects of the COVID-19 epidemic on the economic situation of the Iran's sports industry, which are described in Table 12.

Table 12. Results of Fuzzy Delphi method question 5

| **Item** | **Index** $D(A)^{\sim}$ |
|---|---|
| Government financial support for private sports businesses (grants and long-term interest-free bank loans) | .87 |
| Uninsured manpower covered by insurance | .73 |
| Carry out regular visits to places, facilities and equipment that need care | .75 |
| Promote a culture of sports at home in cyberspace and on state radio and television | .72 |
| Development of e-sports infrastructure (online and offline) | .79 |
| Preparation of sports organizations for similar cases in the future (appropriate planning and policy to predict and reduce similar future challenges) | .81 |

The gap between the current level of impact and the impact if the current situation continues in the next 6 months was measured by the difference between the scores of each.

Before performing the statistical test, first Shapiro-Wilk test was used to check the normal distribution of data, the results of this test are given in Table 13.

Table 13. Shapiro Wilk test results for question 5.

| Variables | W | df | Sig. |
|---|---|---|---|
| Government financial support for private sports businesses (grants and long-term interest-free bank loans) | .91 | 18 | .09 |
| Uninsured manpower covered by insurance | .94 | 18 | .35 |
| Carry out regular visits to places, facilities and equipment that need care | .92 | 18 | .19 |
| Promote a culture of sports at home in cyberspace and on state radio and television | .97 | 18 | .64 |
| Development of e-sports infrastructure (online and offline) | .91 | 18 | .09 |
| Preparation of sports organizations for similar cases in the future (appropriate planning and policy to predict and reduce similar future challenges) | .93 | 18 | .35 |

Considering the significance for the variables in Table 13, it is observed that the distribution of data is normal, so for the next tests, parametric test should be used. Significance of mean difference was assessed by paired *t*-test. The average for each item and the gap between the current impact and the impact in the next 6 months is shown in Table 14.

Table 14. Comparison of the gap between current impact and impact if the situation continues for the next six months with correlated *t*-test

| Item | Current status (mean and standard deviation) | Next six months (mean and standard deviation) | Interval between current status and next 6 months | *t*-value |
|---|---|---|---|---|
| Government financial support for private sports businesses (grants and long-term interest-free bank loans) | 5.55 (1.46) | 6.66 (.59) | -1.11* | -3.24 |
| Uninsured manpower covered by insurance | 5.50 (1.58) | 6.66 (.48) | -1.16* | -3.20 |
| Carry out regular visits to places, facilities and equipment that need care | 5.50 (1.38) | 6.61 (.69) | -1.11* | -3.68 |
| Promote a culture of sports at home in cyberspace and on state radio and television | 5.66 (1.32) | 6.44 (.92) | -0.78* | -3.75 |
| Development of e-sports infrastructure (online and offline) | 5.38 (1.03) | 6.27 (.82) | -0.89* | -3.68 |
| Preparation of sports organizations for similar cases in the future (appropriate planning and policy to predict and reduce similar future challenges) | 6.00 (1.18) | 6.77 (.42) | -0,77* | -3.28 |

* Means at a level less than 0.01.

The results of Table 14 show that all 6 tactics required to reduce the negative effects of the COVID-19 epidemic were highly evaluated. There was a significant difference between the current situation and the next 6 months in terms of COVID-19 for all items.

## 5. Discussion

This study examined the challenges and opportunities of the Iran's sports industry in the face of the COVID-19 epidemic and examined the impact of this uninvited guest from different aspects. Initially, various areas of the sports industry were identified that were at risk from the outbreak of the COVID-19. Findings of the study showed that 11 areas are more important and all of them were considered important. Also, the members of the group had an almost high level of confidence in their effectiveness. The most important areas that feel the most risk can be the private business sector, including a variety of amateur and professional sports clubs and organizers of sporting events and the functional part of sports including physical fitness and health trainers, medical-sports centers, sports venues and public sports pointed out. It has been more than four months since the outbreak of Coronary heart disease worldwide, and the outbreak of the virus has affected all sports. The one-year postponement of the Tokyo Olympics and Euro 2020 is only part of the virus' impact on the world of sports, which has caused the organizers of the Games to face huge financial losses. The suspension of world football leagues in the past few months has also caused football clubs 'sources of income, including television broadcasting rights and ticket sales, which depended on the league, to fall sharply, and even the clubs' shares to fall. Jeopardize their financial future as well (Ippolito, Hui, Ntoumi, Maeurer, & Zumla, 2020). One of the reasons for the insignificance of the advertising and certification sector in Iran is that developed countries in world sports have various sources of income, including the right to broadcast television, the activities of private networks, selling shirts and club symbols, ticket sales and the like. There are, but in Iranian sports, the right to broadcast television is not given to sports clubs, we do not face the issue of real ticket sales, and clubs do not make money from selling their shirts and symbols. Previous research regarding the COVID-19 and sport industry also support our results. For example, Alavi et al. (2021) mentioned to negative effect of COVID-19 on sport events. Also, Brakhas et al. (2021) stated, the management of sports business in the conditions of crisis and economic recession requires the use of change and innovation strategy along with technology-based environmental networking.

The next topic addressed in this study was the consequences of prolonging the COVID-19 on the sports industry. The findings identified 11 aspects of the negative impact of the COVID-19 on the Iran's sports industry, and the difference between the mean status of the current components and the status of the next six months was significant for all cases. In this regard, the areas of burnout and destruction of places, facilities and sports equipment due to lack of proper and timely care, mortality and expenditures related to health were the most important components, as well as areas of significant decline in physical fitness and psychology of professional and elite athletes. One of the direct effects of the COVID-19 outbreak, as well as the closure of sports clubs and even parks and outdoor sports

spaces, is the deterioration and destruction of their facilities and equipment due to lack of care, cleanliness and lack of defiance. Mobility is the general public, certainly in these few months, overweight and obesity are obvious consequences and will intensify in the coming months and due to increased inactivity and overweight, the growth of cardiovascular disease and diabetes and so on. Not far from expectation (World Health Organization, 2020). This will increase the cost of medical treatment in the country, and as a result, maintaining the viability of sports clubs in the standard condition for the post- COVID-19 period in order to increase mobility, vitality and ultimately the health of the community, is very important. In fact, sports clubs are vital arteries for the development of health and wellness in the country and are supported in most countries around the world in various and continuous ways. Certainly, by using the applications and programs of the educational space in different sports, it will be far less damaged than the excited conditions caused by the outbreak of the COVID-19. Previous research regarding the COVID-19 and fitness industry also support our results. For example, Bae et al. (2021) mentioned to negative effect of COVID-19 on fitness customers in Korea, Helsingen et al. (2021) had same results in Norway. Also, Ong et al. (2021) stated, comfort, security, and fitness center services were the main aspects that gym-goers would consider as their main preference. The study highlighted how gym-goers are sensitive to the price set by the fitness centers. Moreover, due to the COVID-19 pandemic, ventilation and size are considered highly important attributes among gym-goers.

The next goal of the study was to address external factors that could contribute to the deterioration of the economic situation of the Iran's sports industry in this period. Findings from the study evaluated 11 aspects of the negative impact of the COVID-19 on the Iran's sports industry, which are imposed on the Iran's sports industry from abroad during this period and make the situation twice worse. In this regard, there was no significant difference between the current situation and the next six months in terms of the COVID-19 for the components of US and UN international sanctions and Iran's inclusion in the FATF blacklist, because these two components affect Iran for several years. Imposed and those who have invested in the Iran's sports industry and the managers of sports organizations and companies for years have used solutions to address these negative factors in their planning. But the difference was significant for nine of the other 11 cases. Unemployment in other parts of the country and the loss of social trust in the government were the most important. Evidence shows that the epidemic affects almost all sectors of the economy, but low-income, low-income workers, especially those in the informal sector, are the most vulnerable. More than 1.3 billion workers around the world work in sectors that have been severely damaged by the Corona and are experiencing a sharp drop in production. These sectors mainly include retail services of accommodation, hotel, transportation, tourism and small manufacturing companies, and in the second quarter of 2020 will reduce manpower or reduce working hours or reduce wages, which is equivalent to full-time unemployment 230 there will be millions in the world (Ebrahim & Memish, 2020). In the face of the current epidemic, one must learn from the policies and approaches of successful governments. To be more successful in this area, the Islamic Republic of Iran needs to increase public confidence in the effectiveness of its policies.

Transparency of decisions and disclosure of the real reasons for these decisions greatly contribute to this trust. Unfortunately, at the beginning of this crisis, there were questions and issues that greatly questioned public confidence in government decisions and policies such as questions about the real time of the virus in Iran, and the lack of timely information about it and the real reasons for not quarantining of some cities. It is good for the government to move towards transparency and to explain clearly, for example, that due to sanctions and economic and budgetary conditions, we are forced to allow production, industrial and service units to operate or the government's inability to provide financial support to the affected strata. Lack of government enlightenment in this area leads to the formation and dissemination of false arguments and rumors that seriously damage public confidence in the government. This also causes people to not cooperate properly with government policies.

Finally, in this study, the tactics needed to reduce the negative effects of the COVID-19 epidemic were discussed. The results showed that six tactics will be effective in reducing the negative effects of the COVID-19 epidemic. There was a significant difference between the current situation and the next 6 months in terms of COVID-19 for all components. The most important tactics are to ensure the unemployed manpower by the insurers, conducting regular visits to places, facilities and equipment who need care and government financial support for private sports businesses through grants and long-term bank loans and interest-free. The government can increase the role of the insurance industry in the country's sports economy by launching various types of protection funds and involving insurers to cover the challenges of credit investment and start-ups, especially digital businesses. Sports managers, officials related to sports venues and supervisors and managers of sports venues, by recognizing each of the effective factors in increasing the productivity of sports venues, should try to strengthen and improve their knowledge and abilities. Also, considering that the most effective and most important priority in increasing the productivity of sports facilities and facilities, the human resources are specialized. Be able to use and protect the minimum available resources in a desirable and appropriate way and take steps to improve the productivity of sports facilities, facilities and equipment. Also, by using the preventive maintenance system, which is one of the types of maintenance systems, managers can focus on planning for the repair and service of equipment and parts before failure, and by developing appropriate instructions. Perform services, periodic inspections and inspections of parts (Ebrahim, Ahmed, Gozzer, Schlagenhauf, & Memish, 2020). One of the most important consequences of the outbreak of COVID-19 in the country is the impact of various economic activities and businesses. Although the virus has infected the entire country and endangered various sections of society, it seems that some sections are more exposed to the damage and economic pressures that result from it. Previous research regarding the COVID-19 and fitness industry also support our results. For example, Jaberi and Mazloumi Soveini (2021) mentioned to opportunities of COVID-19 on fitness centers, they stated, the findings showed that "E-learning", "Virtual Sports", "New Culture", "Social Responsibility", "Science, Technology and Innovation", and "Modern Entrepreneurship" are among the explored opportunities arisen from COVID-19 pandemic in Iran sports.

## 6. Conclusion

The aim of this study was to identify the challenges and opportunities of the Iran's sports industry in the face of the COVID-19 epidemic. The research method was qualitative-quantitative and the data collection method was library studies and Delphi method. In online interviews, we asked five questions to the study participants. The various sectors of the sports industry that are at risk from the COVID-19 epidemic were identified and prioritized in 11 areas that can be attributed to the private business sector, including a variety of amateur and professional sports clubs and organizers. He mentioned sporting events and the functional part of sports, including fitness and health coaches, medical-sports centers, sports venues and public sports. Therefore, this study seeks to understand the impact of the SARS-CoV-2 pandemic on the fitness industry in Iran, through a qualitative-comparative methodology. It tries to analyze the different sectors that make up this industry and how it may be affected by the pandemic. Concluding that there are multiple negative effects of this pandemic in the fitness sector, and as a lasting effect in time foresees a complicated future for the sector. Aspects as important as the lack of physical activity, overweight or the deterioration of sports facilities. For this reason, this pandemic may offer, in time, an opportunity for this sector to renew itself and return to be a key space for society. To this end, certain tactics are needed to encourage a quick recovery of the sports industry, with the government being an important player in this recovery.

## 7. Management implications

COVID-19 disease is the most important global health issue today that directly endangers human health and the first and most important effect of this disease is undoubtedly felt on the country's economy, so that the main condition for controlling the spread of COVID-19 is the maximum reduction of social interactions. It will be unnecessary and will require the closure of many economic activities, including the sports industry, which of course will impose economic costs on various segments (Widdop, Bond &, Parnell, 2020).

In fitness centers, health centers and occupations focused on physical activity and health, the general picture is different from professional club management. The final customers are citizens who register at a fitness center or sports club and are closed in many countries today.

It has been observed how different strategies have emerged that would help alleviate the negative effects of the epidemic, such as strengthening the fitness industry by the institutions, through subsidies and promoting a strong sports culture through different means, and above all with the experience, to reinforce certain aspects that help to be prepared for this industry in future similar to the current pandemic. Breesch (2015) in their paper on the financial stability of the fitness industry, appeal to the viability of the fitness industry with government support, such as tax incentives for this industry.

Resilience strategies emphasize new methods and tools for dealing with complex change that contribute to rapid adaptability in the face of uncertainty and the exploitation of new opportunities.

Support measures and strategies in particular should include the following:

• Ensuring that the sports industry has the budget to support jobs, employees and self-employment against the risk of dismissal and loss of income.

• Clarify government aid laws such as tax breaks for individuals and organizations promoting sports activities.

• Encourage innovation programs (industrial modernization) for sports companies by addressing current societal challenges.

• Lending to ensure the liquidity of sports clubs and other associations through available financial instruments.

• Redirecting some of the financial resources of the sports industry, especially the structural and investment funds of the government and the Ministry of Sports, to measures for the well-being of citizens, including sports and physical activity.

• Establish public and private solidarity funds for sports clubs and trade unions and their employees, including coaches, players and others in the sports industry.

• Allocate specific funds to innovative strategies to promote sports and physical activity when people are quarantined in their homes. Such as creating games and virtual programs related to the sports industry and creating a suitable platform for selling sports industry services and goods.

• Assisting schools and physical education teachers and educators in private sports clubs to continue educating students and students as well as sports professionals to provide sports science through effective digital tools such as providing free or low-cost Internet.

Finally, promote a healthy lifestyle in working people by introducing innovative ways to motivate physical activity.

## 8. Limitations and future directions

The data of the present study were collected during the implementation of the social distancing plan and due to the observance of health tips and reducing the prevalence of COVID-19, the interviews with the participants were held virtually through social messaging networks. And during the interview, the Internet may be disconnected, and communication may be disrupted. It is also possible that a misunderstanding will occur and that you or the interviewee will not notice the question or content and will require lengthy interpretations. It is also difficult for many people to sit in front of the camera and look at it. Therefore, it is suggested that a study be conducted in which data are collected in the form of face-to-face interviews.

Naturally, the Covid-19 crisis is accompanied by economic problems, and this is the nature of the disease, and it poses problems for seasonal sports clubs, event and tour organizations, cross-section coaches, low-income groups, and so on. This stratum forms a major part of the sports industry. On the other hand, the structure of our governance is such that it shows the problems of sanctions and the relative severance of international relations and exchanges in the form of lack of proper structural support for this group. The consequence of these economic problems and lack of government support will be that we will see adverse psychological effects on the mental health of the sports community, including feelings of hopelessness and helplessness and family seizures and similar problems (Shahyad & Mohammadi, 2020). Therefore, it is suggested that research be conducted on the study of stress strategies through performing specific exercises in times of such crises.

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