



<https://asml.ui.ac.ir/>

Identifying Barriers and Solutions for the Development of Public Sports in the Post-COVID Era: A Case Study of Ardabil Province

Abbas Naghizadeh-Baghi¹, Hossein Kordloo², Mehdi Naghizadeh-Baghi³

1. Department of Sport Management, Faculty of Educational Sciences and Psychology, Mohaghegh Ardabili University, Ardabil, Iran
a.naghizadeh@uma.ac.ir
2. Department of Sport Management, Faculty of Educational Sciences and Psychology, Mohaghegh Ardabili University, Ardabil, Iran
hkordlu@gmail.com (Corresponding Author)
3. Department of Sport Management, Faculty of Educational Sciences and Psychology, Mohaghegh Ardabili University, Ardabil, Iran
mehdi91nb@gmail.com

Article Info

Abstract

Article type: Research Article

Received:
20 October 2023

Accepted:
12 December 2023

Published online:
28 December 2023

The purpose of this study was to examine the barriers and solutions for the development of public sports in the Post-COVID era in Ardabil province. The main research approach was mixed method. The statistical population of this research in the qualitative part included physical education professors, officials and experts of the General Department of Sports and Youth of Ardabil province and the heads of general sports committees of the province and cities. The research tool was a semi-structured interview, which was recorded by ensuring the confidentiality of the interviews and then implemented in the administrative software, and the data was coded using the MAXQDA20 software. The results of the research showed that 61 items were classified into 10 factors by factor analysis method. In the next step, the OPERA method was used to determine the solutions. In the second part of the research, using G-Power software, a sample size of 386 people was obtained. The sample members were selected by random sampling method and the questionnaire obtained from the codes was distributed among their volumes and finally the data obtained from the questionnaires were entered into SPSS26 software and after checking the reliability, exploratory factor analysis was performed. The opinion of the experts of the opera meetings was that the proposed solutions should be adjusted according to the respondents' prioritization in a small part for the development of public sports in the post-coron Post-COVID a era.

Keywords:

Ardabil, COVID- 19, Barriers, Public Sports, Solutions

Cite this article:

Naghizadeh-Baghi, A., kordloo, H., & Nghizadeh Baghi, M. (2023). Identifying barriers and Solutions for the Development of Public Sports in the Post-corona Era: A case Study of Ardabil Province. Archives in Sport Management and Leadership, 1(2), 91-106. [doi: 10.22108/asml.2023.139528.1035](https://doi.org/10.22108/asml.2023.139528.1035)

© The Author(s).

Published by University of Isfahan

This is an open access article under the CC BY-NC 4.0 License (<https://creativecommons.org/licenses/by-nc/4.0>).



Introduction

Undoubtedly, regular and continuous activity is one of the building blocks of a healthy life and society. Motivating different strata of people to do sports activities requires a wide range of facilities, and if this interest is created among the society, many social anomalies will be eliminated, and addiction and social corruption will be reduced. Future generations will be at a higher level in terms of mental abilities and physical talents, and the ability to fight social problems and endure hardships will increase in the eyes of people (Barani., 2015). Therefore, many organizations related to health seek to increase the sports participation of people in the society. This is despite the fact that the machine lifestyle has taken away the quick initiative from humans and has made people in the society suffer from mobility poverty and this mobility poverty has brought many physical, mental and social problems to the society (Sha'bani-Moghadam et al., 2010). The effects of the expansion of sports are so important that currently sports and healthy recreation are considered as an important industry and an effective factor in national economic growth in developed countries (Fakhri et al., 2019). In the meantime, public exercise is important because of the positive and beneficial effects it has on satisfying the mental and physical needs of people, especially the young generation, and it can be beneficial and productive in a favorable way (Eshraghi & Kashef, 2017).

Evidence shows that physical activity has beneficial effects on chronic diseases such as most cardiovascular diseases, type 2 diabetes, types of cancer, obesity, overweight and improving musculoskeletal and psychological health (Vafaeie Moghadam., 2019). Also, the economic analysis shows that physical inactivity brings high costs. Therefore, improving the level of physical activity is a basic component in public health. Sports as a strategic solution and public sports as a cheap and enjoyable means can solve this problem in a favorable way (Momtazbakhsh & Fakur., 2016). Accordingly, in recent years, there has been a significant interest in various countries to promote physical activity and develop public sports, which is largely influenced by the policies of the World Health Organization (Ghafouri et al., 2012). In the meantime, the Covid-19 pandemic made the situation much more difficult. So that the access of many people to sports spaces was limited and physical mobility was reduced to a minimum. Social distancing, staying at home and being hospitalized have negative effects on the immune system and weaken it. The investigation of policies and strategies in the field of public sports after the COVID-19 pandemic has not led to an increase in participation across different classes (Gu et al., 2023). The optimization of team sports public service during the pandemic is hindered by a lack of evidence, preventing safe decision-making (Gökalp et al., 2023).

Covid-19 created significant challenges worldwide in terms of economics, social interactions, and individual lifestyles (Woods et al., 2020). One of the most important consequences of the spread and the epidemic of viruses was the creation of social anxiety all over the world. This had caused serious concerns for citizens in all countries, even in societies without the spread of the Covid-19 virus (Sadati et al., 2020). Social risks are part of everyday life. The spread of the Covid-19 virus showed that social risks lead to social damage. Therefore, the World Health Organization (WHO) advised national governments to take protective measures to slow down the spread of the virus (2020). Therefore, measures aimed at spatial distancing and self-quarantine were implemented in many countries as part of the policies to reduce Covid-19 (Mutz & Griek., 2021). Not engaging in sports activities and refraining from physical contact, not using public transportation and intensifying personal hygiene were among the most important behavioral changes during the pandemic. Also, social isolation is another social reaction to epidemics (Bults et al., 2015). Social isolation often causes psychological disorders such as acute stress disorder, fatigue, separation from others, irritability, insomnia, wrong decision making, fear and anxiety (Woods et al., 2020). Therefore, the use of leisure activities (both in terms of physical and sports activities as well as in social, cultural and artistic dimensions) leads to the improvement of performance and is a step in the direction of improving the effectiveness of sports culture (Tayyebi et al. 2020). The Covid-19 epidemic forced the world population to change their daily schedules, including sports habits (Lim et al., 2021). Most people got used to a sedentary lifestyle with less physical activity, less number of daily steps and rare engagement in exercise (Pinto et al., 2020).

Several studies have reported that physical inactivity increased during Covid-19 in different countries, indicating difficulty in following recommendations to stay active during this period (Farah et al., 2021). On the other hand, emotional considerations caused by the spread of Covid-19 may also affect their attitude towards physical activity and exercise (Puen et al., 2021) and people do not want to exercise in public places due to concerns about possible risks. (Robinson et al., 2021). Also, some researchers have mentioned the

psychological effects for the athletes. In this regard, Henriksen et al. (2020) have mentioned the psychological effects of inactivity, including increasing the likelihood of anxiety, depression, addiction, and other mental health concerns. Staying at home for a long time can lead to worrying consequences such as weight gain, social isolation, as well as a decrease in physical activity level (Blanza Martinez et al., 2020). A decrease in physical activity may be particularly evident among active people who usually exercise. Reduced physical activity due to isolation at home may worsen a wide range of health conditions, including chronic diseases, such as cardiovascular and metabolic diseases (Lippi et al., 2019), as well as infectious diseases, due to immune modulation.

Even without it, significant weight gain occurs. Therefore, maintaining an active lifestyle at home, including physical activity, is particularly important for the health of the general population, especially for those with additional risk factors, including the elderly during quarantine (Anderson, Dorstein., 2019). With limited social activities due to mandatory restrictions, organized sports activities were greatly reduced during the outbreak of the virus. As a result, it is valuable to continue physical activity to maintain physical and mental health when dealing with the current challenges caused by the Covid-19 (Jakobsson et al., 2020). One of the ways to eliminate or prevent physical poverty is to have an active lifestyle. Sports as a strategic solution and public sports as a cheap and fun means can solve this problem in a favorable way. Public sports is a form of physical activities or regular participation in physical activities that leads to physical and mental health and well-being, shapes social relationships and leads to positive results (Vafaei Moghadam et al., 2019). The philosophy of public sports is to encourage citizens to do sports and physical activities, and it also has a message for policymakers to use their position to advance this goal and provide opportunities for public participation (Aman et al., 2009). The popularization of public sports and the welcoming of all sections of the society to participate in sports programs and related matters increases vitality and productivity. In addition to promoting physical activity, participation in sports provides the participant with an opportunity for psychosocial development, membership in a community, and development of a social network (Holt et al., 2017).

Development is a flow that brings revival and a different orientation of the entire economic and social system. Sotiriadou et al. (2008) consider sports development to include structures, systems, opportunities and processes that enable people to participate in sports and recreation and improve their performance to the desired level. In Iran, less attention has been paid to public sports and organized recreation. The low participation of the society in public sports, especially in the conditions governing the society and the era after Covid-19 and the lack of a legal, integrated system, and the need to create centers for policy making and planning in the matter of public sports are felt more and more (Vafaei Moghadam et al., 2019). Public sports, like any other system, needs to formulate macro goals, strategies and operational plans so that, in addition to knowing the direction of movement, it can avoid any repetition, misdirection and waste of its financial, human, physical and informational resources. Identifying barriers to physical activities is an important point when creating interventions to promote physical activities. Considering these unprecedented times due to the spread of Covid-19, lifestyle habits have changed significantly in the post-Covid-19 period. It is plausible that barriers to physical activity may have changed due to social isolation (Farah et al., 2021); therefore, the questions posed in the current research are as follows: what are the barriers to participating in sports activities in the post-Covid-19 era? What are the strategies for expanding participation in physical activity? In seeking the answers to these questions, and according to the identified barriers and the changes that have occurred in public sports during the Post-Covid19 era, this research will provide solutions to expand people's participation in public sports.

Considering the importance of sports, and the importance of public sports, especially in the post-Covid-19 era, and regarding the necessity of exercise, it can be said that public exercise as a low-cost and fun and effective tool that can be implemented for the general public in terms of individual and social characteristics, can be a part of people's daily life plan. It could in fact have a significant effect on improving their physical, mental and social health; therefore, those in charge of sports, health and health should investigate the barriers that cause a decrease in the number of people participating in public sports (Saberi et al., 2015). The evidence indicates that despite the growth of public sports in the world in the last few years, a small percentage of Iranian citizens are still active in public sports programs (Faraji et al., 2023). To this situation, one should add the Covid-19 situation of the society, which caused more problems. Therefore, through sports, the prevailing conditions in the society should be corrected so that they do not suffer from

physical and mental problems. Since public sports is a fundamental factor in the health of people in the society, the need for its further development is felt. Government authorities and trustee bodies should not consider public sports as an additional cost, but should see it as an investment in personal and public health and social benefits that provide economic resources for the country. It is necessary for sports organizations, healthy recreation and education and health and other bodies involved in sports and physical education of the country to cooperate in implementing public sports programs and to have close relations for this purpose in order to promote the growth of public sports culture. Being provided therefore, with regard to providing a platform to activate people in the society to increase physical and mental health, the need is felt in Ardabil province to conduct a research to identify the barriers to the development of public sports, which will identify the challenges and solutions for the development of public sports in the post-Covid-19 era.

Research Methods

The nature of the subject and the goals of each research is the most important factor determining the method of each research. This study is of an applied type and the main research strategy is a mixed strategy, and the strategies of both quantitative and qualitative approaches have been used. In the qualitative stage, its strategy is phenomenology. In this research, the interpretative approach of phenomenology was used. The steps of doing phenomenology with an interpretive approach include the following:

1. Selection of research topic: It should be a subject that can be explored through the lived experiences of individuals.
2. Participant Selection: Identify and recruit participants who have directly experienced the phenomenon under investigation. Selection should aim for diversity to capture a range of perspectives and experiences.
3. Data collection: semi-structured interviews were used for this purpose. Interviewing is often the primary method in interpretive phenomenology, allowing participants to describe their experiences in detail.
4. Transcription and immersion: The interview recordings were transcribed word for word. Familiarized with the content and engaged in repeated reading and listening to gain a deep understanding of the participants' experiences.
5. Phenomenological reduction: Researchers engaged in a process called phenomenological reduction, which involves discarding preconceived assumptions and theoretical frameworks to focus on essential aspects of the participants' experiences. The goal of this step is to approach the data with an open mind and let the phenomena speak for themselves.
6. Coding and thematic analysis: Data were analyzed by identifying and coding important phrases, expressions or themes emerging from the participants' descriptions. In other words, the researchers looked for patterns, commonalities and differences in the data that reveal the underlying structures and meanings of the phenomena.
7. Interpretation and sense-making: Engage in a process of interpretation to make sense of the coded data and develop a coherent understanding of the phenomenon. This involves reflecting on the themes, considering their interrelationships, and drawing connections to relevant theories or existing knowledge.
8. Writing and representation: The researchers tried to write a narrative or an interpretive narrative that depicts the essence of the phenomenon based on analysis and interpretation. In other words, present the findings in an attractive, meaningful and faithful way to the participants' experiences.
9. Validation and member checking: The researchers sought feedback from the participants to verify the accuracy and validity of the interpretations. Member review involves sharing findings with participants and inviting their input or confirmation.
10. Reflection and reflexivity: Throughout the research process, researchers engaged in ongoing reflection and reflexivity. They reflected on their own biases, assumptions, and subjective influences that may have shaped the interpretation. This step ensures transparency and acknowledges the researchers' role in the interpretive process.

In the qualitative section, participants which involved conducting interviews and implementing the OPERA method, consisted of physical education professors, officials and experts from the Provincial Sports and Youth Administration, as well as the presidents of public sports associations in the province and its cities. A purposive sampling method was used to select participants until theoretical saturation was achieved. Participants were individuals from the research community who had the highest knowledge and experience regarding the research topic. The participants were people from the research community who had the most knowledge and experience regarding the research topic. The sample size depended on the theoretical saturation of the questions, so when the researcher came to the conclusion that the answers to the questions are similar to the answers of other participants and there is no new data in them and the theoretical saturation has been achieved, he considered the number of interviews to be sufficient and stopped continuing the

interview. In this research, theoretical saturation was achieved when the number of participants reached 10 people. The statistical population in the second part of the research (quantitative part) included all athletes who are active in public sports activities in Ardabil province. The sample size was 386 people using G-power software and the samples were randomly selected.

To collect the data of the first part of the qualitative research, the necessary information was collected through interviews, and the research tool was a semi-structured interview. Cope (2003) has stated the purpose of phenomenological interview to obtain a first-hand description of some special areas of experience and considers the role of the interviewer to provide a situation in which the participants feel free to describe their experiences in detail. In this research, the interviewees were first asked a preliminary question about the topic of the research in a completely friendly and informal manner, and during the interview, the interviewees themselves discussed the concepts and words they used in an in-depth and deep discussion. The interviewer was completely free and unrestricted to present his opinions within the framework of the research topic, and any interruption was put at bay so that the interviewees could express their opinions and mentalities easily. In the quantitative phase of the research tool, the researcher made a questionnaire with 61 questions that were obtained from the open codes obtained from the quantitative phase. In the second part of the qualitative research, the researcher used the opera method to determine solutions and prioritize them. The opera method is a systematic method through which an attempt is made to provide a solution to an issue through a kind of systematic brainstorming. Its steps include own thoughts, paired suggestions, explaining, ranking and arranging. The steps are listed below:

1. Own Thoughts: In this step, individuals generate their own thoughts and ideas regarding the issue or problem at hand. They take time to think independently and come up with potential solutions or suggestions.

2. Paired Suggestions: Individuals then pair up and share their thoughts and suggestions with each other. They engage in a collaborative discussion, exchanging ideas and building upon each other's suggestions. This step encourages teamwork and the exploration of different perspectives.

3. Explaining: Participants in the OPERA method take turns explaining their suggestions to the rest of the group. Each person provides a clear and concise explanation of their idea, ensuring that everyone understands the proposed solution.

4. Ranking: After all the suggestions have been presented, participants rank the suggestions based on their perceived feasibility, effectiveness, or other relevant criteria. This step involves considering the strengths and weaknesses of each suggestion and assigning a ranking or score.

5. Arranging: In the final step, the ranked suggestions are arranged in a specific order or sequence. This arrangement could be based on the rankings assigned in the previous step or other factors such as priority or logical flow. The goal is to create a structured list of potential solutions or actions.

In this study, in the qualitative phase, the external referee method was used to check the validity of the research, and two external referees monitored the research and gave advisory opinions, these people did not benefit from the research. To check the reliability of the research, after three experts coded the data, the reliability of the agreement between the coders was used, and the Cohen's kappa reliability coefficient between the evaluators and the researcher was above 0.90 in all interviews, which indicates the reliability of the analysis, and it can be said that the analysis Quality is about 82 to 100 percent valid. Also, in the quantitative stage, face validity was confirmed by a number of experts, and then content validity was determined and approved using CVI (0.85) and CVR (0.91) indices. Guttman's test was used for reliability, which is given in the table below.

Table 1- Test reliability

Reliability		
	1	0.86
	2	0.90
Lambda coefficient	3	0.89
	4	0.67
	5	0.89
	6	0.93

Because there is no variable yet and the questions are made of codes. In the software, it was divided into six categories and a lambda coefficient was given for each category, considering that category 4 has the smallest lambda (0.67) and is greater than 0.6. According to the opinion of Davis and Higdon (2008), the reliability of the researcher-made tool, which is the result of a qualitative work, is confirmed.

Findings

Preliminary coding was done as the first step of open coding, and the researcher subjected each document to thematic analysis or hidden content analysis based on the previous step, and the initial concepts or codes were not found. In the open coding stage, the number of 61 primary concepts was extracted, and the total frequency of these codes was 225.

To check if the existing data can be reduced and reduced to several factors. Two KMO and Bartlett tests were used and the results showed that the KMO value is equal to 0.912 and therefore the research data can be reduced to a number of basic and fundamental factors. Also, the result of Bartlett's test (15552.52), which is significant at a significance level of less than 0.01, shows that the correlation matrix between the items is not the same and the same matrix, and on the one hand, there is a high correlation between the items within each factor. On the other hand, there is no correlation between the items of one factor and the items of another factor. The KMO coefficient is greater than 0.7, which means that the sample size is sufficient for factor analysis, and Bartlett's value is not interpretable, but should only be statistically significant. The table shows that the error value is less than 0.01 and at the probability level of 99%, the sphericity of the relationships between the questions in the society is confirmed and factor analysis is possible.

Table 2- KMO and Bartlett test results

Keyser-Meyer-Olkin (KMO)	0.91
Bartlett	15552.52
Degrees of freedom	1830
Significance level	0.001

Since there are only 61 questions or measures, the researcher uses the most common rotation, i.e. Varimax, to reach a systematic pattern, and the matrix of questions and factors after Varimax rotation and removing questions number 4, 16, 17, 19, 21, 23, 51 and 53 can be seen in Table 3.

Table 3- Matrix of questions and factors after varimax rotation

Questio n	Factor	F. Loading	Questio n	Factor	F. Loading	Questio n	Factor	F. Loading
6	Factor 1	0.63	55	Factor 3	0.80	43	Factor 5	0.69
7	Factor 1	0.66	56	Factor 3	0.82	47	Factor 6	0.66
8	Factor 1	0.73	57	Factor 3	0.82	48	Factor 6	0.75
9	Factor 1	0.82	58	Factor 3	0.78	49	Factor 6	0.73
10	Factor 1	0.79	59	Factor 3	0.80	50	Factor 6	0.73
11	Factor 1	0.79	60	Factor 3	0.71	52	Factor 6	0.66
12	Factor 1	0.77	18	Factor 4	0.52	61	Factor 6	0.73
13	Factor 1	0.66	24	Factor 4	0.54	44	Factor 7	0.84
20	Factor 1	0.58	25	Factor 4	0.63	45	Factor 7	0.84
31	Factor 2	0.76	28	Factor 4	0.53	46	Factor 7	0.86
32	Factor 2	0.79	29	Factor 4	0.68	2	Factor 8	0.90
33	Factor 2	0.77	39	Factor 4	0.73	30	Factor 8	0.90
34	Factor 2	0.73	41	Factor 4	0.77	1	Factor 9	0.56
35	Factor 2	0.73	22	Factor 5	0.58	3	Factor 9	0.59
36	Factor 2	0.74	26	Factor 5	0.65	5	Factor 9	0.50
37	Factor 2	0.74	27	Factor 5	0.59	14	Factor 10	0.68
38	Factor 2	0.77	40	Factor 5	0.56	15	Factor 10	0.81
54	Factor 3	0.71	42	Factor 5	0.77			

In Table 4, 10 categories of public sports and their barriers are presented using factor analysis.

Table 4- Classification of 10 types of public sports using factor analysis

Factor	Features respectively
Media related barriers	Media advertisements, broadcasting, clips, television competitions, television advertisements, holding competitions, using billboards, holding festivals, priority of foreign competitions on the sports network.
Cultural barriers	Cultivation, attitude towards public sports, gender view, lifestyle, exaggeration, neglect of public sports, street festivals, holding a conference
Social barriers	family, organizational weakness, managers' weakness, using the capacity of donors, human resources weakness, using the capacity of other organizations, professional trainers
Individual barriers	Illness, obesity, laziness, playing together, physical literacy, seeking comfort, people's age
Public sport	Feeling satisfied with life, cheerfulness, being universal, filling free time, getting pleasure from activity and mobility, improving health
Covid-19restrictions	Weight gain during Corona, overeating during Corona, the habit of inactivity during Corona, fear of disease, Covid-19restrictions, virtual applications
Economic barriers	Economic conditions, public sports budget, people's financial problems
Legal barriers	Legal problems, development plans
Physical barriers	Sports equipment, infrastructure, sports facilities
Political barriers	Political interference in sports programs, political interference in managerial appointments

In Table 5, after the performance of two opera sessions, practical solutions and Suggestions for the development of public sports in the post-Covid-19era were presented.

Table 5- Executive solutions and suggestions for the development of public sports

Solution for barriers	Executive proposals
Related to the media	<ul style="list-style-type: none"> - Acquainting people with the various dimensions, effects and benefits of public sports - Encouraging people to walk and bike and reduce the use of vehicles - Special attention of the child and adolescent program to public sports - Increasing advertisement regarding attention to physical fitness and avoiding obesity through mass media. - Holding sports competitions related to public sports on various occasions and awarding prizes
cultural	<ul style="list-style-type: none"> Changing the attitude of high managers and clerics towards public sports Correcting misconceptions about women's sports
social	<ul style="list-style-type: none"> - Using volunteer forces in sports - Special attention to local indigenous sports and its revival - Training of efficient and expert forces in terms of quality and quantity and special attention to general sports coaches - Paying more attention to sports in schools and universities - Taking advantage of sports benefactors
Individual	<ul style="list-style-type: none"> - Suitability of programs according to people's needs
Covid-19restrictions	<ul style="list-style-type: none"> - Strengthening and improving the exercise plan at home - Creating content for public sports programs - Strengthening the infrastructure of virtual space
Economic	<ul style="list-style-type: none"> - Financial support of the government to the people by paying subsidies to promote public sports - Providing opportunities for the private sector to enter public sports - Development of free sports facilities. - All officials and members of parliament should try to remove the deprivation of the region.
legal	<ul style="list-style-type: none"> - Removing the legal gap of public sports through lawyers
physical	<ul style="list-style-type: none"> - Building sports facilities, parks and open spaces and equipping them with sports equipment - The expansion of public sports should be considered in urban designs in the future - The facilities of other devices should be used around the clock

Solution for barriers	Executive proposals
	<ul style="list-style-type: none"> - Providing sports facilities and equipment in the sports sector - Suitability of the programs according to the needs of the regions and geographical features of the cities of the province
political	<ul style="list-style-type: none"> - Selection and appointment of public sports managers based on meritocracy - Sports elections should be held within the framework of the law and without the interference of politicians - Employing expert and experienced people in the management of institutions involved in sports, including education

Friedman's non-parametric test was used to prioritize the barriers and solutions to the development of public sports in the post-Covid-19 era, and the results, according to Table 6, showed that there is a significant difference between the prioritization of the barriers to the development of public sports in the post-Covid-19 era ($p=0.001$).

Table 6- Prioritization of barriers to the development of public sports in Ardabil province

barriers of public sports	Degrees of freedom	Average ratings	rank	chi square	Error rate
Related to the media		7.82	1		
physical		6.21	2		
social		5.98	3		
cultural		5.33	4		
Economic	8	5.20	5	1381.62	0.001
Individual		4.99	6		
political		4.98	7		
legal		2.28	8		
Related to Corona		2.22	9		

According to the table above, we conclude that according to the respondents, there is a significant difference between the barriers in terms of importance, and from the respondents' point of view, these barriers do not have the same value and importance. According to the respondents, in the post-Covid-19 era, the most important barriers to the development of public sports in Ardabil province are those related to the media, followed by physical, social, cultural, economic, individual, political, and legal barriers, and the barriers related to the Covid-19 virus are among the barriers to the development of public sports in Ardabil province in the post-Covid-19 era.

Discussion

The results of this research on the barriers related to the media showed that things like media advertisements, radio, clips, television competitions, television advertisements, holding competitions, using advertising boards, holding festivals, priority of foreign competitions play a role in the sports network. A contributor to the media advertising code states that "familiarizing people with the various dimensions and effects of public sports activities through the media is important." Another participant stated that "if you study sports media such as provincial sports magazines, you will see that within a year, they do not dedicate even a few pages of their volume to public sports, and this is very inappropriate for us". Also, a contributor to broadcasting says, "Seblan network can prepare many programs for people about the harms of inactivity and its consequences, such as obesity and cardiovascular diseases." Naghizadeh Baghi et al. (2023) and Poorsoltani Zarandi et al. (2020) have pointed out the effective role of the media in the development of sports in their studies. Since the media is one of the effective tools on culture, therefore, they can be a very powerful tool in promoting public sports culture and encouraging and promoting people to sports. Due to the influence they have in shaping the attitude and behavior of the audience, the media can be an important tool in the development of public sports at the community level (Babapour., 2021). Among the types of media, the role of television in facilitating the transmission of information cannot be overlooked due to its appeal to mass audiences (Asgari

et al., 2013). The results of the study by Khalidian et al. (2015) indicate that mass media, as information highways and communication bridges influencing public opinion, play an important role in the process of information, discourse creation, education, social participation and culturalization. They are responsible for sports in the society and the promotion of sports in the country and its development and inclusiveness. Ghareh et al. (2013) also showed that the role of the media in making the audience aware of the benefits of public sports was favorable, but it was unfavorable in providing information about suitable places and public sports conferences. Also, it has been evaluated as unfavorable in creating a positive attitude and positive behavior change towards public sports. Poorsoltani Zarandi et al. (2020) stated that the activities carried out by radio and television to increase public participation in the field of public sports have been low and attracting people to public sports has been ineffective. Public sports does not only lead to running in the park or a specific sport and includes any physical activity outside of the competition that is freely chosen. Mass media can play a significant role in changing people's attitudes and beliefs, informing, educating and culturalizing public sports and finally, institutionalizing public sports in the province. Mass media have become the dominant source of formation of social realities in societies. The media are responsible for most of the observations and experiences through which we organize our understanding of the world around us and how it works. In fact, a major part of our attitude towards the world is rooted in pre-made media messages. They have a direct effect on the values and norms of the society in terms of having a wide scope of influence. Also, they play a significant role in changing the awareness and attitudes of the society. In the second stage of the current study, the respondents were of the opinion that barriers related to the media in the post-Covid-19 period have the first priority.

The results of this research on cultural barriers showed that things like culturalization, attitude towards public sports, gender view, lifestyle, exaggeration, neglect of public sports, street festivals, holding conferences play a role. A contributor for culture code stated that "If you look at our situation today, you will see that most of the children and youth and even the middle-aged people of the province are not familiar with the names of their native games and have forgotten them". Another participant for the topic of attitude towards public sports declares that "the most important issue is to change the attitude, they must reach this level of understanding to know that public sports is a very important platform for the progress and development of society in all dimensions." Or "For the barriers to development, I will first raise the issue of attitude, that the attitude should be corrected both among the audience and in the management population". People's attitudes and ways of thinking guide their actions. Those who consider the most important goal of sports to be the training of sports heroes, do not pay the necessary attention to the sports of ordinary people, as a result, they spend most of their efforts in holding various competitions. In terms of gender perspective, according to the participants, attitudes towards gender should be changed, of course, it has improved compared to before, but it is still not enough. Today, in most societies, women are deprived of equal opportunities to participate in sports activities and face limitations. Structural and managerial restrictions, financial and facility restrictions, cultural and social restrictions are among these restrictions, but these restrictions in Iran for various reasons. Especially, the cultural and social conditions governing the country are more prominent (Nourbakhsh et al., 2011). In this connection, Poorsoltani Zarandi et al (2020) did not find a significant difference in the gender perspective in relation to public sports. Kouzechian et al. (2021) showed in his study that the advertisements about the beneficial effects of exercising through mass media have not yet been able to give the necessary assurance to many families about the necessity of exercising for women. As Bourdas & Zacharakis (2020) also emphasizes, the economic and social base determines the sports activity of people in the society. In case, women with any economic and social base do not have equal opportunity to participate in social and sports activities. The minimum necessary support for them is the material and spiritual support of the family, which the high economic and social base of women provides for this support. Of course, this is if the family does not have a traditional view of women and does not provide the conditions for their socialization with this view. People's lifestyles have changed and the tastes of children and teenagers today have undergone changes compared to the past, and virtual space and computer games have become companions of their moments. A kind of exaggeration is done for public sports in the

country, which is not the case in reality. A participant says, "Our public sports are only in front of the camera. Let me honestly tell you that our public sport is held only once a year by walking. For a week, all the organizations kill themselves because it is broadcast live, gather everyone there! What's wrong with you trying to gather all these people together during the year? Always collect all. What's wrong with it?" In the second stage of the current study, the respondents' opinion was that cultural barriers in the post-Covid-19 period were ranked fourth.

The results of this research on social barriers showed that things like family, organizational weakness, managers' weakness, use of the capacity of donors, weakness of human resources, use of the capacity of other organizations, professional trainers play a role in this sector. A contributor to the family code stated that "in the past, children and young people played traditional local games in the streets, and when you watched them, you saw them full of children's noise, joy and happiness, as if problems did not exist in life. The reason was that in the past, families raised their children by playing native and local games, and they had no worries, because their children spent their free time with all their heart. And even with restlessness, they were counting the moments to accomplish such an important event and were looking for indescribable excitement with their passion. The family as a social institution plays a role in the development of public sports, so that parents and families give priority to sports other than public sports, such as football, volleyball, and martial arts. In relation to the issue of using the capacity of other devices, which was the most frequent in the qualitative section of the interviewees, it was stated that "everyone's sports is growing, but this growth is very slow, I hope that the cooperation of various institutions, from the municipality to the Sports and Youth Affairs Department and other bodies with a public delegation, will ensure that the desired programs are implemented in the best conditions, which will ultimately cause more people to be active in the field of public sports. Or "In this context, the general board should be able to compensate for the deficiencies in this regard with the cooperation of the sports and youth department, the municipality and other organizations" or "When we talk about general sports, it means each and every organization. Those who are in the country and in the province, from the highest to the lowest, should provide their share for public sports" or "even the housing and urban development of any complex that is being built must be considered as part of public sports. In the section of social barriers, the use of the capacity of donors and organizational weakness and the weakness of managers are also mentioned, and the participants stated in this regard that "we have Mohaghegh Ardabili University in the province and there are good professors in the field of sports, but there is a gap between the officials. There is a province of sports and universities" or "Sports in our province needs someone to come and motivate". Officials and participants of championship sports are often chosen from among those who have a history of championships or have experience and information in this matter. This group can teach people the necessary techniques and tactics and prepare them to win the competitions. But popularizing sports needs more people who want to popularize sports, have the necessary information about the effects of public sports in the society, and pay attention to the health of the society. The results of this part of the study on social barriers are consistent with the results of Farahani et al. (2017). In the second stage of the present study, the respondents' opinion was that social barriers in the post-Covid-19 period were ranked third.

The results of this research on individual barriers showed that things like illness, obesity, laziness, playing with friends, movement literacy, comfort seeking, and people's age play a role in this section. A participant for the topic of disease has stated that "people got involved in difficult diseases, and now, whether before they got Covid-19 or after the vaccinations, many diseases have increased because it is also contagious, and this results that in many people having a sharp drop in sports activity. In relation to the codes of individual barriers, it is mentioned that "other people accepted bodybuilding and enjoy it, other people got used to the virtual space and no longer want to deal with the real space and sports" and "People don't make time for sports in their schedule anymore, which means that the Covid-19 has caused sports to be left out of the family's basket, and since human beings are by nature comfort-seeking and this situation has met with the good fortune of the society" or "One of the barriers that you say can be that people have become lazier, people have become fatter, people have become less active and this laziness has prevailed over them" and "it seems that the role of brothers and sisters in the family is also changing." It has been more in teaching games

and being a teammate in the past. The results of this part of the study on individual barriers are consistent with the results of the study of Bourdas & Zacharakis (2020) and Tayyebi et al. (2020). In the second stage of the current study, the respondents' opinion was that individual barriers in the post-Covid-19 era were ranked sixth.

The results of this research on the barriers of the Covid-19 epidemic showed that things like weight gain during Covid-19, overeating, the habit of inactivity, fear of disease, Covid-19 restrictions, and virtual applications play a role in this sector. During the Covid-19 era, due to the psychological debate that started in the country, almost no one dared to go out of the house, and this issue was one of the important barriers to participation in public sports. A participant for the Code of Fear of Covid-19 disease stated that "the calls that were given, nationwide campaigns, national campaigns, stay at home and stay healthy, these were held." It's just that people were afraid not to say too much about the closure of clubs and swimming pools in this crowd, this made them stay at home because of the fear of the Covid-19" or "the fear of the disease made important international competitions including Olympics and world championships in various fields were postponed or not held, even the league matches in various countries were declared half-finished. Stay and do not participate in sports fields, even in the open air. Regarding the other codes of this section, it is mentioned that "one of the barriers was the Covid-19 restrictions that were caused by not using sports halls and the fear that was created for people from the psychological aspect, and they did not allow people to gather together at all." Or "Covid-19 era was a setback in public sports, which means we have to spend energy to be able to return the conditions to the pre-Covid-19 period and then develop public sports. In this way, it is one of the most important things that exist. And it can be an obstacle that people get used to life without exercise. One of the distinctive aspects of the sports landscape of Covid-19 was the absolute stop of sports. The results of this part of the study on the barriers of the Covid-19 epidemic are consistent with the results of the study of Rezaei et al. (2021), Naghizadeh Baghi et al. (2023) and Ruihley and Li (2020). Although some seasons or events were delayed more than others, fans from around the world experienced some form of disruption in their sports consumption. Another aspect about this time of epidemic was the individual and collective need for social distance, self-isolation or quarantine. As a result, many celebrities, athletes, coaches, and sports organizations were forced to use alternative forms of media or altered messages to communicate during this unusual time (Ruihley & Li., 2020). Rezaei et al. (2021) found in their research that during the quarantine, 88% of indoor places and about 70% of outdoor places were closed. Conclusion that sports activities were severely affected by Covid-19 and reduced. In the second stage of the present study, the respondents' opinion was that the barriers related to Covid-19 in the post-Covid-19 era were ranked ninth.

The results of this research on economic barriers showed that things like economic conditions, public sports budget, and people's financial problems play a role in this sector. Unfortunately, due to economic conditions, sports have been left out of families' baskets. A participant stated that "in terms of economic discussion, considering the economic conditions we have, it is really difficult for people to spend money on sports" and "a person who wants to do sports needs a hand warmer and a pair of shoes and other things required that are very expensive and difficult for the middle and low-income sections of the society to be able to provide it" or "we should note that most families are involved in expensive and financial problems and the high price in the country has caused that the most concerning mental conflict of people to be meeting the basic needs of life. Or "among other things that can be pointed out is the lack of proper budget allocation for the development of mass sports, so that during the Covid-19 era, not only the budget of the mass sports federation but also most of the federations was reduced, and as a result, the budget for The provincial delegations were also allocated, it was far less than in the era before Corona. Financial resources as a factor in the development of sports are said to be effective in different ways in generating income and expenses in sports organizations and due to the fact that the implementation of plans and sports programs need financial resources, this issue is of particular importance. Poorsoltani Zarandi et al. (2020) and Javadipour et al. (2014) stated that one of the factors affecting public sports is the economic debate. In fact, financial resources, for example, are the vital artery of any organization, and they affect the organization's plans when financial resources are not available. Kianmarz et al. (2007) stated the low per capita exercise in the household basket

as one of the economic problems in exercise. In this regard, Wheatley (2010) stated that economic deprivation led to a delay in significant positive changes for the development of sports. In this connection, Asefi (2013) points out that allocating a suitable and sufficient budget to public sports can help its institutionalization in the society. Therefore, the necessity of allocating enough funds to advance the goals of developing public sports is clear. But according to the opinion of the interviewees, unfortunately, sufficient funds are not allocated to these programs. Therefore, it is necessary for the officials of the organization to be more careful in allocating the budget and considering the importance of the issue of public sports and its relationship with the health of the society, they should pay attention to allocating the appropriate budget for its programs or even more budget for this. It is necessary to request the competent authorities of the government to increase the quality of public sports programs and facilitate the development of the culture of public sports. In the second stage of the current study, the respondents' opinion was that economic barriers in the post-Covid-19 period were ranked fifth.

The results of this research on legal barriers showed that things like legal problems, legal plans play a role in this sector. A participant stated that "this budget that is allocated to us and if this board is assigned or even if it is assigned to the general administration, we could increase the quality and quantity of people who work in the public domain in their fields. The legal and legal barriers are due to the weakness, lack or inappropriateness of the laws related to the development of sports, which included the lack of law-oriented in the implementation of the strategic document and the lack of thematic and supporting laws for sports. In fact, the legal factors and the provision of legal and facilitating platforms can be a supporting factor for the sustainable development of sports, and in this regard, institutions such as the Islamic Council can pass laws in this direction as a supporter of the country's sports development. In this connection, the study of Doosti et al. (2015) has also confirmed the role of legal factors. In the second stage of the current study, the respondents' opinion was that the legal barriers in the post-Covid-19 era were ranked eighth.

The results of this research on physical barriers showed that things like sports equipment, infrastructure, and sports facilities play a role in this sector. A participant stated that "in the past, the child had a right in the public space of the streets and their play was natural for adults, but today there is a need for a special playground and adults do not notice children's play at all and disturb it." and this is a very important issue" or "There is a park, see how well received it is. There are two basketball hoops every day and every hour. How enjoyable. How beautiful it is to enjoy activity and movement. They can build clay tennis, beach volleyball, regular volleyball, even beach handball very easily. Sir, six months of the year, there are a number of interested people. Running and walking tracks can do this under the command of sports departments and the relevant field of different organizations should be involved. To pay for any work, facilities and infrastructure must be provided. In terms of public sports, in our country there is a noticeable lack of sports spaces that are easily and freely available to the people. Perhaps for someone who starts exercising or is even interested in this work, the lack of sufficient facilities in the initial sessions does not prevent him from engaging in physical activity, but in the long term and for its continuation, the existence of available facilities such as space Suitable walking, park, sports field and... It is necessary. A person may take the effort of walking a long distance to reach a suitable space such as a park for one or two physical activity sessions, but if sports activities are to be part of his daily schedule, the distance can be an obstacle. In this context, Jagemann (2004) stated that providing sports facilities and equipment in the sports sector is one of the solutions for the development of sports. Therefore, considering the high importance of the existence of facilities and infrastructure in the direction of the development of public sports, it is expected that the country's macro-level officials will try to eliminate the deficiencies in this field. In this regard, the media can bring the issue to the attention of the regulatory institutions by highlighting these castes and thus play the role of inciting the demands of the regulatory institutions. In the second stage of the present study, the respondents' opinion was that physical barriers were ranked second in the post-Covid-19 era.

Limitation of access to the research community: In this study, focusing on Ardabil Province as the research area may limit the generalizability of the identified barriers and solutions to other regions and provinces. Additionally, conducting a case study solely in Ardabil Province may have time constraints for data collection and analysis, which could impact the generalizability of the results. Furthermore, the use of

purposive sampling in selecting participants may result in sampling limitations and lack of representativeness in the study sample. However, by acknowledging and managing these limitations, this study can contribute to a better understanding of barriers and solutions for the development of public sports in the post-COVID era in Ardabil Province.

Conclusion

What is important in the development of sports is the continuation of the implementation of sports programs and the sustainable participation of people in sports, which is systematically observed in the sports programs of developed countries. In fact, in these countries, whenever there is talk about the development of sports and its programs, it is meant to consider all aspects along with the durability and institutionalization of its programs.

In this research, the barriers to the development of public sports were identified and the first stage of the work was completed to some extent, and in order to continue, in the next stage, each of the barriers should be expertly analyzed and the necessary solutions to solve them should be proposed. And finally, the best solution should be selected and implemented from the listed solutions.

Acknowledgments

The authors thank and appreciate all the people who contributed in any way to the present research.

Conflicts of Interest

There is no conflict of interest.

Funding

The present article is based on a research project that was carried out with the financial support of the General Directorate of Youth Sports of Ardabil Province.

References

- Aman, M. S., Mohamed, M., & Omar-Fauzee, M. S. (2009). Sport for all and elite sport: underlining values and aims for government involvement via leisure policy. *European Journal of Social Sciences*, 9(4), 85-91. <https://B2n.ir/y47774>
- Anderson, E., & Durstine, J. L. (2019). Physical activity, exercise, and chronic diseases: A brief review. *Sports Medicine and Health Science*, 1(1), 3-10. <https://doi.org/10.1016/j.smhs.2019.08.006>
- Asefi, A. A. (2013). Identification and modeling of effective factors in institutionalizing public sports in Iran (38595) [PhD Thesis, University of Tehran]. <https://utdlib.ut.ac.ir/Search/DocumentDetails/38595> [In Persian].
- Asgari, B., Ghasemi, H., & Kashkar, S. (2011). A Quantitative Study of Channel Three's Sports Programs. *Communication Research*, 18(68), 135-151. <https://doi.org/10.22082/cr.2011.23714> [In Persian].
- Babapour, L. (2021). Investigating the role of sports television network on people's sports participation. *Sociology and Lifestyle Management*, 7(17), 47-69. <https://doi.org/20.1001.1.24237558.1399.5.1.3.9> [In Persian].
- Balanzá-Martínez, V., Atienza-Carbonell, B., Kapczynski, F., & De Boni, R. B. (2020). Lifestyle behaviours during the COVID-19-time to connect. *Acta Psychiatrica Scandinavica*, 141(5), 399. <https://doi.org/10.1111/acps.13177>
- Barani, S. (2015). Situational prevention of cyber terrorism crime from the perspective of Islam. *World Conference on Psychology and Educational Sciences, Law and Social Sciences at the Beginning of the Third Millennium, Shiraz*. <https://civilica.com/doc/592239/> [In Persian].
- Bourdas, D. I., & Zacharakis, E. D. (2020). Physical activity: a natural allies to prevent impending adverse effects due to the increase of isolation and physical inactivity in COVID-19 era. *Sports Medicine*, 1(2), 25-34. [10.3390/vaccines11091431](https://doi.org/10.3390/vaccines11091431)

- Bults, M., Beaujean, D. J., Richardus, J. H., & Voeten, H. A. (2015). Perceptions and behavioral responses of the general public during the 2009 influenza A (H1N1) pandemic: a systematic review. *Disaster Medicine and Public Health Preparedness*, 9(2), 207-219. <https://doi.org/10.1017/dmp.2014.160>
- Cope, J. (2003). Entrepreneurial learning and critical reflection: Discontinuous events as triggers for 'higher-level' learning. *Management Learning*, 34(4), 429-450. <https://doi.org/10.1177/1350507603039067>
- Davis, B., & Higdon, K. (2008). The effects of mentoring/induction support on beginning teachers' practices in early elementary classrooms (K-3). *Journal of Research in Childhood Education*, 22(3), 261-274. <https://doi.org/10.1080/02568540809594626>
- Eshraghi, H., & Kashef, M. (2009). The Comparative Study of General Health and Social Relationships of Physically Active and Inactive Governmental Employees in Isfahan City. *Journal of Sport Biosciences*, 1(2), 111-238. https://jsb.ut.ac.ir/article_21993.html?lang=en [In Persian].
- Fakhri, F., Asgarian, F., & Sedghi, Sh. (2013). The relationship between the managerial personality of coaches and the success rate of sports teams. *The 6th National Conference of Physical Education and Sports Science Students of Iran, Tehran*. <https://civilica.com/doc/194437/certificate/print/> [In Persian].
- Farah, B. Q., do Prado, W. L., Malik, N., Lofrano-Prado, M. C., de Melo, P. H., Botero, J. P., ... & Ritti-Dias, R. M. (2021). Barriers to physical activity during the COVID-19 pandemic in adults: a cross-sectional study. *Sport Sciences for Health*, 17, 441-447. <https://doi.org/10.1007/s11332-020-00724-5>
- Farahani, A., Keshavarz, L., & Sadeghi, A. (2017). The Design of strategies in development Iran elite sport. *Applied Research in Sport Management*, 5(3), 127-142. https://arsmb.journals.pnu.ac.ir/?_action=articleInfo&article=3446&lang=en [In Persian].
- Faraji, E., Dabiri, A., Allami, M., Hosseini, M., & Barati, A. H. (2023). Physical activity and sport participation in veterans with extremity musculoskeletal disorders. *Eujapa*, 16(1), 1-11. <https://doi.org/10.5507/euj.2022.002>
- Ghafouri, F., Rahman Seresht, H., Kozechian, H., & Ehsani, M. (2012). Studying and investigating the attitude of physical education specialists towards the role of mass media (radio, television and publications) in people's tendency towards championship and public sports. *Movement*, 16(16), 57-78. https://journals.ut.ac.ir/article_10284.html [In Persian].
- Ghareh, M., Gholipour, N., & Anet, Z. (2013). Examine the role of mass media to attitudes to sport for all in students of Alzahra University. *Communication Management in Sport Media*, 1(2), 40-47. <https://doi.org/20.1001.1.23455578.1392.1.2.5.3> [In Persian].
- Gökalp, A. R., Akıl, M., & Balkar, B. (2023). Cooperation policies among public institutions for the development and dissemination of sports: a qualitative study. *Sport in Society*, 26(6), 1024-1043. <https://doi.org/10.1080/17430437.2022.2088359>
- Gu, Y., Yuan, Z., Zhou, W., & Xu, W. (2023). Development of public sports and optimization of sports mode under the influence of COVID-19 epidemic. *Revista Brasileira de Medicina do Esporte*, 29, e2023_0084. https://doi.org/10.1590/1517-8692202329012023_0084
- Henriksen, D., Creely, E., & Henderson, M. (2020). Folk pedagogies for teacher transitions: Approaches to synchronous online learning in the wake of COVID-19. *Journal of Technology and Teacher Education*, 28(2), 201-209. <https://www.learntechlib.org/primary/p/216179/>
- Holt, N. L., Neely, K. C., Slater, L. G., Camiré, M., Côté, J., Fraser-Thomas, J., & Tamminen, K. A. (2017). A grounded theory of positive youth development through sport based on results from a qualitative meta-study. *International Review of Sport and Exercise Psychology*, 10(1), 1-49. <https://doi.org/10.1080/1750984X.2016.1180704>
- Jagemann, H. (2004). Sports and the environment: ways towards achieving the sustainable development of sport. *Conference by the 4th Pierre de Coubertin School Forum Arezano (MUVITA)*.

<https://thesportjournal.org/article/sports-and-the-environment-ways-towards-achieving-the-sustainable-development-of-sport/>

Jakobsson, J., Malm, C., Furberg, M., Ekelund, U., & Svensson, M. (2020). Physical activity during the coronavirus (COVID-19) pandemic: prevention of a decline in metabolic and immunological functions. *Frontiers in Sports and Active Living*, 2. <https://doi.org/10.3389/fspor.2020.00057>

Javadipour, M., Ghavedel Sarkandi, M., & Sameenia, M. (2014). Introduction to the Theoretical Framework and Model Designing of Sport for All in Iran. *Sport Management Studies*, 5(21), 127-148. <https://smrj.ssrc.ac.ir/?action=articleInfo&article=244&lang=en&lang=fa&lang=en> [In Persian].

Khaledian, M., Mostafaei, F., Samadi, M., & Kia, F. (2013). The role of mass media in the development of sport. *Communication Management in Sport Media*, 1(2), 48-55. <https://sportmedia.journals.pnu.ac.ir/?action=articleInfo&article=589&lang=en> [In Persian].

Kianmarz, Y., Muharramzadeh, M., Kianmarz, M., & Marandi, R. (2007). Investigating the economic situation of Iran's sports industry. *Proceedings of the Sixth International Conference on Physical Education and Sport Sciences, Kish Island*. [In Persian].

Kouzechian, H., Saffari, M., & Khalili, M. (2021). The Effectiveness of Advertising through Sport in Social Networks (Case Study: Instagram). *Sport Management Journal*, 13(1), 257-275. <https://doi.org/10.22059/jsm.2019.275140.2224> [In Persian].

Lim, M. A., & Pranata, R. (2021). Sports activities during any pandemic lockdown. *Irish Journal of Medical Science (1971-)*, 190(1), 447-451. <https://doi.org/10.1007/s11845-020-02300-9>

Lippi, G., Henry, B. M., & Sanchis-Gomar, F. (2020). Physical inactivity and cardiovascular disease at the time of coronavirus disease 2019 (COVID-19). *European Journal of Preventive Cardiology*, 27(9), 906-908. <https://doi.org/10.1177/2047487320916823>

Momtazbakhsh, M., & Fakur, Y. (2016). Investigating strategies for the promotion and development of women's public sports at the University of Police Sciences. *Police Knowledge Journal*, 9(2), 53-62. <https://www.sid.ir/paper/100519/fa> [In Persian].

Mutz, M., & Gerke, M. (2021). Sport and exercise in times of self-quarantine: How Germans changed their behaviour at the beginning of the Covid-19 pandemic. *International Review for the Sociology of Sport*, 56(3), 305-316. <https://doi.org/10.1177/1012690220934335>

Naghizadeh Baghi, A., Moharram Zadeh, M., Sorati, N., & Kordloo, H. (2023). Teachers' Lived Experience of the Effectiveness of Physical Education Training During Covid-19. *Applied Educational Leadership*, 4(2), 1-18. <https://doi.org/10.22098/ael.2023.1553> [In Persian].

Nourbakhsh, M., Kohandel, M., & Azimi Shad, S. (2011). A comparative study of women's sports before and after Adqam plan. *Sports Science Quarterly*, 3(8), 63-79. https://journals.iau.ir/article_526700_6ad5696e2c635d1843de4abb0dfec191.pdf [In Persian].

Pinto, A. J., Dunstan, D. W., Owen, N., Bonfá, E., & Gualano, B. (2020). Combating physical inactivity during the COVID-19 pandemic. *Nature Reviews Rheumatology*, 16(7), 347-348. <https://doi.org/10.1038/s41584-020-0427-z>

Poorsoltani Zarandi, H., Kordlu, H., & Tariverdi, R. (2020). The Role of the State TV and radio to Increase of people participation in Public Sports: A Case Study of Qazvin Province. *Art & Media Studies*, 2(3), 11-30. <https://magiran.com/p2172136> [In Persian].

Puen, D. A. Y., Cobar, A. G. C., Dimarucot, H. C., & Camarador, R. A. (2021). Perceived Barriers to Physical Activity of College Students in Manila, Philippines during the COVID-19 Community Quarantine: An Online Survey. *Sport Mont*, 19(2), 101-106. [10.26773/smj.210617](https://doi.org/10.26773/smj.210617)

- Rezaei, S., Aghababa, A., Rohani, H., & Nabilpuor, M. (2021). Effects of the Novel 2019 coronavirus outbreak (Covid-19) on the level of sports activities and mood of non-professional football players in Iran. *Organizational Behavior Management in Sport Studies*, 7(4), 29-42. <https://doi.org/10.30473/fmss.2021.56160.2223> [In Persian].
- Robinson, E., Boyland, E., Chisholm, A., Harrold, J., Maloney, N. G., Marty, L., ... & Hardman, C. A. (2021). Obesity, eating behavior and physical activity during COVID-19 lockdown: A study of UK adults. *Appetite*, 156, 104853. <https://doi.org/10.1016/j.appet.2020.104853>
- Ruibley, B. J., & Li, B. (2020). Sport and the coronavirus crisis special issue: An introduction. *International Journal of Sport Communication*, 13(3), 289-293. <https://doi.org/10.1123/ijsc.2020-0254>
- Saberi, A., Bagheri, Gh., & Begharaz, M. (2015). Investigating the role of group cohesion in social capital (case study: professional football players of Fars province). *Social Capital Management*, 2(1), 75-94. [10.22059/JSCM.2015.54093](https://doi.org/10.22059/JSCM.2015.54093) [In Persian].
- Sadati, A. K., Lankarani, M. H. B., & Lankarani, K. B. (2020). Risk society, global vulnerability and fragile resilience; sociological view on the coronavirus outbreak. *Shiraz E-Medical Journal*, 21(4). <https://doi.org/10.5812/semj.102263>
- Shabanimoghadam, K., Rahmati, M., Nazem, F., Rezaei, A. A., & Mir Nasouri, R. (2011). Acute effect of blows to the head due one bout of amateur boxing match on electroencephalography (EEG). *Yafte*, 13(1), 106-113. <https://yafte.lums.ac.ir/article-1-409-en.html> [In Persian].
- Sotiriadou, K., Shilbury, D., & Quick, S. (2008). The attraction, retention/transition, and nurturing process of sport development: Some Australian evidence. *Journal of Sport Management*, 22(3), 247-272. <https://doi.org/10.1123/jsm.22.3.247>
- Tayyebi, B., Asadi, F., & Janani, H. (2020). The Paradigm of Improving the Culture of Sports at Home during the Outbreak of the Coronavirus. *Sport Management Studies*, 12(62), 265-290. <https://doi.org/10.22089/smrj.2020.8750.2988> [In Persian].
- Vafaei Moghaddam, A., Farzan, F., Razavi, S. M. H., & Afshari, M. (2019). Serving the development causes of sport for all based on Grounded Theory. *Sport Management Studies*, 10(52), 43-72. <https://doi.org/10.22089/smrj.2017.3818.1745> [In Persian].
- Wheatley, L. R. (2007). Sport action zones: empowering local communities? The regional manifestation of a national initiative (*Doctoral Dissertation, Durham University*). <http://etheses.dur.ac.uk/2561>
- Woods, J. A., Hutchinson, N. T., Powers, S. K., Roberts, W. O., Gomez-Cabrera, M. C., Radak, Z., ... & Ji, L. L. (2020). The COVID-19 pandemic and physical activity. *Sports Medicine and Health Science*, 2(2), 55-64. <https://doi.org/10.1016/j.smhs.2020.05.006>