

## A survey of the Challenges Raising from COVID-19 in Sport for all with a focus on Children's Sports and Physical Activities

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### **Abstract**

**Background:** The COVID-19 pandemic has significantly impacted people's sports and physical activities. Many studies have examined these effects from different points of view. This study investigates the challenges of COVID-19 in sport for all, emphasizing Children's Sport and Physical Activity.

**Methods:** This research is applied in terms of purpose and descriptive-analytical in terms of data collection, and is conducted by the use of the field method. The population included all experts in children's sports, kindergarten teachers, primary school teachers, and managers of the clubs active in children's sports in Gorgan (N = 750). The sample was determined based on the statistical population and Morgan table (n = 257). A 22-item researcher-made questionnaire with a five-point Likert scale was used to collect the data and assess the effects of COVID-19 on children's sport in three dimensions and ten components. Given the normal distribution of data, the correlated t-test was used to measure the effects. And Friedman's test was used to prioritize the challenges of COVID-19 in sport for all, emphasizing children's sports.

**Results:** The results showed that the challenges of COVID-19 in sport for all with an emphasis on children's sports and physical activities are jeopardizing the physical health of children, increasing the issues related to holding competitions and festivals, increasing unemployment of sports coaches, increasing governmental restrictions for the operation of sports facilities, reducing investment in children's sports, endangering the physical health of individuals, loss of human resources, the financial crisis of sports centers, reducing the income of health-related sports centers and increasing psychological problems (Social Phobia, anxiety and fear of Sports).

**Conclusions:** The results revealed that the challenges raised by COVID-19 in children's sports and physical activity can be managed by giving priority to low-risk sports in open spaces, games, and competitions without spectators, providing unemployment insurance services to children's sports activists, using technology in sports classes, providing support packages and banking facilities for sports center owners and observing health practices.

**Key Words:** Children, COVID-19, Physical activity, Sport for all.

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## 1- INTRODUCTION

The sport has a broad audience in today's world (1). Sports' fascinations and sensitivities have made sports popular worldwide having many fans and followers. As a large community, all the news, secondary issues, and information should be followed by many people (2). Sport has become an ideal environment for promotional, cultural, and social activities because of a broad audience in all personal spectrums. The social potentials of sports have led to political inclusion and pursuing political goals through sports (3).

Childhood is the most critical period of motor development, and the characteristics of motor development include continuous physical, motor, cognitive and emotional development. Early experiences and learning in this course are efficient for the person's learning in the future (4). The age range of 3 to 12 is commonly defined as the period of childhood, but this definition is to be corrected; it divides childhood into two parts. The first period is from 3 to 6 years of age, and the next period is from 6 to 12 years of age. However, today, this division has undergone some changes (5). The positive and constructive effects of physical activity and play on children's physical development, reduction of obesity, and cardiorespiratory fitness have been confirmed in many studies, books, and textbooks (6). Children are more interested in a particular type of play; In 5 to 6 years old children, the ability to play movement games develops because of the increased interest in the group and regular games and the further development of fundamental movement patterns. Malina and Bopard stated that the preschool period or the second childhood period (2-7 years) is characterized by gradual neuromuscular development and the ability to perform in fundamental movement patterns. 1-7-year-old children make a good progress in this area, advanced patterns in some fundamental skills

develop a little later, and play is essential to refine these skills (7).

The IOC (International Olympic Committee) points that sport for all are activities that restore strength and superiority to human beings and promote health, fitness, and well-being through sports activities to people who can become accustomed to them according to their age, gender, and attitude, economic and cultural conditions (8). Mozaffari (2005) considers sport for all to be a set of simple, low-cost, informal, fun, and festive sports activities that everyone can participate in. Public and recreational sports are implemented in five different and related activities and programs: educational sports, informal sports, Intramural sports, Extramural sports, and club sports (9).

Educational sports programs are based on learning opportunities regarding sports skills, strategies, rules, and regulations and help the participants improve their skills. This training often includes individual or group trainings through courses and workshops, such as the trainings in various sport classes held in the summer to fill people's free time. Usually, three levels of education can be imagined: beginner, intermediate and advanced, Informal sports involve spontaneous participation in sports. Informal sport is an individual approach to sport; this sport emphasizes participation in physical fitness and recreation and is often done without a predetermined goal and only to participate in sport. The main emphasis of informal sports is on minimal management and control. Planning in this type of sport deals with providing facilities and services available based on personal needs and interests. School games or recreational and movement games played in neighborhoods are examples of informal sports. Intramural sports include sports competitions and matches in which the participants are limited to one community section. Only people from the same section

(kindergarten, school, etc.) participate in such activities. The activities in this section are usually related to men, women, or mixed. Associations, committees set their rules or boards, such as Collegiate or intra-organizational competitions (for example, between employees). Extramural sports deals with the organized participation of individuals in recreational competitions in the form of teams, and competitions between the winners of Intramural competitions. Extramural sports occur between different festivals and competitions, such as the competitions between departments or universities. Club Sports are usually founded by a group of people with common interests. Clubs differ in the program under-emphasis, and its members determine the type of activity. For example, members of a club may emphasize training, financial support, socialism, or a combination of these three activities and promote them.

The level of people's access to various services required has increased, activities have become more specialized, and people's physical mobility has been dramatically reduced given the growth in urbanization, the prevalence of business systems, and the mechanization of activities. Promoting sport for all, following the type of activities and personal and professional living conditions in the community, can cover some of the effects of physical inactivity and increase social vitality and national productivity (10).

Sports history shows that this industry has not always been on growth and development. Changes in the world have been able to change its developmental process seriously. For example, the formation of some international aspects has caused negative changes in the sports industry. At the same time, some industries such as medicine, military, transportation are less affected by environmental conditions (11). This fact shows that sport

can take a negative path under critical conditions. The importance of sports has led to more efforts to increase the strength and stability of this industry in different conditions.

In times of crisis, the compatibility of industries with the forthcoming changes can reduce losses and follow the path of industrial excellence. The occurrence of natural and unnatural crises is one of the most critical factors in the failure of some industries, causing irreparable damages (12). One of the current crises is COVID-19. Since late December 2019, an outbreak of a respiratory disease called New Coronavirus, or COVID-19, has been reported in Wuhan, China, subsequently affecting the entire country. In general, COVID-19 is a respiratory disease that, although not highly lethal, has caused widespread concerns (13). This issue has caused human, industrial, educational, and environmental damages in all countries, including Iran. Like some national and international industries, the virus has affected Iranian sport. The unpreparedness of the sports industry for this international event has caused many problems and injuries in this regard. Undoubtedly, due to the extent of this virus's medical, mental, and behavioral effects, the sport has also suffered.

Meanwhile, sports adaptation to the community level changes is an important activity for the prosperity of the sports industry. Although not all sports are expected to avoid significant financial losses due to changes in their programs and goals, sports can be revived with proper and creative planning. Due to the weak foundations of the country's sports, the outbreak of this virus has been able to have serious harms to sports, and sports will undoubtedly suffer from injuries after the elimination of the COVID-19. The lack of crucial research on the challenges of sport with the outbreak of the COVID-19 virus crisis made the situation complex in

this area in Iran. So, this study answers the question of what are the challenges of COVID-19 in sport for all, emphasizing sports and physical activity of children.

## 2- MATERIALS AND METHODS

The study is applied in terms of purpose and descriptive-analytical in terms of data collection, and is conducted by the use of the field method. The population Includes all experts in children's sports, kindergarten teachers, primary school teachers and managers of clubs active in children's sports in Gorgan (N = 750). A sample of 257 individuals was determined based on the statistical population and Morgan table. Because the population consisted of different groups and their number was not equal, the participants were selected based on the convenience sampling method selected.

A 22-item researcher-made questionnaire with a five-point Likert scale was used to collect data that assesses the effects of COVID-19 on children's sport in three dimensions and ten components. The

sports experts confirmed the validity of the questionnaire, and its reliability was confirmed by the Cronbach's alpha coefficient of 0.79, and the test-retest reliability of 0.82. The distribution and collection of research questionnaires were both in person and absentia through social media.

Descriptive statistics such as frequency, mean, standard deviation, minimum and maximum are used to describe the variables. Given the normal distribution of data, the correlated t-test was used to measure the effect. Friedman's test was used to prioritize the challenges of COVID-19 in sport for all, emphasizing children's sports.

## 3- RESULTS

The descriptive results showed that 72% of the participants in the study were men, and 28% were women. Among the research samples, people with a bachelor's degree with 64% had the highest share. Also, the age group of 31-45 years had the highest share with 50%, shown in **Table 1**.

**Table-1:** Descriptive Statistics of Individual characteristics of the subjects

	Variable	Frequency	Percent
Gender	Man	72	%28
	Women	185	%72
Education	Associate and less degree	45	%14
	bachelor's degree	165	%64
	Master and PhD degree	37	%21
Age	Less than 30 years	47	%18
	Between 31 to 45 years	121	%50
	More than 45 years	81	%32
Working Groups	Sports Experts	23	%9
	Director of Children's Sports Club	37	%15
	Primary School Teachers	63	%24
	Kindergarten instructors	133	%52

**Table 2** shows the descriptive statistics including the mean and standard deviation of the challenges arising from COVID-19

in different factors related to sport for all with a focus on the children's sports and physical activities.

**Table-2:** Description of the Challenges arising from COVID-19

Challenges		Mean	Std. Deviation	N	Max	Min
Health-related challenges	Endangering children's physical health	3.81	0.922	257	5	2
	Endangering the physical health of people	3.41	0.746	257	5	2
	Increased psychological problems (total phobia, anxiety and fear of sport)	3.23	0.874	257	5	2
jobs -related challenges	Loss of human resources	3.40	0.857	257	5	2
	Reduced investment in children's sports	3.56	0.743	257	5	2
	Unemployment of sports coaches rises	3.74	0.754	257	5	3
Sports facilities -related challenges	Declining revenues of health-related sports centers	3.32	0.999	257	5	1
	Government restrictions on sports facilities increase	3.56	0.851	257	5	1
	Financial crisis of sports centers	3.35	0.867	257	5	1
	Increasing the problems of holding competitions and festivals	3.74	0.798	257	5	1

The results of the one-sample t-test showed that in all challenges studied, the average point of view of the subjects is different from the average of the

hypothesis. Given the positive difference between the means, the subjects believed that all factors affect children's sports and physical activity.

**Table-3:** Results of One-Sample T-Test regarding the Challenges arising from COVID-19

Challenges	Test Value = 3					
	Mean	Std. Deviation	t	df	Mean Difference	Sig.
Endangering children's physical health	3.81	0.922	14.071	256	0.809	0.000
Endangering the physical health of people	3.41	0.746	8.869	256	0.412	0.000
Increased psychological problems (total phobia, anxiety and fear of sport)	3.23	0.874	4.212	256	0.230	0.000
Loss of human resources	3.40	0.857	7.572	256	0.405	0.000
Reduced investment in children's sports	3.56	0.743	12.090	256	0.560	0.000
Unemployment of sports coaches rises	3.74	0.754	15.719	256	0.739	0.000
Declining revenues of health-related sports centers	3.32	0.999	5.058	256	0.315	0.000
Government restrictions on sports facilities increase	3.56	0.851	10.634	256	0.564	0.000
Financial crisis of sports centers	3.35	0.867	6.474	256	0.350	0.000
Increasing the problems of holding competitions and festivals	3.74	0.798	14.929	256	0.743	0.000

Friedman's nonparametric test was used to rank the challenges of COVID-19 in sport

for all. The results presented in **Tables 4** and **5** show that the challenges of COVID-

19 in sport for all, respectively, include endangering the physical health of children, increasing unemployment of sports coaches, increasing the problems of holding competitions and festivals, increasing government restrictions on sports facilities, decrease in the investment

in children's sports, endangering the physical health of people, loss of human resources, the financial crisis of sports centers, declining revenues of health-related sports centers, increase in psychological problems (social phobia, anxiety, and fear of sports).

**Table-4:** Friedman Test Results for rankings the Challenges

Test Statistics*	
N	257
Chi-Square	114.415
df	9
Asymp. Sig.	.000

\* Friedman Test

**Table-5:** Average rankings of COVID-19 challenges in sport for all

Challenges	Mean Rank
Endangering children's physical health	6.30
Increasing the problems of holding competitions and festivals	6.21
Unemployment of sports coaches rises	6.18
Government restrictions on sports facilities increase	5.72
Reduced investment in children's sports	5.71
Endangering the physical health of people	5.28
Loss of human resources	5.08
Financial crisis of sports centers	5.00
Declining revenues of health-related sports centers	4.90
Increased psychological problems (total phobia, anxiety and fear of sport)	4.63

#### 4- DISCUSSION

COVID-19 is a crisis faced by human beings and has overshadowed all activities (14). The results of the current study showed that one of the challenges arised from COVID-19 in children's sports is the health-related challenge. This challenge includes endangering children's physical health and increasing mental health problems (aggression, anxiety, and fear of sport) followed by lowering the level of safety in sport, aggravating sedentary lifestyle, and increasing obesity and overweight. The results are consistent with those of Dana et al. (2021), Ghorbani et al. (2021), and Shahyad and Mohammadi

(2020) on the effects of COVID-19 on community health (15-17). Choobdari et al. (2016) studied the psychological consequences of coronary artery disease in children. They showed an increase in behavioral problems, self-regulation, anxiety, fear, adaptation and coping strategies, the experience of abuse and emotional harassment, increased severity of disorders, psychological depression, and post-traumatic stress as the psychological consequences of the COVID-19 in children (18). Ho et al. (2020) found that the COVID-19 caused psychological damage and anxiety among individuals

and ultimately led to behavioral and psychological problems (19).

The current results, further, revealed that one of the challenges of COVID-19 in children's sports and physical activity is the career challenge. These challenges included the loss of human resources, reduced investment in children's sports, and increasing unemployment among sports coaches. Imani Jajarmi (2020) showed that this crisis has had the most significant consequences in areas such as family and education, labor relations, and some social groups such as women, children, small business owners, and immigrants; they indicated the need to adopt an approach of social cohesion in line with the policy of social distance (20). Eskandarian (2020) demonstrated that the COVID-19 crisis and quarantine situation had had many positive and negative consequences for the cultural consumption pattern of the Iranian family (21). The COVID-19 crisis and its aftermath have significantly strengthened the patterns of visual and auditory consumption of cultural goods. The pattern of written consumption has changed for the better, although it has not grown significantly, as expected. The results are also consistent with Alavi et al. (1400) reporting that COVID-19 had economic, tourism, and infrastructure consequences for sports careers (22); and with Zargar et al. (2020) who examined COVID-19 and female coaches' economic challenges (23).

Additionally, the results of the present study showed that one of the challenges of COVID-19 in sport for all is the challenges related to sports facilities that provide sports services to children. The challenges included reducing the income of health-related sports centers, increasing government restrictions on sports facilities, the financial crisis of sports centers, and increasing the difficulty of holding competitions and festivals. These results are consistent with those of Heidari et al.

(2016), who identified the effects of the COVID-19 outbreak on the sports industry, and Ahmadi et al. (2016), who developed a framework for controlling compensating the financial losses in the sports industry due to COVID-19 (24,25).

## 5- CONCLUSION

As a pandemic disease, the global outbreak of COVID-19 led to a critical situation for the health care system (24). According to the findings in medicine, a definitive treatment has not been found yet, and strengthening individuals' hygiene and health system to prevent infection with the virus is the most crucial preventive activity at the moment (26). High Transmissibility of this virus has led to the focus on prevention and control as the most crucial pillars in the fight against this disease (27). Therefore, one can manage the challenges of COVID-19 in children's sports and physical activities by giving priority to low-risk sports in open spaces, games, and competitions without spectators, providing unemployment insurance services to children's sports activists, using technology in sports classes, providing support and banking facilities for the owners of sports centers and observing health procedures.

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