

**COVID-19 KARANTİNA DÖNEMİNDE AKTİF SPORCULARIN
KARŞILAŞTIĞI BAZI DURUMLARIN İNCELENMESİ**

**AN ANALYSIS OF SOME PROBLEMS FACED BY ACTIVE
ATHLETES DURING COVID-19 ISOLATION PERIOD**

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Sevde Mavi VAR

Ahi Evran University, Sports Science Faculty, Kırşehir, Turkey

Orcid: 0000-0002-0767-0985

İrfan MARANGOZ

Ahi Evran University, Sports Science Faculty, Kırşehir, Turkey

Orcid: 0000-0002-7090-529X

Levent VAR

Ahi Evran University, Sports Science Faculty, Kırşehir, Turkey

Orcid: 0000-0001-8089-0610

Covid-19 Karantina Döneminde Aktif Sporcuların Karşılaştığı Bazı Durumların İncelenmesi

ÖZ

Bu araştırmanın amacı COVID-19 karantina döneminde aktif sporcuların karşılaştığı bazı durumların incelenmesidir. Araştırmaya Türkiye’de aktif spor yapan; atletizm, basketbol, boks, futbol, hentbol, jimnastik, judo, su topu, taekwondo, tenis, voleybol ve yüzme branşlarından toplam 1176 sporcu katılmıştır. Nitel araştırma yöntemiyle yapılan bu çalışmada veri toplama aracı olarak araştırmacılar tarafından oluşturulan 5 açık uçlu soru içeren anket formu kullanılmıştır. Bu çalışmadan elde edilen verilerin analizi için SPSS 22.0 programı kullanılmıştır. Araştırma bulgularına göre Covid-19 karantina döneminde sporcuların %66,2’si antrenmanlarının olumsuz olarak etkilendiğini (f=779), %33,8’i ise antrenmanlarının olumsuz olarak etkilendiğini (f=397) söylemişlerdir. Milli olmayan sporcular açısından bakıldığında; %73,7’si olumsuz etkilendiğini, %26,3’ü ise olumsuz etkilendiğini söylemiştir. Ayrıca araştırmaya katılan sporcuların %74,7’si Covid-19 karantina döneminde performanslarının düştüğünü (f=878), %25,3’ü ise performanslarının düşmediğini belirtmişlerdir (f=298). Bu sonuçlara bakıldığında sporcuların büyük çoğunluğunun Covid-19 karantina döneminde performanslarının olumsuz etkilenerek düştüğü görülmektedir. Sonuç olarak; Covid-19 salgını sporcuların alışılmışın dışında hareket kısıtlılığı, antrenmanlara evde ya da kendi imkanlarıyla devam etmek zorunda kalmalarından kaynaklı olarak fiziksel, fizyolojik ve psikolojik olarak birtakım olumsuzluklar yaşamalarına, buna bağlı olarak ta performanslarının olumsuz etkilenmesine sebep olmuştur.

Anahtar Kelimeler: Covid-19, Sporcu, Antrenman, Performans

An Analysis of Some Problems Faced by Active Athletes during Covid-19 Isolation Period

ABSTRACT

The present study aims to analyze some problems faced by active athletes during Covid-19 isolation period. A total of 1176 active athletes in different sports branches in Turkey, i.e. athletics, basketball, boxing, football, handball, gymnastics, judo, water polo, taekwondo, tennis, volleyball and swimming, participated in the present study voluntarily. A qualitative research method was used for data analysis. In addition, a survey form consisting of 5 open-ended questions was used by researchers as a data collection tool. SPSS 22.0 was used for the analysis of the data obtained from the survey. The findings demonstrated that during Covid-19 isolation period, 66.2% of the athletes were affected negatively in terms of their trainings (f=779), while 33.8% of them were not affected negatively (f=397). As for non-national athletes, it was found that 73.7% of them were affected negatively, while 26.3% of them were not affected. In addition, 74.7% of the athletes stated that their performances declined during Covid-19 isolation period (f=878), while 25.3% of them did not report any performance declines (f=298). It can be thus inferred that many athletes’ performances were affected negatively and thus declined remarkably during Covid-19 isolation period. Thus, Covid-19 isolation led to an unusual limitation of movement for athletes and caused them to face a number of physical, physiological and psychological problems because they were forced to continue trainings at home and with their own equipment, which eventually resulted in a performance decline.

Key Words: Covid-19, Athlete, Training, Performance

INTRODUCTION

COVID-19, which is a highly infectious disease, turned into an important problem for the world in the past year.^{1,2,3} The best strategy against it is to protect individual health.^{4,5} Although self-isolation occupies a vital position in the protection against such an infectious disease, it also leads to serious physiological and psychological consequences.⁶ For many people, changing lifestyles and behaviors in this isolation period may lead to an insufficient amount of physical activities and the limitation of movement.^{7,8} Therefore, it bears utmost importance to adapt to the isolation process in order to overcome problems caused by physical inactivity. It is a basic principle to remain physically and mentally active during the isolation period in order to maintain a healthy body.⁹ Halabchi et al. (2020)¹⁰ stated that if no lockdown is in effect, a moderate aerobic exercise such as walking or jogging can be a rational option during an isolation period as long as social distance is kept and advised people to avoid exercises in crowded environments and high intensity trainings. Jiménez-Pavón et al. (2020)¹¹ reported that moderate physical activities (corresponding to 65% to 75% percent of maximum pulse rate) could compensate the number of decreasing normal daily physical activities during an isolation period. Therefore, moderate aerobic exercises can be considered as a feasible solution to Covid-19, as they usually strengthen the immune system. Thanks to home exercises, individuals can burn energy at a level equal to the amount which they used to spend before the isolation period. However, professional athletes who participated in performance improvement exercises were deprived of these trainings as a precaution against Covid-19, which made it necessary to continue trainings individually. Given the effects of training intensity on the immune system, whether professional athletes should continue their high intensity trainings in order to preserve their competitive performances posed an important question for them. It must be also noted that professional athletes are very likely to suffer from performance declines due to a lack of high intensity trainings. Nevertheless, such trainings may still suppress their immune systems and increase their risk of being infected with Covid-19.⁷ Hull et al. (2020)¹² argued that elite athletes who were not diagnosed with any symptoms could continue their high intensity trainings without any sudden increases in the training loads. Campbell and Turner, (2018)¹³, on the other hand, suggested that based on various studies on infectious diseases similar to Covid-19, athletes needed to limit the duration of their trainings to <60 minutes and the intensity to <80% in order to minimize their risk of Covid 19.

Brett et al. (2020)¹⁴ stated that it was difficult for professional athletes to maintain their cardiovascular fitness during the isolation period and recommended them to continue their individual trainings through personal equipment such as spin bike, treadmill and other resistance exercises under the supervision of a coach who would schedule and monitor these trainings in detail. They also added that athletes infected with Covid-19 could resume their trainings after all symptoms disappeared and their energy returned to a normal level and that they could perform low intensity exercises at home during the isolation that lasted for at least 72 hours following the disappearance of symptoms.

Aktug et al. (2020)⁷ also drew attention to the importance of high intensity trainings for professional athletes' performances and negative effects of these trainings on their immune systems and advised them to continue high intensity exercises in a well-planned isolation period without any physical contact with other individuals. In addition, they reported that athletes were likely to suffer from a performance decline because training loads of an exercise at home could not possibly match that of a team training

and thus teams in the league should be allowed a training period of 3 to 4 weeks following the isolation period.

MATERIAL AND METHODS

The research method

In order to analyze active athletes' activities during Covid-19 isolation period, the present study benefited from a qualitative research method. According to Yıldırım and Şimşek, (2016)¹⁵, "a qualitative study uses qualitative data collection methods such as observation, interview and document analysis and follows a qualitative process in order to collect realistic and holistic information about a certain case or perception in a natural environment". The present study too utilizes "case study" and "field survey" methods for data analysis.

The study group

A total of 1176 active athletes in athletics (n=100), basketball (n=102), boxing (n=95), football (n=109), handball (n=102), gymnastics (n=90), judo (n=112), water polo (n=74), taekwondo (n=100), tennis (n=95), volleyball (n=105), and swimming (n=92) participated in the present study.

Data Collection Tools

A survey form consisting of demographic information and 5 open-ended questions was used as a data collection tool in the present study. The questions were asked on "Google Forms" as a precaution against Covid-19. The voluntary athletes were requested to participate in the present study through several communication tools such as e-mail, WhatsApp, Instagram and other platforms.

The following open-ended questions were asked in the survey:

1. Have Covid-19 isolation period affected your trainings negatively?
2. Have you gained any weights during Covid-19 isolation period?
3. Do you think that your performance has declined during Covid-19 isolation period?
4. How was your mental well-being affected by Covid-19 isolation period?
5. What kinds of training did you do during Covid-19 isolation period?

Statistical Analysis

SPSS 22.0 was used for the analysis of the survey data obtained in the present study. Because the study focused on the number and percentages of the participants, descriptive statistics and frequency test were used in all statistical tables (Table 1, Table 2, Table 3, Table 4, Table 5, Table 6, Table 7, and Table 8).

FINDINGS

Table 1. The Participants' Sports Branches

Branches	f	%
Athletics	100	8.5
Basketball	102	8.7
Boxing	95	8.1
Football	109	9.3
Handball	102	8.7
Gymnastics	90	7.7
Judo	112	9.5
Water Polo	74	6.3
Taekwondo	100	8.5
Tennis	95	8.1
Volleyball	105	8.9
Swimming	92	7.8
Total	1176	100

Frequency (f) and percentage (%) distributions of the participants' sports branches are given in Table 1. While the highest number of participants was in Judo (f=112, 9.5%), the lowest number of participants came from Water Polo (f=74, 6.3%).

Table 2. The Distribution of Trainings in Individual and Team Sports, Among National And Non-National Athletes and The General Distribution of Training Types During Covid-19 Isolation Period

Individual Sports			Team Sports			General		
Training Type	f	%	Training Type	f	%	Training Type	f	%
Strength Training	135	17.8	Strength Training	60	14.4	Strength Training	195	16.6
Running	105	13.9	Branch Technical Training	57	13.6	Running	161	13.7
Branch Technical Training	87	11.5	Running	56	13.4	Branch Technical Training	144	12.2
Flexibility	79	10.4	Core Training	41	9.8	Flexibility	92	7.8
Endurance	65	8.6	Physical Fitness Exercises	28	6.7	Endurance	79	6.7
Other	287	37.8	Other	242	57.9	Other	505	43
Total	758	100	Total	418	100	Total	1176	100
Non-national Athletes			Non-national Athletes					
Training Type	f	%	Training Type	f	%			
Branch Technical Training	103	18.3	Strength Training	104	16.9			
Strength Training	91	16.2	Running	97	15.8			
Running	64	11.4	Flexibility	45	7.3			
Flexibility	47	8.4	Branch Technical Training	41	6.7			
Endurance	47	8.4	Endurance	32	5.2			
Other	210	37.3	Other	295	48.1			
Total	562	100	Total	614	100			

Table 2 indicates the distribution of trainings in individual and team sports, among national and non-national athletes as well as the general distribution of training types during Covid-19 isolation period. It can be observed that both groups of athletes who perform individual (f=135, 17.8%) and team sports (f=60, %14.4%) had strength training. In addition, it was found that non-national athletes had mostly branch-oriented technical training (f=103, 18.3%), whereas national athletes had mostly strength training (f=104, 16.9%).

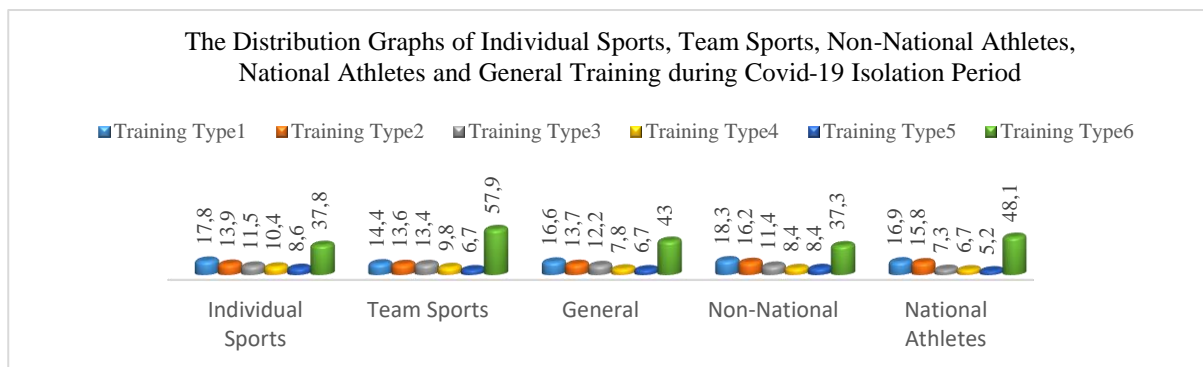


Table 3. The Distribution of the Participants’ Responses to “Have Covid-19 Isolation Period Affected Your Trainings Negatively?”

	Individual Sports (n=758)		Team Sports (n=418)		Non-national athletes (n=562)		National athletes (n=614)		General (n=1176)	
	f	%	f	%	f	%	f	%	f	%
Yes	532	70.2	247	59.1	414	73.7	365	59.4	779	66.2
No	226	29.8	171	40.9	148	26.3	249	40.6	397	33.8
Total	758	100	418	100	562	100	614	100	1176	100

The participants’ responses to “Have Covid-19 isolation period affected your trainings negatively?” are given in Table 3. According to this, while 70.2% of the individual athletes stated that their trainings were affected negatively by Covid-19 isolation period (f=532), while 29.8% of them answered in the negative (f=226). As for team athletes, 59.1% of them were affected negatively by (f=247), whereas 40.9% of them stated that they were not affected negatively (f=171). Similarly, while 73.7% of non-national athletes were affected negatively (f=414), 26.3% of them were not affected (f=148). Finally, among national athletes, 59.4% of the participants were affected negatively (f=365), whereas 40.6% of the participants were not affected (f=246). As a result, it can be stated that 66.2% of all participants were affected negatively by Covid-19 isolation period in terms of their trainings (f=779), while 33.8% of them did not report any negative effects (f=397).

Table 4. The Distribution of the Participants’ Responses to “Have You Gained Any Weights During Covid-19 Isolation Period?”

	Individual Sports (n=758)		Team Sports (n=418)		Non-national athletes (n=562)		National athletes (n=614)		General (n=1176)	
	f	%	f	%	f	%	f	%	f	%
Yes	439	57.9	255	61.0	356	63.3	338	55.0	694	59.0
No	319	42.1	163	39.0	206	36.7	276	45.0	482	41.0
Total	758	100	418	100	562	100	614	100	1176	100

The participants’ responses to “Have you gained any weights during Covid-19 isolation period?” are presented in Table 4. It was found that 57.9% of individual athletes responded “yes” to the question, while 42.1% of them responded “no”. In a similar vein, 61% of team athletes responded “yes”, while 39% of them responded “no”. As for non-national athletes, 63.3% of the participants stated that they gained weight during Covid-19 isolation period, whereas 36.7% of them stated that they did not gain any weights. Similarly, 55% of national athletes gained weight, while 45% of them did not. In total, 694 athletes responded positively to this question (f=694, 59%), while 482 responded negatively (f=482, 41%).

Table 5. The Distribution of the Participants' Responses to "Do You Think That Your Performance Has Declined During Covid-19 Isolation Period?"

	Individual Sports (n=758)		Team Sports (n=418)		Non-national athletes (n=562)		National athletes (n=614)		General (n=1176)	
	f	%	f	%	f	%	f	%	f	%
Yes	541	71.4	337	80.6	391	69.6	487	79.3	878	74.7
No	217	28.6	81	19.4	171	30.4	127	20.7	298	25.3
Total	758	100	418	100	562	100	614	100	1176	100

The participants' responses to "Do you think that your performance has declined during Covid-19 isolation period?" can be seen in Table 5. It was observed that 71.4% of individual athletes responded positively to this question, while 28.6% of them responded negatively. Similarly, 80.6% of team athletes also responded "yes", while 19.4% of them responded "no". When it comes to non-national athletes, 69.6% of them stated that their performances declined during Covid-19 isolation period, whereas 30.4% of them did not report any performance declines. Similarly, 79.3% of national athletes suffered from performance declines, while 20.7% did not. In total, 878 athletes responded "yes" to this question (f=878, 74.7%), whereas 298 athletes responded "no" (f=298, 25.3%).

Table 6. The Distribution of the Participants' Responses to "How Was Your Mental Well-Being Affected By Covid-19 Isolation Period?"

	Individual Sports (n=758)		Team Sports (n=418)		Non-national athletes (n=562)		National athletes (n=614)		General (n=1176)	
	f	%	f	%	f	%	f	%	f	%
Positively	557	73.5	347	83.0	435	77.4	469	76.4	904	76.9
Negatively	201	26.5	71	17.0	127	22.6	145	23.6	272	23.1
Total	758	100	418	100	562	100	614	100	1176	100

Table 6 presents the participants' responses to "How was your mental well-being affected by Covid-19 isolation period?" While 73.5% of individual athletes stated that they were affected by Covid-19 isolation period positively, 26.5% of them stated that they were affected negatively. Similar to individual athletes, 83% of team athletes were affected positively by this period, whereas only 17% of them were affected negatively. As for non-national athletes, 77.4% of them stated that they were affected positively, while 23.6% of them were affected negatively. 76.4% of national athletes were also affected positively by this isolation period, while 23.6% of them were affected negatively. In total, 904 athletes were affected positively by this period in terms of their mental well-being (f=904, 76.9%), while 272 athletes were affected negatively (f=272, 23.1%).

Table 7. The Distribution of the Participants' Trainings Based on Their Sports Branches During Covid-19 Isolation Period

Athletics (n=100)			Basketball (n=102)			Boxing (n=95)		
Training Type	f	%	Training Type	f	%	Training Type	f	%
Strength Training	30	30.0	Branch Technical Training	32	31.4	Mountain Running	13	13.7
Running	11	11.0	Strength Training	19	18.6	Running	12	12.6
Branch Technical Training	8	8.0	None	11	10.8	None	9	9.5
Core Training	6	6.0	Running	8	7.8	Jogging	9	9.5
Endurance	6	6.0	Home Exercises	6	5.9	Shuttle Run	8	8.4
Other	39	39	Other	26	25.5	Other	44	46.3
Total	100	100	Total	102	100	Total	95	100
Football (n=109)			Handball (n=102)			Gymnastics (n=90)		
Training Type	f	%	Training Type	f	%	Training Type	f	%
Physical Fitness Exercises	22	20.2	Running	26	25.5	Flexibility	35	38.9
Running	14	12.8	Strength Training	25	24.5	Strength Training	31	34.4
Flexibility	11	10.1	Core Training	18	17.6	Branch Technical Training	15	16.7
Plates	10	9.2	Body Building and Fitness	12	11.8	Balance	6	6.7
Branch Technical Training	9	8.3	Endurance	3	2.9	Agility	2	2.2
Other	43	39.4	Other	18	17.7	Other	1	1.1
Total	109	100	Total	102	100	Total	90	100
Judo (n=112)			Water Polo (n=74)			Taekwondo (n=100)		
Training Type	f	%	Training Type	f	%	Training Type	f	%
Strength Training	35	31.3	Flexibility	11	14.9	Branch Technical Training	58	58.0
Running	34	30.4	Dryland Training	11	14.9	Strength Training	17	17.0
Rubber Band Training	18	16.1	Online Branch Training	9	12.2	Flexibility	9	9.0
Flexibility	6	5.4	Strength Training	7	9.5	None	6	6.0
Endurance	4	3.6	Physical Fitness Exercises	6	8.1	Running	5	5.0
Other	15	13.2	Other	30	40.4	Other	5	5.0
Total	112	100	Total	74	100	Total	100	100
Tennis (n=95)			Volleyball (n=105)			Swimming (n=92)		
Training Type	f	%	Training Type	f	%	Training Type	f	%
Endurance	50	52.6	Core Training	23	21.9	Running	32	34.8
Home Exercises	7	7.4	Branch Technical Training	13	12.4	Cycling	12	13.0
Jogging	6	6.3	Rubber Band Training	11	10.5	Strength Training	12	13.0
Running	6	6.3	Strength Training	10	9.5	Flexibility	8	8.7
Branch Technical Training	6	6.3	Running	8	7.6	CrossFit	6	6.5
Other	20	21.1	Other	40	38.1	Other	22	24
Total	95	100	Total	105	100	Total	92	100

The distribution of the participants' trainings based on their sports branches during Covid-19 isolation period is given in Table 7. The most frequent training types in each branch was strength training for 30% of athletes (f=30), branch-oriented technical training for 31.4% of basketball players (f=32), mountain running for 13.7% of boxers (f=13), physical fitness exercises for 20.2% of football players (f=22), running for 25.5% of handball players (f=26), flexibility training for 38.9% of gymnasts, (f=35), strength training for 31.3% of judo players, (f=35), flexibility and dryland training for 14.9% of water polo players (f=11), branch-oriented technical training for 58% of taekwondo players (f=58), endurance training for 52.6% of tennis players (f=50), core training for 21.9% of volleyball players (f=23), and running for 34.8% of swimmers (f=32).

Table 8. The Distribution of the Participants' All Trainings Based on Their Sports Branches During Covid-19 Isolation Period

No	Training Type	f	%	No	Training Type	f	%
1.	Strength Training	195	16.6	26.	CrossFit	6	.5
2.	Running	161	13.7	27.	Body Weight Training	6	.5
3.	Branch-Oriented Technical Training	144	12.2	28.	Burning Fat	6	.5
4.	Flexibility	92	7.8	29.	Isometric/Static Training	5	.4
5.	Endurance	79	6.7	30.	Hill Running	5	.4
6.	Body Building and Fitness	49	4.2	31.	Skill Training	3	.3
7.	Core Training	48	4.1	32.	Boxing	4	.3
8.	Physical Fitness Exercises	41	3.5	33.	Agility	3	.3
9.	None	40	3.4	34.	Dancing	3	.3
10.	Rubber Band Training	37	3.1	35.	Shadow Training	4	.3
11.	Plates	26	2.2	36.	Treadmill	4	.3
12.	Home Exercises	24	2.0	37.	Stairs Training	4	.3
13.	Jogging	23	2.0	38.	Jumping	4	.3
14.	Mountain Running	20	1.7	39.	Step Aerobics	3	.3
15.	Cycling	18	1.5	40.	Recovery Training	3	.3
16.	Crunch	18	1.5	41.	Speed Training	2	.2
17.	Interval Training	15	1.3	42.	Tempo Training	2	.2
18.	Dryland Training	15	1.3	43.	Spin Bike	1	.1
19.	Online Branch Training	11	.9	44.	Home Resistance Training	1	.1
20.	Jump Rope	9	.8	45.	Functional Exercises	1	.1
21.	Shuttle Run	9	.8	46.	Rowing	1	.1
22.	Push-up	8	.7	47.	Mental Training	1	.1
23.	Balance	7	.6	48.	Beach Running	1	.1
24.	Yoga	7	.6	49.	Squat	1	.1
25.	Pull-up	6	.5		Total	1176	100

The distribution of the participants' all trainings based on their sports branches during Covid-19 isolation period is given in Table 8. According to this, while the participants had mostly strength trainings (f=195, 16.6%), the less frequent training type was squat (f=1, 1%).

DISCUSSION

In the present study, athletes in various sports branches were asked to answer five different questions about their training, performances, weight and mental well-being during Covid-19 isolation period. The survey results were analyzed to obtain some findings and reach conclusions about the athletes.

It was found that 66.2% of all participants were affected negatively by Covid-19 isolation period in terms of their trainings (f=779), while 33.8% of them did not report any negative effects (f=397). As for non-national athletes, 73.7% of the participants stated that they were affected negatively in this period (f=414), whereas 26.3% of them stated that they were not affected (f=148). Similarly, while 59.4% of national athletes were also affected negatively (f=365), 40.6% of them were not affected (f=246). The findings demonstrated that national athletes were affected by Covid-19 isolation period less compared to non-national athletes in terms of their trainings. This can be attributed to the fact that the former group consists of more elite and experienced athletes compared to the latter group.

According to Türkmen and Özşarı, (2020)¹⁶, 2020 can be labelled as a "lost year" for the international sports community. They also argued that in addition to the necessity of a quick recovery for sports sector, the negative effects of delays in global, international and regional sports events such as Olympic Games on the athletes' physical and psychological performance levels could be better understood in the upcoming periods.

Gelen et al. (2020)¹⁷ too underlined the fact that athletes' physical and psychological performances were affected negatively by delays in sports games, tournaments and trainings in different sports branches in many countries due to Covid-19 isolation period, and their consequences would be witnessed later in their respective performances.

It was also revealed in the present study that 59% of the participants gained weight during Covid-19 isolation period (f=694, 59%), while 41% of them did not (f=482, 41%). It can be stated that more than half of the athletes gained weight during the isolation period because gyms were closed, which forced them to stay at home and thus lead a relatively sedentary lifestyle compared to their active training periods.

One of the most important questions in the survey was "Do you think that your performance has declined during Covid-19 isolation period?" As can be seen in Table 5, the responses to this questions were answered positively by 71.4% of individual athletes, while 28.6% of them responded negatively. Similarly, 80.6% of team athletes also responded positively to the question, whereas 19.4% of them responded negatively. As for national and non-national athletes, 69.6% of the former group and 79.3% of the latter group responded positively, while 30.4% and 20.7% of the latter group responded negatively. In general, 74.7% of the participants stated that their performances declined during Covid-19 isolation period (f=878), while 25.3% of them did not report any performance declines (f=298). As a result, it can be suggested that a large portion of the athletes participating in the present study experienced a performance decline during Covid-19 isolation period.

Jukic et al. (2020)¹⁸ stated that Covid-19 was a remarkably problematic period for athletes in many different sports branches. Due to various difficulties such as the lack of a training field and training equipment as well as the impossibility of face-to-face training with teammates and coach, athletes were forced to continue low-intensity trainings with their own equipment, which affected their physical and physiological capacity negatively. Similar to the present study, Akyol et al. (2020)¹⁹ conducted a study on student activities at a faculty of sports science during Covid-19 isolation period. Their findings indicated that many students suffered from physical and physiological performance declines during this period as they were not able to continue their physical activities and trainings at home. In addition, most of the students stated that they did various home exercises in this period. Setiawan et al. (2020)²⁰ aimed to improve handball players' physical performance through Tabata workouts during Covid-19 isolation period and reported that Tabata was one of the most effective individual training systems for handball players. It was also stated that these workouts offered a number of advantages in terms of improving handball players' physical fitness components during Covid-19 isolation period.

The findings of the present study also revealed that the most frequent training types were strength trainings (f=195, 16.6%), running (f=161, 13.7%) and branch-oriented technical trainings (f=144, 12.2%).

In a similar study, Bajramovic et al. (2020)²¹ analyzed female university students' healthy lifestyle habits, changes in exercise schedules and physical fitness levels during Covid-19 isolation period. Their findings demonstrated that the participants'

levels of regular and planned physical exercise and physical fitness decreased by 41.7% and 38.2%, respectively. Additionally, it was also reported that while 50% of the participants changed their eating habits in this period, and 36.3% of them gained weight. The most frequent exercise types were basic exercises for body shape, relaxing and stretching (89.2%) and strength training with the participants' own body weight (82.4%).

Various communities such as international visitors, supporters and residents of a host country gather for a specific sports event, which eventually put them under a threat of contagious diseases as well as other endemic ones.^{22, 23} Therefore, it is inevitable for athletes and audiences to spread the disease over a large territory during a sports organization.¹⁰ This was the reason why many sports competitions and activities in different countries were suspended and/or postponed in order to control the pandemic process and decrease the number of cases. Sports, which is an indispensable and organic part of human social life, was now under the influence of Covid-19 pandemic.¹⁶

It was reported that a crowded audience in a sports event contributed to the spreading speed for a contagious disease. It is not thus surprising that organized sports events create a suitable environment for the spread of a virus in a large stadium with a crowded group of spectators.¹⁰ In this respect, such events which bring thousands of people together are closely related to human health.²⁴

Since the first day of Covid-19 pandemic, Covid-19 cases in which athletes were involved have caused major concerns around the world, since such a disease would lead to delays in training and competitions and were likely to result in various health problems for athletes.^{25, 26} In addition, a lack of training and performance decline will also pose some problems for them in the future. Athletes usually lose their performance levels within 2 to 4 weeks. When they overcome this critical point, they are very likely to experience a much more difficult recovery period.²⁷

In conclusion, in addition of the suspension of educational and social activities due to an isolation period caused by Covid-19 pandemic, various sports and recreational facilities were also closed and sports organizations were cancelled, which led to the disruption of healthy lifestyle habits for sedentary people and professional athletes. This also resulted in the limitation of human mobility in an unprecedented way and a physical and physiological performance decline for athletes, as they had to continue their trainings at home with their own equipment. As a result, it can be concluded that the suspension and/or postponement of sports events due to Covid-19 pandemic affected athletes' physical and physiological performances negatively, and thus the past year can be considered as "a lost year" for the sports community.

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