#### ORIGINAL ARTICLE

# Investigation of Athletes' Habits of Playing Digital Game in The Pandemic Process

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#### ABSTRACT

Aim: In this study, athletes' views on digital games during the pandemic process were examined.

**Methods:** x The sample of the study consists of 1521 (927 Male, 594 Female) athletes who continue their activities in different branches. The research is a screening model and has a descriptive quality. As a data collection tool, an online questionnaire form which questioned the demographic information of the participants, their frequency of playing digital games and the types of games they played was used. The SPSS package program was used to analyze the data and significance was accepted as p < 0.05.

**Results:** According to the results of the research, 60.9% of the participants were male, 35.5% were between the ages of 21-30, 59.2% were students and 61.5% were undergraduate and postgraduate athletes. When looking at the frequency of playing the game, 32.5% of them played with medium frequency. It was determined that athletes played games via a mobile phone at a higher rate than a desktop computer. In the answers given to the playing times during the pandemic process, "yes" was determined as 50.2%. Those who played 3 hours or more in daily playing time in pandemic were determined as 21.6%. In the pandemic, it was determined that the athletes played strategy, war, sportive games, backgammon-rummikub-chess, car racing and fighting games, respectively. Horror and role playing games were played at low rates.

Considering the relationship between the age level of the athletes participating in the study and the types of the games, the rate of playing strategy games increased as the age got older, and young people between the ages of 21-30 played war games at higher rates. Internet usage rate of undergraduate and postgraduates of the participants was determined as 61.5%. Considering the educational status and the types of the games they played, it was determined that they played games such as strategy, war, sportive games and backgammon-rummikub-chess at high rates. The higher the education level, the higher the rate of watching horror movies was. In addition, considering participants' sportive level and the types of games they played, it was determined that the trainers preferred sports and strategy games at higher rates. Considering the sportive level and the types of games played, it was determined that the athletes played games such as backgammon-rummikub -chess at lower rates.

**Conclusion:** As a result; some changes were observed in athletes' lifestyles in the research group with the pandemic process, and the duration spent at home and playing games increased. In this context, it is considered that encouraging sports activities preventing inactivity at home during the pandemic process will positively affect the health of individuals.

Keywords: Pandemic, Game, Digital Games, Sports

# INTRODUCTION

After the COVID-19 disease emerged in Wuhan, Hubei province of China, it spread rapidly all over the world and social isolation and quarantine measures were started to be taken in societies.<sup>1</sup> Social isolation is defined as a situation that expresses the partial or complete lack of contact between the individual and the society<sup>2</sup> and is applied among all individuals living in the society.

As a result of the inability to prevent the spread of the COVID-19 epidemic, it has become a global pandemic. The pandemic process caused not only medical but also social, professional. economic political, and political consequences.<sup>3-4</sup> Along with the COVID-19 pandemic process, it continues to make its effects felt in different points such as social life, social perspective, mass psychology, professions, tourism, agriculture, education, economy, human mobility, health and politics. Despite the measures taken, Covid-19 continues to threaten world humanity physically, economically, spiritually and socially.1,5

With the pandemic process, there have been some changes in all of our habits and daily life. The curfews

taken as a precaution, stay at home proposals changed our lifestyle and the duration of staying at home increased, and especially with the changes and developments in communication technology, the time spent in front of computers, tablets and mobile phones, namely in the virtual environment, also increased. In addition, with the interruption of education and training and with the closure of areas where leisure activities were done, an increase was observed in individuals' staying at home and leisure time. It can be observed that parents and children spend their free time with entertaining activities that they will organize at home.<sup>6</sup> In this context, one of the activities carried out to fill their free time is digital games.

Depending on the developing technology, digitalization has become more frequently used in daily life. Especially digital games have been an important tool for people to spend time. In addition to entertainment and activities such as obtaining information, following the news, traveling, and chat, digital games (virtual games) have been being frequently played in recent years.<sup>7</sup> Considering the pandemic process, being inactive and the obligation to stay at home has increased the playing of computer games.<sup>8</sup> In addition, an international study examining the

use of media at home during the COVID-19 process in the world reported that 67% spent more time on watching news broadcast, 45% reported spending more time on messaging, 44% on social media and 36% on computer / video games.<sup>40</sup> Curfew restrictions and social isolation have increased the consumption of digital entertainment. Studies report that online gaming activity and internet usage related to games have increased by approximately 70%.<sup>8</sup>

Computer games, which are among the activities that people do not only during the pandemic process but to contribute to their free time and personal development, attract attention with the promise of providing fun and beautiful experiences to their users. Today, with the technological developments, the variety of computer games has been increasing.<sup>9</sup>

There are 5 billion internet users in the world today. The number of social media users has reached 4 billion. At the beginning of April 2020, the number of individuals with personal mobile phones reached 5.5 billion.<sup>10</sup> Thanks to the development of the internet network and smart mobile phones, games can be played on mobile phones.

Dilci (2020) stated that the pandemic and the necessity to stay at home prompted individuals to spend more time with technological and digital devices. During the epidemic, the time that adults spend time with technological devices has increased considerably and it has been stated that this rate has reached a level of 116%.<sup>11</sup> Today, experts are talking about a network addiction such as alcohol addiction.<sup>12</sup>

In the study conducted by Güzel and his friends (2020), they asked participants: "What kind of entertainment activities do you do during your stay at home?" and participants stated that they mostly prefer to spend time with technological tools.<sup>13,14</sup>

Covid-19 has deeply affected the entire sports community as well as the whole world. In the process of Covid 19, amateur and professional sports events with large audiences, businesses that provide sports services, sports industry branches, businesses in the marketing chain of these products, sports tourism sector, individuals working in sports organizations and business lines that produce / run services with this sector have suffered great losses.<sup>15</sup>

Within the scope of Covid-19 measures, it is possible for people to be immobile at home to trigger some mental, economic, social and physical problems.16 With the pandemic process, people who stay at home for a long time may be at risk of various physical, psychological and social disorders.<sup>17</sup> In the studies, it was stated that physical regression and decrease in socialization might be seen in children during the epidemic period, and this would lead to negativity in character development.<sup>18</sup> It showed that physical activities decreased by 30% and sitting time increased by 30% with the pandemic process. It was explained that this is an important problem since there are risk factors such as cardiovascular disease, obesity, cancer, diabetes, hypertension, bone and joint disease, depression and premature death as a result of physical inactivity.19,20

The sudden stopping of sports organizations, postponing and canceling the competitions had a negative

impact on the athletes psychologically and sociologically.<sup>23</sup> During the Covid-19 process, people staying at home and isolated from people, athletes not being able to train, fear of decreasing their performance, boredom, anxiety, fear, excessive nervous sensitivity and stress will also affect the performance levels of athletes. Besides, it was stated that sports events, athletes and technical delegation, managers, fans and media workers will only continue to increase the potential threat to the sustainability of the Covid-19 outbreak and the spread of the disease<sup>37</sup>.

Athletes have an active life pace, they are constantly moving with competitions, training, away matches, international activities, seminars and courses. With the pandemic process, these activities were postponed / canceled and athletes and sportsmen were locked in their homes like individuals in the whole society. It is curious what athletes and sportsmen who actively do sports do at home during the pandemic. This research aimed to examine athletes' digital game playing habits during the pandemic process.

## MATERIAL AND METHODS

This research aims to determine the views of athletes on digital games during the pandemic process. This study is a descriptive research prepared with general survey method by following quantitative research methodology. The research group consisted of 1521 (927 Male, 594 Female) athletes from different branches and different provinces in Turkey who are active between December 2020 and January 2021. Survey method, one of the data collection techniques, was used in the research. In obtaining the data: "Personal Information Form" to determine the demographic information of the participants and and the questionnaire which was used by Tel (2015) and Taylan et al. (2017) in the study of students' computer and digital game playing habits, was adapted according to the purpose of the study by taking the opinions of four experts in the field and applied to the participants via the google form application.<sup>21,22</sup>

**Data Analysis:** The data of the research were evaluated by the SPSS statistical package program. In the analysis of the data, the demographic information of the research group, k cross-tab analysis was made regarding the views of digital game playing habits, and the values of "arithmetic mean, percentage, frequency" were given as descriptive statistics. Significance was accepted as p<0.05.

## RESULTS

In this section, the findings of the research results were presented in tables and evaluated.

According to Table1; it was seen that 60.9% of the participants in the research were men and 39.1% were women. According to Table1; it was revealed that 38.4% of the participants were between the ages of 10-20, 35.5% were 21-30 years old, 12.8% were 31-40 years old, 10.3% were 41-50 years old, and 3% were 51 and over. The examination Table 1 showed that 7% of the participants worked as a trainer, 1.4% as a housewife, 8.8% as a civil servant, 59.2% as a student, 14.6% as a teacher and 8.9% as a self-employed person. According to Table1; looking at the educational status of the participants, it was seen that 8.2% of them were secondary school graduates, 30.2%

were high school graduates, 54.7% were university graduates, and 6.8% were postgraduates.

		Frequency	Percent (%)			
Gender	Male	927	60,9			
	Female	594	39,1			
Age	10-20	584	38,4			
	21-30	540	35,5			
	31-40	194	12,8			
	41-50	157	10,3			
	51 yaş ve üzeri	46	3			
	Sports Trainer	107	7			
Occupation	Housewife	22	1,4			
	Officer	134	8,8			
	Student	900	59,2			
	Teacher	222	14,6			
	Self-Employed	136	8,9			
	Secondary School	125	8,2			
Education Loval	High School	460	30,2			
	University	832	54,7			
	Postgraduate	104	6,8			

Table 1: Demographic Information of Participants

Table 2: Sports information of the participants

	Less than 1 year	63	4,1
	1-5 years	561	36,9
	6-10 years	419	27,5
Year of Sport	Less than 1 year   63   4,1     1-5 years   561   36     6-10 years   419   27     11-15 years   180   11     16-20 years   100   6,6     21-25 years   65   4,3     26 years and over   133   8,7     Athlete   952   62     Coach   274   18     Referee   44   2,9     Other   251   16     E-   Yes   362   23     No   1159   76	11,8	
	16-20 years	100	6,6
Year of Sport Year of Sport Year of Sport 11-1 16-2 21-2 26 y Your Level in the Sportive Branch Participation in E- ports Activities No	21-25 years	65	4,3
	26 years and over	133	8,7
	Athlete	952	62,6
Your Level in the	Coach	274	18
Sportive Branch	Referee	44	2,9
	Other	251	16,5
Participation in E-	Yes	362	23,8
Sports Activities	No	1159	76,2

According to Table 2; by looking at the years of doing sports of the participants in the study, it was seen that 4.1% had less than a year, 36.9% 1-5 years, 27.5% 6-10 years, 11.8% 11-15 years, 6.6% 16-20 years,% 4.3 of them had been doing sports for 21-25 years and 8.7% of them for 26 years or more,. The examination of Table 2 determined that 62.6% of the participants in the study were athletes, 18% were trainers, 2.9% were referees and 16.5% were doing sports at other levels. The examination of Table 2 also determined that 23.8% of the participants participated in the activities of the e sports federation and 76.2% did not participate in the activities of the e sports federation.

The examination of Table 3 determined that 11.2% of the participants stated that they played very often, 14.3% often played, 32.5% played moderately, 27.2% rarely, 14.7% did not play at all.

According to mobile phone playing game time per day , the examination of Table 3 also determined that 27.1% did not play games at all, 37.7% played 0-1 hours,14.3% played 1-2 hours, 17.4% played 2-3 hours and 3.5% played for 3 hours or more.

According to playing game time on computer per day, the examination of Table 3 showed that, 57.7% of the participants did not play games at all, 22.4% played for 0-1 hours, 8.9% played for 1-2 hours, 5.9% played for 2-3 hours and 5.1% played for 3 hours or more.

	l never play	224	14,7
	I rarely play	414	27,2
Frequency of Playing	I sometimes play	495	32,5
Games	I frequently play	218	14,3
	I usually play	170	11,2
	l never play	412	27,1
	0-1 hour	574	37,7
Mabila Phone per Day	1-2 hours	218	14,3
Nobile Filolie per Day	2-3 hours	264	17,4
	I rarely play 414   I sometimes play 495   I frequently play 218   I usually play 170   I never play 412   0-1 hour 574   1-2 hours 218   2-3 hours 264   3 hours and over 53   I never play 878   0-1 hour 341   1-2 hours 136   2-3 hours 89   3 hours and over 77   Yes 763   No 758   I never play 487   0-1 hour 324   1-2 hours 210   2-3 hours 172   3 hours and over 328	53	3,5
	l never play	878	57,7
	0-1 hour	341	22,4
Computer per Day	1-2 hours	136	8,9
Computer per Day	2-3 hours	89	5,9
	3 hours and over	77	5,1
Did Your Playing Time	Yes	495   32,5     218   14,3     170   11,2     412   27,1     574   37,7     218   14,3     264   17,4     53   3,5     878   57,7     341   22,4     136   8,9     89   5,9     77   5,1     763   50,2     758   49,8     487   32     324   21,3     210   13,8     172   11,3     328   21,6	
Increase in the Pandemic?	No	758	49,8
	l never play	487	32
	0-1 hour	324	21,3
Daily Playing Time in	1-2 hours	210	13,8
Pandemic	2-3 hours	172	11,3
	3 hours and over	328	21,6

Table 3: Participants' information about their playing game status

According to increase in their playing time during the pandemic, Table 3 showed that 50.2% of the participants stated yes and 49.8% stated no.

According to Daily Game Playing Time in Pandemic, the examination of Table 3 indicated that 32% of the participants did not play at all, 21.3% played 0-1 hours, 13.8% played 1-2 hours, 11.3% played 2-3 hours and 21.6% played 3 hours or more.

Table 4: Sports information of the participants

Game Type	Frequency	Percentage (%)
Field Games	119	3,3
Car Race	274	7,6
Fight	269	7,5
Sports Games (Football, Basketball etc.)	422	11,7
Fear	122	3,4
Role Playing	128	3,5
Combat	635	17,6
Simulation	242	6,7
Strategy	736	20,4
Backgammon- Rummikub - Chess	350	9,7
Other	310	8,6
Total	3607	100

The examination of Table 4 showed that 20.4% of the participants played strategy games, 17.6% war games, 11.7% sportive games, 9.7% backgammon- rummikubchess games, 8.6% other games, 7.6% car racing games, 7.5% fighting games, 3.5% role playing games, 3.4% horror games and 3.3% field games.

Percent-Frequency Distributions By Line:

By looking at the types of game according to the gender variable of the participants in the study from Table 5, it was determined that 44.3% of the women preferred strategy games, 42.6% war and 28.8% sportive games at higher rates. It was determined that the male participants also played strategy at a rate of 51%, war 41.2%, 22.2% backgammon- rummikub -chess and 28.8% sportive games. It was seen that women preferred "other games" at

higher rates than men.

By looking at the types of game from Table 5 according to the age variable of the participants in the study, it was determined that 45.2% of the 10-20 year olds played strategy games, 40.4% played war and 23.5% played sports games. It was determined that they preferred horror games with 5.8% and field games with 5% at low rates. It was determined that the participants aged 21-30 played games such as 46.7% war, 45.9% strategy, 34.1% sportive games, 25% backgammon-rummikub-chess

games at high rates. Participants between the ages of 31-40 were also determined to play games such as 50.0% strategy, 40.8% war, 28.4% backgammon-rummikub-chess at high rates. It was also determined that 62.4% of participants aged 41-50 played strategy games, 40.8% war, 33.8% backgammon-rummikub -chess and 28% car races. It was determined that the participants aged 51 and over played 63% strategy, 3.1% backgammon-rummikub-chess and 26.1% sportive games at high rates.

Table	e 5: Types o	f Playing	Games A	ccording	to the [	Demog	raphic l	Informat	ion Var	iable of the	e Partic	ipants (I	Percenta	age Distribut	ion by	/ Line)

		Field Games	Car Racing	Fighting	Sports games	Horror	Role Playing	War	Simulation	Strategy	Backgammon- Rummikub - Chess		Other	Total
Gender	Woman	43 %7,2	101 %17	111 %18,7	171 %28,8	45 %7,6	51 %8,6	253 %42,6	91 %15,3	263 %44,3	132 %22,2	144 %24,	2	594
	Male	76 %8,2	173 %18,7	158 %17	251 %27,1	77 %8,3	77 %8,3	382 %41,2	151 %16,3	473 %51	218 %23,5	166 %17	9	927
	Total	119	274	269	422	122	128	635	242	736	350	310		1521
	10-20	29 %5	72 %12,3	93 %15,9	137 %23,5	34 %5,8	35 %6	236 %40,4	77 %13,2	264 %45,2	89 %15,2	119 %20,	4	584
Age	21-30	56 %10,4	110 %20,4	113 %20,9	184 %34,1	57 %10,6	58 %10,7	252 %46,7	91 %16,9	248 %45,9	135 %25	124 %23		540
	31-40	11 %5,7	38 %19,6	37 %19,1	48 %24,7	12 %6,2	18 %9,3	78 %40,2	39 %20,1	97 %50	55 %28,4	34 %17	5	194
	41-50	19 %12,1	44 %28	24 %15,3	41 %26,1	14 %8,9	16 %10,2	64 %40,8	26 %16,6	98 %62,4	53 %33,8	27 %17,	2	157
	51 years and older	4 %8,7	10 %21,7	2 %4,3	12 %26,1	5 %10,9	1 %2,2	5 %10,9	9 %19,6	29 %63	18 %39,1	6 %13		46
	Total	119	274	269	422	122	128	635	242	736	350	310		1521
	Coach	14 %13,1	27 %25,2	19 %17,8	39 %36,4	9 %8,4	18 %16,8	42 %39,3	22 %20,6	68 %63,6	35 %32,7	16 %15		107
	Housewife	-	6 %27,3	10 %45,5	10 %45,5	3 %13,6	4 %18,2	14 %63,6	8 %36,4	19 %86,4	4 %18,2	3 %13,	,6	22
Occupation	Civil servant	16 %11,9	22 %16,4	24 %17,9	38 %28,4	11 %8,2	8 %6	54 %40,3	24 %17,9	54 %40,3	40 %29,9	32 %23,	9	134
	Student	58 %6,4	137 %15,2	163 %18,1	240 %26,7	71 %7,9	61 %6,8	387 %43	121 %13,4	402 %44,7	165 %18,3	181 %20	,1	900
	Teacher	16 %7,2	51 %23	25 %11,3	48 %21,6	19 %8,6	21 %9,5	58 %26,1	36 %16,2	112 %50,5	68 %30,6	55 %24	,8	222
	Self-Employment	15 %11	31 %22,8	28 %20,6	47 %34,6	9 %6,6	16 %11,8	80 %58,8	31 %22,8	81 %59,6	38 %27,9	23 %16,	9	136
	Total	119	274	269	422	122	128	635	242	736	350	310		1521
	Middle School	3 %2,4	25 %20	22 %17,6	25 %20	10 %8	11 %8,8	47 %37,6	20 %16	75 %60	14 %11,2	21 %16,	8	125
	High School	27 %5,9	62 %13,5	69 %15	142 %30,9	24 %5,2	36 %7,8	204 %44,3	68 %14,8	193 %42	63 %13,7	88 %19,	,1	460
Education Status	University	70 %8,4	166 %20	166 %20	226 %27,2	76 %9,1	73 %8,8	351 %42,2	135 %16,2	418 %50,2	243 %29,2	178 %21,	4	832
	Postgraduate	19 %18,3	21 %20,2	12 %11,5	29 %27,9	12 %11,5	8 %7,7	33 %31,7	19 %18,3	50 %48,1	30 %28,8	23 %22,	,1	104
	Total	119	274	269	422	122	128	635	242	736	350	310		1521
	Less than 1 year	-	1 %1,6	10 %15,9	8 %12,7	-	1 %1,6	-	1 %1,6	-	-	47 %74,	6	63
	1-5 years	37 %6,6	91 %16,2	111 %19,8	172 %30,7	49 %8,7	54 %9,6	285 %50,8	93 %16,6	306 %54,5	83 %14,8	83 %14,	8	561
	6-10 years	41 %9,8	76 %18,1	73 %17,4	116 %27,7	29 %6,9	31 %7,4	174 %41,5	58 %13,8	175 %41,8	109 %26	84 %20		419
Years of Sports	11-15 years	14 %7,8	41 %22,8	31 %17,2	48 %26,7	24 %13,3	16 %8,9	76 %42,2	40 %22,2	90 %50	62 %34,4	41 %22,	8	180
	16-20 years	10 %10	22 %22	18 %18	27 %27	5 %5	8 %8	37 %37	19 %19	49 %49	30 %30	18 %18		100
	21-25 years	7 %10,8	15 %23,1	9 %13,8	12 %18,5	5 %7,7	7 %10,8	28 %43,1	10 %15,4	39 %60	19 %29,2	14 %21,	5	65
	26 years and more	10 %7,5	28 %21,1	17 %12,8	39 %29,3	10 %7,5	11 %8,3	35 %26,3	21 %15,8	77 %57,9	47 %35,3	23 %17,	,3	133
	Total	119	274	269	422	122	128	635	242	736	47	310		1521

Your Level in the Sportive Branch	Athlete	61 %6,4	151 %15,9	170 %17,9	242 %25,4	75 %7,9	78 %8,2	417 %43,8	143 %15	449 %47,2	195 %20,5	168 %17,6	952
	Coach	36 %13,1	66 %24,1	43 %15,7	86 %31,4	25 %9,1	29 %10,6	112 %40,9	41 %15	148 %54	81 %29,6	60 %21,9	274
	Referee	3 %6,8	5 %11,4	2 %4,5	13 %29,5	3 %6,8	1 %2,3	13 %29,5	7 %15,9	15 %34,1	16 %36,4	14 %31,8	44
	Other	19 %7,6	52 %20,7	54 %21,5	81 %32,3	19 %7,6	20 %8	93 %37,1	51 %20,3	124 %49,4	58 %23,1	68 %27,1	251
	Total	119	274	269	422	122	128	635	242	736	350	310	1521
Participation in E- Sports Activities	Yes	28 %7,7	59 %16,3	54 %14,9	97 %26,8	26 %7,2	33 %9,1	147 %40,6	49 %13,5	149 %41,2	76 %21	86 %23,8	362
	No	91 %7,9	215 %18,6	215 %18,6	325 %28	96 %8,3	95 %8,2	488 %42,1	193 %16,7	587 %50,6	274 %23,6	224 %19,3	1159
	Total	119	274	269	422	122	128	635	242	736	350	310	1521

By looking at the types of games from Table 5 according to the occupation variable of the participants in the study, it was determined that 66.6% of the trainers preferred strategy games, 39.3% war, 36.4% sportive games, 32.7% backgammon-rummikub-chess games at higher rates. It was determined that the housewives played 86.4% strategy, 63.6% war, 45.5% sportive games and 45.5% fear, 18.2% backgammon-rummikub-chess games at high rates. It was determined that the civil servants played 40.3% strategy, 40.3% war, 28.4% sportive games and 29.9% backgammon-rummikub-chess games at high rates. It was determined that the students played 44.7% strategy, 43% war, 26.7% sportive games and 24.8% other game types at high rates. It was determined that teachers played 50.5% strategy, 30.6% backgammon-rummikubchess, 26.1% war and 24.8% other games at high rates. It was determined that the self-employed people played 59.6% strategy, 58.8% war, 27.9% backgammon-rummikub-chess, 26.1% other different games at high rates.

By looking at the types of game from Table 5 according to the education variable of the participants, it was determined that middle school graduates preferred strategy games at a higher rate with 60.0%. It was determined that high school graduates played %44.3 war game, 42.0% strategy, 30.9% sportive games and 19.1% other game groups at high rates. It was determined that university graduates played 50.2% strategy, 42.2% war, 29.2% backgammon-rummikub-chess and 27.2% sportive games at high rates. It was also determined that 48.1% of postgraduate graduates played strategy, 31.7% war, 28.8% backgammon-rummikub-chess, 27.9% sportive games at high rates.

By regarding the types of games of the participants in the study according to the variant of the year of doing sports from Table 5, it was determined that 74.6% of those who did sports for less than one year preferred other games. It was determined that those who did sports for 1-5 years played the game groups such as 41.8% strategy, 41.5% war, 27.7% sportive games and 26.0% backgammon-rummikub-chess at high rates. It was determined that those who played sports for 11-15 years played 50.0% strategy, 42.2% war, 34.4% backgammon-rummikub-chess and 27.7% sportive games at high rates. It was seen that the rates of those who did sports for 16-20 years and 21-25 years were similar according to their types of playing. It was determined that those who did sports for 25 years and over preferred %57.9 strategy, 35.3% backgammon-rummikub-chess games and 29.3% sportive games.

By looking at the types of playing games of the participants in the study according to the level variable in the sports branch from Table 5, it was determined that 47.2% of the athletes preferred strategy, 43.8% war, 25.4% sportive games and 17.9% combat sports. It was determined that 54.0% of the coaches preferred strategy, 40.9% war, 31.4% sports games, 29.6% backgammon-chess and 24.1% car races. It was determined that 36.4% of the referees preferred backgammon-rummikub-chess, 34.1% strategy, 29.5% sportive games and 31.8% other games. It was determined that the others preferred 49.4% strategy, 34.1% strategy, 37,1% war, 32.0% sportive games and 23.1% backgammon-rummikub-chess.

By looking at the types of playing games according to e-sports activities of the participants in Table 5, it was determined that 41.2% of those who said yes played strategy games and 40.6% played war games. It was also determined that 50.6% of the participants who said no played the strategy games at a higher rate.

		Field Games	Car Racing	Fighting	Sports games	Horror	Role Playing	War	Simulation	Strategy	Backgammo n- Rummikub - Chess	Other	Total
	I never play	17 %17,6	48 %21,4	36 %16,1	74 %33	19 %8,5	17 %7,6	97 %43,3	42 %18,8	117 %52,2	56 %25	44 %19,6	224
	I rarely play	31 %7,5	75 %18,1	64 %15,5	113 %27,3	31 %7,5	35 %8,5	164 %39,6	61 %14,7	190 %45,9	108 %26,1	84 %20,3	414
Frequency of Playing Games	I sometimes play	37 %7,5	93 %18,8	108 %21,8	143 %28,9	42 %8,5	55 %11,1	214 %43,2	84 %17	243 %49,1	107 %21,6	103 %20,8	495
	I frequently play	22 %10,1	35 %16,1	36 %16,5	56 %25,7	15 %6,9	12 %5,5	89 %40,8	31 %14,2	103 %47,2	47 %21,6	43 %19,7	218
	I usually play	12 %7,1	23 %13,5	25 %14,7	36 %21,2	15 %8,8	9 %5,3	71 %41,8	24 %14,1	83 %48,8	32 %18,8	36 %21,2	170

Table 6: Types of Games Played by Participants According to Their Frequency of Playing Games (Percentage Distribution by Line)

	Total	119	274	269	422	122	128	635	242	736	350	310	1521
	l never play	32	80	65	125	31	38	175	74	202	99	84	412
		%7,8	%19,4	%15,8	%30,3	%7,5	%9,2	%42,5	%18	%49	%24	%20,4	
	0-1 hour	46	107	99	155	51	45	224	92	282	134	119	574
		%8	%18,6	%17,2	%27	%8,9	%7,8	%39	%16	%49,1	%23,3	%20,7	
Playing Game	1-2 hours	17	36	43	67	24	22	97	41	111	47	39	218
Time on Mobile		%7,8	%16,5	%19,7	%30,7	%11	%10,1	%44,5	%18,8	%50,9	%21,6	%17,9	
Phone per Day	2-3 hours	19	42	58	66	11	20	114	28	114	66	54	264
		%7,2	%15,9	%22	%25	%4,2	%7,6	%43,2	%10,6	%43,2	%25	%20,5	
	3 hours and over	5	9	4	9	5	3	25	1	27	4	14	53
	<b>T</b>	%9,4	%17	%7,5	%17	%9,4	%5,7	%47,2	%13,2	%50,9	%7,5	%26,4	
	lotal	119	2/4	269	422	122	128	635	242	736	350	310	1521
	I never play	69	181	164	254	69	80	377	142	405	208	198	878
	0.41	%7,9	%20,6	%18,7	%28,9	%7,9	%9,1	%42,9	%16,Z	%46,1	%23,7	%ZZ,6	0.44
	0-1 nour	31	60 9/17 6	63 0/10 E	91 % 26 7	36	33	135	61 0/17.0	185	/1 0/20.0	63 0/10 E	341
	4.0 h a una	%9,1	%17,0 40	%18,5	%Z0,7	%10,6	%9, <i>1</i>	%39,0	%17,9	%54,3	%20,8 07	%18,5	100
Playing Game	1-2 nours	8 %50	18	23	3∠ %22.5	/ 9/51	/ 9/51	51 0/27 5	14	00 0/ 19 5	37 0/ 27 2	21 0/15 /	136
nine on Computer	2.2 hours	/03,9	/01J,Z	15	7023,J	70J, I	70J, I 7	7037,3	14	/040,5	/021,2 17	/013,4	80
per Day	2-3 110015	0 %9	0 %9	%16.9	27 %30.3	0 %6 7	/ %79	30 %40 4	%15.7	%52.8	%19.1	13 %14.6	09
	3 hours and over	3	7	4	18	4	1	36	11	33	17	15	77
		%3,9	%9,1	%5,2	%23,4	%5,2	%1,3	%46,8	%14,3	%42,9	%22,1	%19,5	
	Total	119	274	269	422	122	128	635	242	736	350	310	1521
	Yes	57	128	127	203	54	60	314	120	375	174	153	763
Did Your Playing		%7,5	%16,8	%16,6	%26,6	%7,1	%7,9	%41,2	%15,7	%49,1	%22,8	%20,1	
Time Increase in	No	62	146	142	219	68	68	321	122	361	176	157	758
the Pandemic?		%8,2	%19,3	%18,7	%28,9	%9	%9	%42,3	%16,1	%47,6	%23,2	%20,7	
	Toplam	119	274	269	422	122	128	635	242	736	350	310	1521
	I never play	33	103	95	140	38	42	211	79	220	116	108	487
		%6,8	%21,1	%19,5	%28,7	%7,8	%8,6	%43,3	%16,2	%45,2	%23,8	%22,2	
	0-1 hour	27	57	46	89	27	31	121	49	164	78	63	324
		%8,3	%17,6	%14,2	%27,5	%8,3	%9,6	%37,3	%15,1	%50,6	%24,1	%19,4	
	1-2 hours	24	39	33	63	15	20	91	31	108	44	37	210
Daily Playing Time		%11,4	%18,6	%15,7	%30	%7,1	%9,5	%43,3	%14,8	%51,4	%21	%17,6	
in Pandemic	2-3 hours	9	24	36	49	15	13	65	25	81	44	36	172
		%5,2	514	%20,9	%28,5	%8,7	%7,6	%37,8	%14,5	%47,1	%25,6	%20,9	
	3 hours and over	26	51	59	81	27	22	147	58	163	68	66	328
	<b>T</b>	%7,9	%15,5	%18	%24,7	%8,2	%6,7	%44,8	%17,7	%49,7	%20,7	%20,1	
	I otal	119	2/4	269	422	122	128	635	242	736	350	310	1521

By looking at the relationship between participants' frequency of playing games and the types of games from Table 6, it was determined that 52.2% of those that expressed they never played, preferred strategy games, 43.3% war and 33.0% sportive games and 25% games such as backgammon-rummikub-chess at higher rates. It was determined that the participants who rarely played, playing games 45.9% strategy, 39.6% war, preferred 27.3% sportive games and 26.1% backgammon-rummikubchess. It was determined that the participants who sometimes played, preferred playing games 49.1% strategy, 43.2% war, 28.9% sportive games and 21.6% backgammon-rummikub-chess. It was determined that the participants who frequently played, preferred playing games 47.2% strategy, 40.8% war, 25.7% sportive games and 21.6% backgammon-rummikub-chess. It was determined that the participants who usually played, preferred playing games 48.8% strategy, 41.8% war, 21.2% sportive games and 21.2% backgammon-rummikubchess.

By looking at the relationship between daily mobile game playing time and types of game play from table 6, it was determined the participants who played less than an hour, preferred 49.2% strategy games, 42.5% war and 30.3% sportive games and 24.0% games such as backgammon-rummikub-chess with a higher rate. It was determined that participants who played 0-1 hour, preferred 49.0% strategy games, 39.0% war and 27.0% sportive games and 23.3% games such as backgammonrummikub-chess. It was determined that participants who played for 1-2 hours, preferred 50.9% strategy games , 44.5% war and 30.7% sportive games at higher rates. It was determined that participants who played for 2-3 hours, preferred 43.2% strategy games, 43.2% war games, 25.0% sports games and games such as backgammon-rummikubchess with 25.0%. It was determined that that participants who played for over 3 hours, preferred 50.9% strategy games , 47.2% war and 26.4% other games at higher rates.

By looking at the relationship between the duration of daily computer games of the participants and the types of games they play from Table 6, it was seen that 878 people were less than half an hour. It was determined that 46.1% of those who played games for less than an hour preferred strategy games, 42.9% war and 28.9% sportive games at higher rates. It was determined that the participants, whose daily game duration was an hour, preferred 54.9% strategy games, 39.06% war and 26.7% sportive games at higher rates. Those who play 1-2 hours preferred 48.5% strategy, 37.5% war, 27.2% backgammon-rummikub-chess and 23.5% sportive games at higher rates. It was determined that those who played for 2-3 hours preferred 52.8% strategy, 40.4% war and 30.3% sportive games. Those who played for 3 hours or more preferred 46.8% war, 42.9% strategy and 30.3% sportive games at higher rates.

Considering the relationship between the participants'

duration of playing game during the pandemic process and the types of games they played in Table 6, it was seen that the rates of those who answered yes and no were close to each other numerically.

Considering the relationship between the duration of playing games and the types of games they played during the pandemic process of the participants from Table 6, it was determined that 45.2% of the participants who played games for less than an hour preferred strategy games, 43.3% war and 27.5% sportive games. It was determined that those who played an hour preferred 50.6% strategy, 37.3% war and 27.5% sportive games. It was determined that those who played for 1-2 hours preferred 51.4% strategy, 43.3% war, 30.0% sportive games. It was determined that those who played for 2-3 hours preferred 47.0% strategy, 37.8% war and 28.5% sportive games. Those who played for 3 hours or more preferred 49.7% strategy, 44.8% war and 24.7% sportive games.

## DISCUSSION

The restrictions applied with the pandemic process have affected the daily life of the individuals and increased the duration of staying at home. Şahinler et al., In their study, stated that 84.1% of the athletes stated that Covid-19 affected their lives.<sup>23</sup> With Covid 19, the duration of staying at home and the types of activities carried out at home have also changed. In this process, the activities carried out at home have increased, and especially with the changes and developments in communication technology, the time spent in front of computers, tablets and mobile phones, ie in the virtual environment, has also increased. In this period when technology and digitalization process are rapidly increasing, digital games are one of the activities carried out at home, especially during the pandemic process. The aim of this research is to examine the digital game playing habits of athletes and these habits during the pandemic process.

It was determined that 60% of the participants were male, young, student, 55% university graduates and athletes. It was determined that the participant's years of doing sports were between 36.9% for 1-5 years and 27.5% for 6-10 years. In the study, 62.6% of them were found to be athletes and the others were coaches and referees. It was observed that 76.2% of the participants did not participate in the activities of the e sports federation. Considering the frequency of playing games of the research group, it was determined that they were ranked as medium frequency, rare and often. Time for playing game for 0-1 hours by mobile phone per day was determined as 37.7%. In addition, it was determined that the participants preferred mobile phones more for playing games. It can be said that playing games on internet compatible smart phones is easier and more accessible as the reason why mobile phones are preferred more for playing games. In their study Taylan et al. (2017) pointed out that the rate of playing games on the computer was high, and it can be said that this rate has changed with the development of technology and the increase of internet compatible smartphones.<sup>21</sup> In the research, when the data regarding the leisure time variable in the Covid 19 process were examined, it was determined that 41.6% of the athletes were hanging out on the internet in their spare time.<sup>23</sup> In another study, it was determined that the 20 minutes for computer use and video games allocated to these activities increased by getting older.<sup>38</sup> In different studies, it was stated that students used the internet for 1-1.5 hours a day.<sup>24,25</sup> It can be said that our research results are similar compared to the results of other studies.

It was determined that the research group said there was an overall increase in the question of whether there were changes in playing game time during the pandemic, but that the no view was proportionally close to the yes view. It was determined that 21.6% of the participants had the highest rate of playing games for 3 hours or more per day during the pandemic process. In this context, it was observed that the research group's duration of playing games increased during the pandemic process.

Considering the type of games played by the research group, they are listed as strategy, war, sportive games, backgammon-rummikub-chess, other games, car racing, fighting and simulation games. Dolu et al. (2010) stated in their study that the vast majority of students played games involving war and violence.<sup>26</sup>

By examining the types of games played by the research group and the gender variable, it was determined that men played strategy and backgammon-rummikubchess games at a higher rate, while women preferred strategy, war, sportive games and other games. In addition, in the study, it was found that men played computer games more than women. In similar studies, it was stated that boys were tend to gaming more than girls.<sup>27-32</sup>

Considering the types of games that the research group played and the age variable, it was determined that the rate of playing strategy games increased as they got older. It was determined that the participants between the ages of 21-30 played war games more. In addition, it was determined that as the age got older, the participants played backgammon-rummikub-chess games more. In their study, Akçay and Özçebe (2012) determined that as preschool students got older, the frequency of playing computer games increased.<sup>28</sup> In different studies, it was stated that the age of using the Internet decreased to the age of 10 and that most of them started playing digital games at this age.<sup>24,33,34</sup>

When the types of games played by the research group with the variable of profession were evaluated, it was determined that housewives never watched horror movies and did not play car races. It was observed that the majority of the participants in all occupational groups played games such as strategy, war, sports games and games such as backgammon-rummikub-chess. It was determined that the participants in the student and teacher group played 'other games' more than the participants in all professions.

In the research group, the rate of using the internet of the participants with undergraduate and graduate education was 61.5%. Considering the types of games that the participants played and the educational status variable, it was determined that strategy, war, sports games and backgammon-rummikub-chess games played at high rates. As the education level of the participants increases, the rate of watching horror movies increases. In addition, it was also determined that those with a graduate degree played war-type games at low rates, while they played other game types at higher rates. Baltacı et al. (2020) stated in their study that during the COVID-19 pandemic, university students had difficulty in controlling their internet usage, they spent more than 5 hours on the internet a day on average and this could pose a risk.<sup>35</sup> Considering the types of games that the research group played and the sporty level variable, it was determined that the habit of playing sports games and strategy games was higher in trainers. In addition, it was determined that athletes played games such as backgammon- rummikub-chess at lower rates.

Considering the frequency of playing games of the research group and the types of games they played, it was seen that the participants played "other game" types more. It was determined that the type of game played by the participants in terms of the frequency of playing the game, respectively, were strategy, war, sports games and backgammon-rummikub-chess. It can be said that the participants who played games very often preferred different types of games.

Considering the time of playing games on their mobile phone per day and the game types they played, it was determined that the participants in the study played the strategy games by 50% rate in all groups. It was also determined that the participants who played games for 3 hours or more played other game types with the highest rate of 26.4%. According to these results it can be said that as the duration of the game increases, the participants prefer different games and want to gain different experiences. In a different study, it was stated that 76% of individuals between the ages of 16 and 64 who had mobile phones, spent more time with their phones during pandemic days. In addition, one out of every 5 people using the internet stated that they watched more movies and videos during this period, and one out of every 7 users spent more time on social media applications.<sup>36</sup> In the results of the research, the excessive time spent on mobile phones and playing games is thought to be due to the fact that the majority of the research group is mainly university graduates and young people.

Considering the time of playing computer game of the participants and the types of games played, it was determined that the participants who played games for 3 hours or more played war games, strategy and sports games at higher rates, respectively. In addition, it was determined that the participants' time for playing games on a computer was lower than their time for playing games on a mobile phone.

It was determined that the games that the participants played most in all game groups during the pandemic process were strategy, war, sports and backgammon games, respectively. In addition, it was also determined that regarding the question of whether there was a change in the duration of the game during the pandemic process, the yes option was high, but the no option was close, besides the rate of the participants playing for 3 hours or more was high.

## CONCLUSION

As a result, with the pandemic process, the rates of spending time at home with technological tools have increased all over the world, and similarly, the rates of using the internet, computers and mobile phones have increased in Turkey. The research was applied on athletes, and it was observed that the participants in the research group were young and mostly students, so they frequently used technology. Looking at the internet user profile in Turkey, it was stated that there was a predominantly young and male distribution.<sup>39</sup>

In the research, it was observed that during the pandemic process, athletes' playing time increased; and It was also determined that they played, respectively, strategy, war, sportive games and backgammon-rummikubchess games at high rates. It was found that during the pandemic process, their time for digital games and playing games by mobile phones increased.

It was determined that female athletes preferred strategy, war, sportive games, while male athletes preferred war games such as strategy and backgammonrummikub-chess. It was determined that university graduates used the internet at higher rates and played different types of games. It was also determined that athletes played games such as backgammon-rummikubchess at lower rates, while coaches played strategy games at higher rates. In addition, it was determined that those who played games for a long time played war games.

**Suggestion:** It will be beneficial for athletes to play digital games related to their own sports branches while playing strategy games at high rates during the pandemic process.

For those who will do research on this subject, it is advised to do a research to determine habits of playing game according to sports branches.

Physical activities at home during the pandemic process are important for athletes. The recreational games that can be played at home will prevent the athletes from staying still for long periods of time and spending time on computer games and smart phones.

Strategies to prevent immobility as a result of staying home for a long time should be recommended.

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