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EXAMINATION OF THE RELATIONSHIP BETWEEN PHYSICAL ACTIVITY PARTICIPATION MOTIVATION AND DIGITAL GAME PLAYING MOTIVATION

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ABSTRACT

This study was carried out to examine the motivation of secondary school students to participate in physical activity and play digital games. Scanning design, one of the descriptive research models, was used in the study. The study group consisted of 462 students continuing their education in secondary schools in Ankara province Çankaya district in the 2022-2023 academic year. In the study, the Digital Game Playing Motivation Scale (DGPMS) developed by Demir and Hazar (2018) and the Motivation scale for participation in physical activity (MSPPA) developed by Demir and Cicioğlu (2018) were used. In scientific analysis, arithmetic mean, standard deviation, percentage, frequency, Spearman Correlation, Mann-Whitney U Test, Kruskal-Wallis Tests were used. In the study, a low-level significant negative correlation was found between the MSPPA total score, achievement and arousal, curiosity and social acceptance sub-dimensions. Significance was found in favor of male students in the sub-dimensions of success and vitality and curiosity and social acceptance according to gender. According to the grade level variable, a significant difference was found in favor of the 6th grades in the sub-dimensions of achievement and arousal, curiosity and social acceptance. In the research, it was seen that the motivation of the participants to play digital games was medium, and the motivation to participate in physical activity was high. As a result of the research, it was found that as the motivation to participate in physical activity increased, the desire of individuals to play digital games and the motivation to have fun through digital games decreased.

Keywords*: Motivation, participation in physical activity, digital game*

INTRODUCTION

Today, the dynamics of life lead individuals to a more inactive form. Considering the 2002 data of the World Health Organization (WHO), inactive life causes 1.9 million deaths per year in the global world. Physical inactivity is emerging as one of the most important health problems in our contemporary society. A century ago, individuals had to stay physically active while going about their daily lives. With the advancement of technology, the individual has adopted a more sedentary lifestyle away from physical activity (Akıncı, 2014). In other words, there has been a decrease in activity levels, transportation, the introduction of technology into home life and the widespread use of products that facilitate many more daily lives have caused individuals to be more passive physically. The digital games brought with it by technology have also given birth to inactivity, so the number of individuals who lead a sedentary life has increased. The increase in sedentary lifestyles has paved the way for many metabolic diseases such as eating disorders and obesity in societies. When it comes to today's life cycle, it is observed that 15% of children and 30% of adults have a body weight above their ideal body weight in most of the developed countries. Evaluations in the light of the literature indicate that while technology-based development improves the living conditions and comfort of societies in one respect, it also paved the way for the emergence of very important health problems in other respects (Hekim, 2015; Arıcan-Baydar, 2021). The reasons that push the individual to participate in physical activity in the social life circle are the basic motivational forces such as achieving success and status, renewing by expending energy, socializing, spending time productively, obtaining physical condition and skill development (Arıcan-Baydar, 2021; Demir & Cicioğlu, 2018; Rickel, Park and Morales, 2012; Sit and Lindner, 2007). In addition, achieving ideal weight, healthy living, socializing, avoiding stress, avoiding diseases, not thinking about daily problems, saying goodbye to harmful habits, avoiding negative thoughts, having fun, physical self-development, productive use of work/non-work time, lifelong Individuals tend to continue their lives without moving away from physical activities due to expectations of development, self-confidence and similar expectations (Demir & Cicioğlu, 2018). Physical activity is an important building block for the physical and mental development of young people, as well as for individuals at every developmental level. In other words, physical activities play a critical role in the physical, psychological and mental development of the individual. Lack of physical activity causes many health problems such as childhood obesity, type 2 diabetes mellitus, cardiovascular problems, hypertension, hyperlipidemia, stroke, colon cancer and breast cancer (Castelli, Hillman, Buck, & Erwin, 2007). According to Demir and Cicioğlu (2018), the reason why the tendency to physical activity, which is accepted as one of the

important supporters of individuals to lead a healthy life, is decreasing day by day, is that individuals are driven to mental fatigue and burnout due to intense working/working hours, and the use of bicycles for transportation from one place to another. and the decrease in walking, providing one-touch access with modern transportation vehicles, and the fact that children and young people cannot find enough time and energy for physical activities due to exam anxiety in our country's education and training environment. These emerging situations cause people to move away from physical activities and the spread of games played on digital platforms. The widespread use of the Internet has significantly affected the increase in the tendency to digital games. This situation strengthened the relationship between internet and digital game addictions, which are expressed as behavioral addictions; drew attention to the conclusion that the tendency of the individual to use the internet is for the purpose of playing digital games (Günüç, 2015). When the reasons for individuals to participate in digital games are examined, discharge, challenging themselves and others, communication barriers in social relations, the idea of winning in the virtual world what they cannot achieve in real life, and the desire to move to a higher level in the game emerge (Tekkurşun Demir and Mutlu Bozkurt, 2019). Another element that directs individuals to play digital games is motivation. With the continuation of education and training activities with digital games, significant improvements have been made in children and youth's ability to use digital devices, to give desired commands, to predict with psychomotor development, and to make decisions. On the other hand, it is thought that long-term exposure of children and young people to the screen-internet for leisure and entertainment purposes will create negative results (Ülker and Bülbül, 2018). Motivated individuals are expected to take action for the work/occupation they will conclude. In that case, if a driving force, inspiration or urge to take an action has not emerged in the individual, sufficient motivation has not been provided. On the contrary, if the individual takes action to reach a result or can focus his energy on the result, sufficient motivation is obtained (Ryan & Deci, 2000). When the relevant literature is scanned, it is possible to see various definitions in the definition of the concept of motivation. In its most basic form, motivation is expressed as the direction and intensity of an individual's pursuits. Adequate motivation level contributes positively to learning and performance (Weinberg & Gould, 2015). When the national and international studies on motivation in the literature are examined, it is seen that mostly the motivations for participation in sports (Mishra et al., 2022; Pereira et al., 2022; Emamverdi et al., 2020; Tekkurşun-Demir and İlhan, 2019; Sukys et al., 2019), the motivations of the participants watching the sports competitions (Polat and Yalçın, 2014) and the motivation of the disabled people to participate in sports (Moura et al., 2021; Cole, Zhang and Wang, 2019; Tekkurşun, İlhan, Esentürk, & Kan, 2018),

research on motivation to play digital games (Erol & Çırak, 2020; Hazar, 2019; Scharkow, Festl, Vogelgesang, 2012; Wang, Khoo, Liu, & Divaharan; 2008).

In the context of these data, it is very important to determine the motivation levels that lead today's children and youth, who represent the potential power of the future, to participate in physical activities and digital platform games. In this respect, it is aimed to examine the relationship between secondary school students' motivation to participate in physical activity and their motivation to participate in digital games in terms of various variables.

METHOD

Model of the Research

This study was carried out using the scanning model, one of the descriptive research models. Survey model is the research carried out to obtain data in order to express some characteristics of a particular group (Büyüköztürk, Kılıç, Çakmak, Akgün, Karadeniz & Demirel, 2017).

Study Group

In the 2022-2023 academic year, 462 students who continue their education in secondary schools in the Çankaya district of Ankara province participated in the study.

Table 1. *Descriptive Statistics for the Study Group (n=462)*

		Grade				
		5th grade	6th grade	7th grade	8th grade	Total
Gender	Girl	66	66	63	75	210
	Boy	36	54	57	45	192
Total		102	120	120	120	462

According to Table 1, 102 (66 girls, 36 boys) from the 5th grade, 120 (66 girls, 54 boys) from the 6th grade, 120 (63 girls, 57 boys) from the 7th grade and 120 (75 girls, 45 boys) from the 8th grade were included in the study. A total of 462 (270 girls, 192 boys) students participated.

Data Collection Tools

Digital Game Playing Motivation Scale (DGPMS): The scale developed by Demir and Hazar (2018) is represented in 3 sub-dimensions as Success and Revival, Curiosity and Social Acceptance, and Uncertainty in Willingness to Play. DGPMS comes together with 19 items and is graded and scored in a 5-point Likert type (I strongly disagree, (1) -I do not agree, (2), -I am undecided, (3)-I agree, (4)-I

totally agree, (5)). Scale sub-dimensions have Cronbach Alpha values of.81,.79, and.75, respectively. The highest score that can be obtained from the scale is 95 and the lowest score is 19. While calculating the score for the items, high scores on the scale indicate high motivation to play digital games, and low scores indicate low motivation.

Motivation scale for participation in physical activity (MSPPA): The scale developed by Demir and Cicioğlu (2018) is represented by 3 sub-factors as Individual Reasons, Environmental Reasons and No reason. MSPPA consists of 16 items and is graded in a 5-point Likert type. Scale sub-factors have Cronbach Alpha values of.89,.86, and.82, respectively.

The lowest score obtained from MSPPA is 16, and the highest score is 80. The high scores of the participants from the scale indicate that their motivation to participate in physical activity is positive. In this context, the scores of the participants in MSPPA mean that they have a very low range of 1 to 16, a low range of 17-32, a medium range of 33-48, a high range of 49-64, and a very high motivation to participate in physical activity.

Analysis of Data

In order to determine the analyzes to be performed in the analysis of the data, the normality test for the variables and the homogeneity of the variances were determined. Accordingly, non-parametric tests were performed on the variables whose distribution was not found to be normal (the distribution was not within the range of ±1) (Büyüköztürk et al., 2012). In the analysis of the data, arithmetic mean, standard deviation (ss), minimum (min) and maximum (max), Spearman Correlation, Mann-Whitney U Test, Kruskal-Wallis Tests were used. Accordingly, the Z score for the Mann-Whitney U Test and the Chi-Square score for the Kruskal-Wallis Test were calculated. The significance level was calculated as.05.

RESULTS

Table 2. *Relationship Between DGPMS and MSPPA*

		Success and Revival	Curiosity and Acceptance	Social Uncertainty in Game Request
DGPMS	r	-,104	-,127	,050
	p	**,00****	**,00***	, 11

p<,05

In Table 2, the relationship between the Spearman Correlation analysis and the DGPMS and MSPPA was examined. According to the analysis, there was a

negative, low-level significant correlation between MSPPA and achievement and vitality sub-dimension (r=-.104; p<0.05) and curiosity and social acceptance sub-dimension (r=-.127; p<0.05) found.

Table 3. *Mann Whitney U Test Results According to Gender Variable*

		Gender	N	significant difference	Mann Whitney U	Z	p
DGPMS	Success and Revival	Girl	270	69,70	2178,000	-2,580	**,01***
		Boy	192	88,47			
	Curiosity and Social Acceptance	Girl	270	66,56	1895,000	-3,615	**,00***
		Boy	192	92,89			
	Uncertainty in Game Request	Girl	270	77,76	2857,000	-,085	,93
		Boy	192	77,14			
MSPPA		Girl	270	76,09	2767,000	-,415	,67
		Boy	192	78,27			

p<,05

Table 3 shows the findings of the Mann-Whitney U Test conducted between the gender of the participants and the DGPMS and MSPPA. According to the analysis, a significant difference was found between gender and the sub-dimensions of DGPMS. Accordingly, it was found that the male students' (SOmale=88.47) success and revival scores in playing the digital game were significantly higher than the female students' (SOgirl=69.70) scores (A=-2.580; p=<.05).

In addition, in the Curiosity and Social Acceptance sub-dimension, it was determined that male students' (SOmale=92.89) digital game playing scores were significantly higher than female students' (SOgirl=66.56) scores (A=-3.615; p=<.05).

Table 4. *Kruskal-Wallis Test Results According to Grade Level Variable*

		Grade Level	N	Rank Average	x^2	p	significant difference
DGPMS	Success and Revival	5th	102	50,44	20,906	,00	6*7-8-5
		6th	120	96,53			
		7th	120	84,09			
		8th	120	74,89			
	Curiosity and Social Acceptance	5th	102	47,26	32,779	,00	6*7-8-5
		6th	120	106,11			
		7th	120	79,70			
		8th	120	72,39			
	Uncertainty in Game Request	5th	102	68,93	19,501	,21	-
		6th	120	64,69			
		7th	120	67,44			
		8th	120	79,06			

MSPPA	5th	102	82,38	1,430	,69	-
	6th	120	74,78			
	7th	120	81,39			
	8th	120	72,19			

p<,05

Table 4 shows the results of the Kruskal-Wallis Test conducted between the class level of the participants and the DGPMS and MSPPA. According to the analysis, significant differences were found in the class levels of the participants and in the sub-dimensions of Success and Revival and Curiosity and Social Acceptance. The group in favor of the significant difference is indicated by *. Accordingly, in the Achievement and Revival sub-dimension, the mean scores of 6th grade students (SO6.class=96.53), 7th grade (SO7.class=84.09), 8th grade (SO8.class=74.89) and 5 It was determined that the mean score of the first grade (SO5.grade=50,44) students was significantly higher than the mean score (Chi-Square=20.906; p<.05).

In addition, in the Curiosity and Social Acceptance sub-dimension, the mean scores of 6th grade students (SO6.class=106.11), 7th grade (SO7.class=79.70), 8th grade (SO8.class=72.39) and It was found that the mean score of the 5th grade (SO5.class=47,26) students was significantly higher than the mean score (Chi-Square=32,779; p<.05).

Table 5. *Descriptive Statistics Regarding the Responses of Secondary School Students to DGPMS and MSPPA*

	N	Min.	Max.	Average	ss.
DGMPS Total	462	25,00	89,00	57,77	12,25
MSPPA	462	20,00	80,00	59,53	9,71

p<,05

There are descriptive statistics of the responses of secondary school students participating in the study to DGMPS and MSPPA. According to the analysis, it is seen that the participants' digital game playing motivation score average ($\bar{x}$= 57.77 ± 12.25) is moderate. As seen in Table 5 and as stated by Demir and Cicioğlu (2018) in Table 2, it was found that middle school students' mean score for participation in physical activity ($\bar{x}$= 59.53 ± 9.71) was high.

DISCUSSION AND CONCLUSION

462 students were included in the study, which was conducted to examine the motivation levels of secondary school students to participate in physical activity and play digital games according to some variables.

When the findings obtained in the study were evaluated, a negative and low level significant relationship was found between MSPPS and the sub-dimension of achievement and revival, and the sub-dimension of curiosity and social acceptance. In this context, it can be stated that with the increase in students' motivation to participate in physical activity, their motivation to play digital games decreases. This situation can be associated with the fact that the individual, who spends most of his time on digital games, does not have the opportunity to participate in physical activity. Supporting the findings of the study in the literature, in the study conducted by Demirel et al. (2019) with the participation of 105 students continuing their education in secondary education, a significant difference emerged between the students' participation in physical activities and their motivation to play digital games. Similarly, Kolçak and Çakır (2020), in their study conducted with 335 primary school students, found that the decrease in the duration of playing digital games increased the motivation to participate in physical activity. On the other hand, when the study of Biddiss and Irwin (2010) is different from the findings of the study; It is revealed that digital motion games played through game consoles increase the motivation of the players to do physical activity, in addition, they contribute to allocating more time to physical activity.

In the second finding of the study, a significant difference was found between the gender of the participants and the sub-dimensions of DGMPS. This difference was found to be significantly higher in male students' "success and vitality" and "curiosity and social acceptance" scores in playing the digital game than the female students' scores. According to this finding, it can be stated that male students are fed more from internal and external resources while playing digital games than female students. In parallel with the findings of the study, Güler and Çakır's (2020) study with 5th, 6th, 7th, and 8th grade students found a significant difference in the motivation to play digital games in favor of boys. In their study, Tekkurşun-Demir and Cicioğlu (2019) found a significant difference in favor of men in the scores of "success and vitality" and "curiosity and social acceptance" according to the gender variable. In the study of Demirel et al. (2019), it was determined that the motivation to play digital games in favor of men is high. Griffiths and Davies (2005) stated in their study that men spend more time on digital games than women. In the study of Namlı and Demir (2020), a significant difference was found between the attitude of playing digital games and the gender variable. There was no significant difference in the MSPPA scores of the participants. This can be

explained by the fact that the motivational resources of male and female students in participating in physical activity are similar to each other.

In parallel with the research findings, Tekkurşun-Demir and Cicioğlu (2019) found that the study group consisted of secondary school students, and it was found that the gender variable did not cause a significant difference in the motivation scores for participation in physical activity. In the study of Hazar, Demir, Namlı, and Türkeli (2017), similar physical activity levels were found in both genders. In the study of Demir and İlhan (2019) with disabled athletes, no significant difference was found between the motivations of women and men to participate in sports. In the study of Namlı and Demir (2020), no difference was found between participation in sports and gender. Unlike the research findings, Kaya, Cicioğlu and Demir (2018) found that men's attitudes towards sports are higher than women's in their research. In addition, in the study of Türkmen et al. (2016), the attitude towards sports in favor of men was found to be high.

In another finding of the study, a significant difference was found in the sub-dimensions of "success and vitality" and "curiosity and social acceptance", which are among the sub-dimensions of DGMPS according to the grade level variable. In this context, it was found that the scores of the students attending the 6th grade in the sub-dimensions of "success and revival" and "curiosity and social acceptance" were significantly higher than the scores of the students who continued their education in the 7th, 8th and 5th grades. Accordingly, it can be stated that 6th grade students are more affected by factors such as receiving awards, popularity, and excitement while playing digital games compared to 7th, 8th and 5th grade students. Similar to the research findings, in the study of Tekkurşun-Demir and Cicioğlu (2019), a significant difference was found in the digital game motivation scores of the students attending secondary school according to the grade level. There was no significant difference in the MSPPS scores of the participants. This situation can be explained by the fact that the motivational resources of students with different grade levels in participation in physical activity are similar to each other. Unlike the research findings, Çakır's (2019) study on high school students found a significant difference in MSPPA scores according to grade level. In the study conducted by Bozdağ and Özbek (2020), it was determined that the class variable differs according to the MSPPA, unlike the research findings.

As a result, it was determined that the average score of the digital game playing motivation of the secondary school students participating in the research was at a moderate level, while the average of the motivation to participate in physical activity was found to be at a high level.

REFERENCES

1) Bozdağ, B., & Özbek, S. (2020). Lise Öğrencilerinin Fiziksel Aktiviteye Katılım Motivasyonlarının İncelenmesi. *Akdeniz Spor Bilimleri Dergisi*, *3*(2), 395-406.
2) Buyukozturk, S., Cakmak, E. K., Akgun, O. E., Karadeniz, S., & Demirel, F. (2017). Bilimsel arastirma yontemleri (23. Baski). *Ankara: Pegem Akademi*.
3) Castelli, D. M., Hillman, C. H., Buck, S. M., & Erwin, H. E. (2007). Physical fitness and academic achievement in third-and fifth-grade students. *Journal of Sport and exercise Psychology*, *29*(2), 239-252.
4) Çakır, E. (2019). Lise Öğrencilerinin Fiziksel Aktiviteye Katilim Motivasyonları ile Vücut Kitle İndeksi Arasındaki İlişkinin İncelenmesi. *Beden Eğitimi ve Spor Bilimleri Dergisi*, *21*(1-A), 30-39.
5) Demir, G. T., & Bozkurt, T. M. (2019). Dijital oyun oynama tutumu ölçeği (DOOTÖ): Geçerlik ve güvenirlik çalışması. *Sportif Bakış: Spor ve Eğitim Bilimleri Dergisi*, *6*(1), 1-18.
6) Demir, G.T., & Cicioğlu, H.İ. (2018). Motivation Scale For Participation In Physical Activity (MSPPA): A study of validity and reliability Fiziksel Aktiviteye Katılım Motivasyonu Ölçeği (FAKMÖ): Geçerlik ve güvenirlik çalışması. *Journal of Human Sciences*, *15*(4), 2479-2492.
7) Demir, G.T., & Cicioğlu, H.İ. (2019). Fiziksel aktiviteye katilim motivasyonu ile dijital oyun oynama motivasyonu arasındaki ilişkinin incelenmesi. *Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi*, *17*(3), 23-34.
8) Demir, G. T. (2022). Beden Eğitimi ve Spora İlişkin Tutum Dijital Oyun Oynama Motivasyonunun Yordayıcısı Mıdır? *SPORMETRE Beden Eğitimi ve Spor Bilimleri Dergisi*, *20*(3), 69-79.
9) Demir, G. T., & Hazar, Z. (2018). Dijital Oyun Oynama Motivasyonu Ölçeği DOOMÖ: Geçerlik ve Güvenirlik Çalışması. *Beden Eğitimi ve Spor Bilimleri Dergisi*, *12*(2), 128-139.
10) Demir, G. T., & İlhan, E. L. (2019). Spora katılım motivasyonu: görme engelli sporcular üzerine bir araştırma. *Gaziantep Üniversitesi Spor Bilimleri Dergisi*, *4*(1), 157-170.
11) Demirel, H.G., Cicioğlu H. İ., Demir, T.G. (2019). Lise Öğrencilerinin Dijital Oyun Oynama Motivasyonudüzeylerinin İncelenmesi. *Atatürk Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi, 21*(3), 128-137.
12) Griffiths, M.D. & Davies, M.N.O. (2005). Videogameaddiction: Doesıtexist? Handbook Of Computer Game Studies. J. Goldstein, J. Raessens (Eds), Boston. Mıt Pres, 359–368.

13) Gungor, G., Ataseven, H., Demir, A., Solak, Y., Gaipov, A., Biyik, M.,... & Polat, H. (2014). Neutrophil gelatinase-associated lipocalin in prediction of mortality in patients with hepatorenal syndrome: a prospective observational study. *Liver International*, *34*(1), 49-57.
14) Güler, M. S., & Çakir, E. (2020). Analysis of the Relationship between Digital Game Playing Motivation and Physical Activity. *African Educational Research Journal*, *8*, 9-16.
15) Gülşen, C., & Gülenay, G. B. (2014). The principal and healthy school climate. *Social Behavior and Personality: an international journal*, *42*(1), 93S-100S.
16) Güvendi, B., Demir, G. T., & Keskin, B. Ortaokul öğrencilerinde Dijital Oyun Bağımlılığı ve Saldırganlık. OPUS Uluslararası Toplum Araştırmaları Dergisi, 11(18), 1194-1217.
17) HAZAR, Z., DEMİR, G. T., NAMLI, S., & TÜRKELİ, A. (2017). Ortaokul öğrencilerinin dijital oyun bağımlılığı ve fiziksel aktivite düzeyleri arasındaki ilişkinin incelenmesi. *Beden Eğitimi ve Spor Bilimleri Dergisi*, *11*(3), 320-332.
18) Kaya, Ö., Cicicoğlu, H. İ., & Demir, G. T. (2018). The attitudes of university students towards sports: attitude and metaphorical perception. *European Journal of Physical Education and Sport Science*.
19) Gunuc, S. (2015). Relationships and associations between video game and Internet addictions: Is tolerance a symptom seen in all conditions. *Computers in Human Behavior*, *49*, 517-525.
20) KOLÇAK, S., & ÇAKIR, E. (2020). Ortaokul öğrencilerinin dijital oyun oynama motivasyonunun fiziksel aktiviteye katılım motivasyonu üzerine etkisi. *Research in Sport Education and Sciences*, *24*(4), 113-118.
21) Namli, S., & Demir, G. T. (2020). The Relationship between Attitudes towards Digital Gaming and Sports. *Turkish Online Journal of Educational Technology-TOJET*, *19*(1), 40-52.
22) Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, *25*(1), 54-67.
23) TEKKURŞUN, D. G., İLHAN, E. L., ESENTÜRK, O. K., & Adnan, K. A. N. (2018). Engelli bireylerde spora katılım motivasyon ölçeği (ESKMÖ): Geçerlik ve güvenirlik çalışması. *Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi*, *16*(1), 95-106.
24) DEMİR, G. T., & CİCİOĞLU, H. İ. (2019). Fiziksel aktiviteye katilim motivasyonu ile dijital oyun oynama motivasyonu arasindaki ilişkinin incelenmesi. *Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi*, *17*(3), 23-34.
25) Türkmen, M., Abdurahimoğlu, Y., Varol, S., & Gökdağ, M. (2016). İslami ilimler fakültesi öğrencilerinin spora yönelik tutumlarının incelenmesi

(Bartın Üniversitesi Örneği). *Uluslararası Güncel Eğitim Araştırmaları Dergisi*, *2*(1), 48-59.

26) Rickel, K., Park, S. R., & Morales, J. (2012). Multiple Groups Confirmatory Factor Analysis of the Motivational Factors Influencing Individual's Decisions about Participating in Intramural Sports. *Choregia*, *8*(2).
27) Sit, C. H., & Lindner, K. J. (2007). Achievement goal profiles, perceived ability and participation motivation for sport and physical activity. *International Journal of Sport Psychology*, *38*(3), 283-303.
28) HEKİM, M. (2015). ÇOCUKLUK ÇAĞI OBEZİTESİNİN ÖNLENMESİNDE FİZİKSEL AKTİVİTE VE SPORUN ÖNEMİ. *Journal of International Social Research*, *8*(37).
29) ARICAN, H. Ö. B. (2021). ÜNİVERSİTE ÖĞRENCİLERİNİN OYUN VE FİZİKSEL AKTİVİTE KAVRAMLARINA YÖNELİK METAFORİK ALGILARININ İNCELENMESİ. *SPORMETRE Beden Eğitimi ve Spor Bilimleri Dergisi*, *19*(4), 170-183.
30) ARICAN, H. Ö. B. (2021). Üniversite Öğrencilerinin Sağlıklı Yaşam Biçimi Davranışları. *Çanakkale Onsekiz Mart Üniversitesi Spor Bilimleri Dergisi*, *4*(2), 59-73.
31) Castelli, D. M., Hillman, C. H., Buck, S. M., & Erwin, H. E. (2007). Physical fitness and academic achievement in third-and fifth-grade students. *Journal of Sport and exercise Psychology*, *29*(2), 239-252.
32) Demir, G. T., & Bozkurt, T. M. (2019). Dijital oyun oynama tutumu ölçeği (DOOTÖ): Geçerlik ve güvenirlik çalışması. *Sportif Bakış: Spor ve Eğitim Bilimleri Dergisi*, *6*(1), 1-18.
33) Ülker, Ü., & Bülbül, H. İ. (2018). Dijital Oyunların Eğitim Seviyelerine Göre Kullanılma Durumları. *TÜBAV Bilim Dergisi*, *11*(2), 10-19.
34) Weinberg, R., & Gould, D. (2015). Personality and sport. Foundations of sport and exercise psychology. *Human Kinetics*, *640*.
35) Mishra, S., Malhotra, G., Johann, M., & Tiwari, S. R. (2022). Motivations for participation in active sports tourism: a cross-national study. *International Journal of Event and Festival Management*, *13*(1), 70-91.
36) Pereira, F. B., Oliveira, C. B. S., Marques, J. V. G., Langkamer, M. F. B., Ferreira, M. I. M., Fusrtenau, S. C. & Ferrari, E. P. (2022). Sports participation among Brazilian adolescents and children: systematic review. *Revista Brasileira de Cineantropometria & Desempenho Humano*, *24*.
37) Emamverdi, M., Letafatkar, A., & Tazji, M. K. (2020). The effect of knee valgus control feedback exercise on pain, hip torque and performance variables in participants with patellofemoral pain. *J Anesthesiol Pain 2020*, *11*(1).
38) Demir, G. T., & İlhan, E. L. (2019). Spora katılım motivasyonu: görme engelli sporcular üzerine bir araştırma. *Gaziantep Üniversitesi Spor Bilimleri Dergisi*, *4*(1), 157-170.

39) Sukys, S., Tilindienė, I., Cesnaitiene, V. J., & Kreivyte, R. (2019). Does emotional intelligence predict athletes' motivation to participate in sports? *Perceptual and motor skills*, *126*(2), 305-322.
40) Polat, E., & Yalçın, H. B. (2014). External motivations scale for sport spectators (EMSSS) and internal motivations scale for sport spectators (IMSSS) validity and reliability study Spor seyircileri için dışsal güdü ölçeği (SSİDGÖ) ve spor seyircileri için içsel güdü ölçeği (SSİİGÖ) geçerlik ve güvenilirlik çalışması. *Journal of Human Sciences*, *11*(1), 105-127.
41) Moura, A., Graça, A., MacPhail, A., & Batista, P. (2021). Aligning the principles of assessment for learning to learning in physical education: A review of literature. *Physical Education and Sport Pedagogy*, *26*(4), 388-401.
42) Cole, S., Zhang, Y., Wang, W., & Hu, C. M. (2019). The influence of accessibility and motivation on leisure travel participation of people with disabilities. *Journal of Travel & Tourism Marketing*, *36*(1), 119-130.
43) Osman, E. R. O. L., & ÇIRAK, N. S. (2020). What are the Factors that Affect the Motivation of Digital Gamers? *Participatory Educational Research*, *7*(1), 184-200.
44) Scharkow, M., Festl, R., Vogelgesang, J., & Quandt, T. (2012, May). Choosing digital games: The relationship between gaming motives and genre preferences. In *Annual conference of the International Communication Association, AZ, United States*.
45) Wang, C. K. J., Khoo, A., Liu, W. C., & Divaharan, S. (2008). Passion and intrinsic motivation in digital gaming. *CyberPsychology & Behavior*, *11*(1), 39-45.
46) Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2017). Bilimsel Araştırma Yöntemleri. Pegem.
47) KOLÇAK, S., & ÇAKIR, E. (2020). Ortaokul öğrencilerinin dijital oyun oynama motivasyonunun fiziksel aktiviteye katılım motivasyonu üzerine etkisi. *Research in Sport Education and Sciences*, *24*(4), 113-118.
48) Biddiss, E., & Irwin, J. (2010). Active video games to promote physical activity in children and youth: a systematic review. *Archives of pediatrics & adolescent medicine*, *164*(7), 664-672.
49) Güler, M. S., & Çakir, E. (2020). Analysis of the Relationship between Digital Game Playing Motivation and Physical Activity. *African Educational Research Journal*, *8*, 9-16.
50) Griffiths, M. D., & Davies, M. N. (2005). Videogame addiction: Does it exist?