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INVESTIGATION OF PRESCHOOL TEACHERS' ATTITUDES TO PLAY

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Abstract:

This research is a descriptive study meant to determine the attitudes of preschool teachers towards playing games which are containing physical activity. The universe of the study consists of pre-school teachers working in Gaziantep. There were 450 (male 110, female 340) teachers in the sample group. The Gameplay Scale developed by Hazar (2015) was used to obtain the research data. Independent t-test, One Way Anova and Pearson correlation analysis were used in the analysis of the data. As a result of the research, in the study conducted to determine the attitudes of preschool teachers towards playing games containing physical activity, it was found that male preschool teachers' game passion and risk-taking attitudes were higher than female teachers', those with less professional experience had higher game passions than more experienced teachers. It has been determined that the social cohesion levels of those who have the above-mentioned experience are higher than the subgroups. While it was determined that those who did not have children had higher game passion and desire to play, a positive significant correlation was found between the scores obtained from the sub-dimensions of the scale by both male and female preschool teachers.

Keywords: teacher, preschool, game

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1. Introduction

Today, insufficient knowledge of society on physical activity, insufficient understanding of the importance of physical activity for health, and sports nutrition (Eyipinar, Büyükkalkan and Semiz, 2021) and the adoption of an increasingly sedentary lifestyle have become one of the important reasons that increase the incidence of chronic diseases such as obesity, cardiovascular diseases, hypertension, diabetes, and osteoporosis. Physical activity is beneficial to health at all ages. Regular physical activity makes significant differences in the healthy growth and development of children and young people, in getting rid of unwanted bad habits, in socialization, in protecting adults from various chronic diseases or in the treatment or support of treatment for these diseases, in ensuring that the elderly have an active old age period, in other words, in increasing the quality of life throughout life.

The first periods of human life are defined as critical periods by educators. Especially in these periods, it is very important to direct children correctly and to guide them correctly. Children's recognizing and making sense of the outside world generally begins in this period, and the child harmonizes this process through play. Especially in the pre-school period, play is an indispensable element of life for children in their behavior, education and development. Play is an essential requirement for children's development. Although the game is perceived differently by adults, according to the child, the game is his most important and serious occupation. The duty of adults should be to create a comfortable and safe play environment for the development of children. Parents should act consciously in this sense and guide children correctly (Alıncak, 2016a).

The childhood stage is very important in the lifelong developmental period of individuals. Children develop rapidly by acquiring many basic skills during this period. There are a number of reasons that affect the development of children, especially in this period. The most important of these is the children's desire to play. Therefore, it can be said that the concept of play in childhood is important for the development of children (Yıkılmaz & Kurşun, 2018).

Participation in regular movement and physical activities in early childhood is important for healthy growth, especially in terms of bone, muscle, cardiovascular development and prevention of obesity (Burrows, 2007; Eastman, 1997; Janz et al., 2004, Sääkslahti et al., 2004; Strickland, 2004; Trost et al., 2003; Vural et al., 2017). On the other hand, inactivity and sedentary life increase the risk of obesity in children (Baranowski, 1992; Goran, 1999; Jago, 2005; Janz et al., 2002; USDHSS, 1996; USDHHS, 2000). In addition, social life factors also affect children's physical characteristics (Öztütüncü et al., 2018). Scientists agree that physical activity levels should be monitored in childhood, adolescence and adulthood (Certain, 2002; Fowler-Brown & Kahwati, 2004; Fishman, 2001; Gordon-Larsen, 2004; Malina, 2001; Pate, 1996; Pate, 1999; Reilly, 2004). It is also stated that adequate and regular physical activity during childhood helps to prevent diseases in adulthood (Raitakari et al., 1994; World Health Organization, 2004). It is known that it has positive effects on not only physical but also physiological, cognitive and psychosocial aspects (Çağlak, 1999; Strong et al., 2005). In this case, it should be seen as a natural mechanism of encouraging participation in physical activity in childhood, acquiring a lifelong activity habit, and healthy life both in the short and long term (Oliver et al., 2010).

The game is an important concept in terms of educational science. Some experts consider the game an "art of learning". In addition, it is considered as a way that children to throw away their excess energy while playing, prevent them from misbehaving, and provide children's imitation needs (Biriktir, 2008).

Participation in physical education and sports activities is undoubtedly very important in the development of societies. Physical education and sports activities have many contributions to the development of individuals. For this reason, it cannot be denied that physical education and sports activities are one of the most important features of education life (Y1k1lmaz, 2019).

Sports is a new branch of science that not only develops the human body with its physical aspect but also determines human character, ego, behavioral quality and psychic structure through games, movements and competitions (Guven, 2006). Childhood is one of the periods when sports are most effective in human development. The childhood process has begun to be perceived as a different and special part of life, especially since the 18th century. In the 19th century, educators and moralists argued that if children were given the opportunity to express themselves, they would grow up healthily and they would be able to carry social responsibility in their behaviors, and argued that child development and behavior should be directed (Muratli, 1997). Sports in childhood began to mature in the 20th century (Slutzky and Simpkins, 2009). In the past, the sports activities of the children of rich families in developed countries have become an activity in which the children of families from all walks of society are interested and even actively and passively participate (Siesmaa, et al., 2011).

According to Huizinga (1995), in today's conditions, the chance for children to play real games is decreasing day by day. This situation is expressed as the confinement of children to home, kindergarten, school and being forced to be successful. The game, which is entertainment in its essence and should be interpreted as such, has become a commercialized and competitive subject today. Most of the child's outdoor games take place in a "private" space rather than a "public" space. Therefore, most children today do not have the opportunity to recognize and use the public environment without parental control (Valentine and McKendrick, 1997). All traditional games find their place in Caillois's classification. However, it seems that this classification is insufficient in the millennium where technological developments are high. Because the socio-cultural structure's exposure to changes due to factors such as migrations, technological developments, and economic difficulties actually killed the game culture that provided the moral development of the society, loyalty, mutual respect and love, and created artificial technological games that are not real, violent and negatively affect moral development (Alıncak and Tuzcuoğulları, 2016; Ayan et al., 2015). Studies have shown that children, especially children, need comfortable places to play games that involve physical activity (Cunningham and Jones, 2004; Hamilton, 2002). It is stated that the child, who lives in apartments, goes to school by bus, spends time in front of the television and

computer, also longs for playgrounds and parks due to unplanned urbanization (Ruhi, 1993).

Play is necessary and beneficial for the healthy development of young children; it is stated that the basis of healthy and consistent personality development with a high mental capacity, a healthy emotional state through a rich mental stimulant environment is the game environment (Tuzcuogulları et al., 2017; Pehlivan, 2005). Even under adverse conditions, children can produce some social games that include a wide variety of age groups among themselves. Children may be deprived of playing in situations such as the restriction of their freedom, being used as a child laborer, or living in war-torn countries. Apart from these, every child is acquainted with the act of play in some way (Timmons, 2003). As it is understood from the literature, the play has an important role in the socialization of children along with their physical and mental development during their childhood. In such an important issue, it is also important to reveal the attitudes of children towards playing games that include physical activities.

In their study, Ayan et al. (2017) determined that individuals who regularly participate in physical education and ask activities have higher emotional intelligence levels.

From this point of view, in this study, it was aimed to determine the attitudes of preschool teachers towards playing games containing physical activity. For this purpose, answers to the following questions were sought.

In the attitudes of preschool teachers towards playing games containing physical activity;

- 1) Is there a difference in terms of gender variables?
- 2) Is there a difference in terms of working years in the profession?
- 3) Is there a difference in terms of having children?
- 4) What is the relationship between game passion, game desire, enjoyment, risktaking and social adaptation sub-dimensions?

2. Method

This research is a descriptive study meant to determine the attitudes of preschool teachers towards playing games which are containing physical activity.

2.1. Universe and Sample

The research was applied to pre-school teachers working in Gaziantep. As of 2021-2022, there are 2027 pre-school teachers working in Gaziantep. In our sample group, a total of 450 teachers were included in the study on a voluntary basis. Therefore, it is thought that the sample group will represent the universe. The personal characteristics discussed in the study belonging to the research group are given in Table 1.

14	I able 1: Personal Characteristics of the Research Group (n=450)						
		n	%				
Gender	Male	110	24.4				
	Woman	340	75.6				
Year of study	1-3 years	180	40.0				
	4-6 years	160	35.6				
	7-9 years	94	20.9				
	10 years and above	16	3.6				
Child status	I have no children	158	35.1				
	1 child	132	29.3				
	2 children	148	32.09				
	3 and above	12	2.7				

2.2. Data collection tool

Personal information form and the Gameplay Scale developed by Hazar (2015) were used to obtain the research data. This scale has been prepared to determine the desire and desire to play active games involving physical activity. For this reason, an answer is requested considering the games that involve physical combat actions and the desire to play. It is a 5-factor scale consisting of 25 items developed as a result of the application on university students aged 18-25. The scale is a 5-point Likert type and consists of answers such as Strongly Disagree (1), Disagree (2), Undecided (3), Agree (4), Strongly Agree (5). The Cronbach Alpha value for the reliability of the playfulness scale was calculated as 0.86.

2.3. Data analysis

The data obtained from the scales used in the research were coded into the computer environment and statistical analyzes were made using the SPSS 22.0 package program. Kolmogorov-Smirnov normality tests were performed to determine whether the research data showed a normal distribution. Kurtosis-Skewness values were checked for data sets that did not show the normal distribution and it was seen that the values were between +2/-2, and it was determined that the data showed normal distribution. From this point of view, Independent Sample t-test for paired groups, One Way ANOVA for multiple groups, and Pearson correlation analyzes were used to determine the relationship between two variables.

3. Findings

In this section, as a result of the analysis of the data obtained from the research, the attitudes of the research group towards playing games containing physical activity were compared in terms of gender, years of working in the profession and having a child.

	Gender	Ν	Mean	Std. Deviation	t	р
	Woman	340	3,04	,83	2 510	0.000
Game passion	Male	110	3,61	,74	3,512	0,000
Diel. Tel.in e	Woman	340	2,67	,891	2 1 5 4	0,000
Risk Taking	Male	110	3,21	,76	3,154	
Social Cohesion	Woman	340	1,97	,62	1 450	0.402
	Male	110	2,12	,83	1,453	0,403
Game Request	Woman	340	2,18	,75	0.167	0.754
	Male	110	2,16	,83	0,167	0,754
Pleasure Taking	Woman	340	2,39	,72	1 052	0216
	Male	110	2,24	,73	1,253	0216

Table 2: Distribution of Scores Obtained from the
Sub-dimensions of the Scale in Terms of Gender Variable

In Table 2, the comparison of the scores obtained from the sub-dimensions of the scale in terms of the gender variable of the research group is given. There were significant differences in favor of males in the sub-dimensions of game passion, and risk-taking between the two groups (p<0.05). There was no significant difference in terms of gender variable in the sub-dimensions of social adaptation, game desire and enjoyment (p>0.05).

		Sum of Squares	df	Mean Square	F	Sig.	
	Between Groups	6.452	3	1.856		.002	a-b, a-c,
Passion	Within Groups	151.765	436	.592	3.352		
for Games	Total	161.256	439				a-d
Diale	Between Groups	4.152	3	1.274			
Risk Talvin a	Within Groups	152.564	436	.596	2.135	.065	
Taking	Total	156.325	439				
6 1	Between Groups	3.923	3	1.425	3.113	.000	d-a, d-b,
Social	Within Groups	94.239	436	.464			
Cohesion	Total	98.635	439				d-c
C	Between Groups	3.652	3	1.152			
Game	Within Groups	135.652	436	.557	1.632	.125	
Request	Total	138.526	439				
Enjoyment	Between Groups	4.978	3	1.306			
	Within Groups	121.065	436	.563	2.715	.063	
	Total	125.124	439				
Groups: Group a: 1-3 years, Group b: 4-6 years, Group c: 7-9 years, Group d: 10 years and above							

Table 3: Comparison of Scores Obtained from the Sub-dimensions of the Scale in Terms of Professional Experience

In Table 3, the comparison of the scores obtained by the research group from the subdimensions of the scale in terms of professional experience is given. There was a significant difference between 1-3 years and other groups in the passion for play subdimension (p<0.05). In the social cohesion sub-dimension, a significant difference was observed between those who were 10 years or older and the other groups (p<0.05). No significant difference was found in terms of professional experience in other subdimensions (p>0.05).

	Sum of Squares	df	Mean Square	F	Sig.	Difference	
	Between Groups	3.215	3	1.142			a-c,
Game Passion	Within Groups	157.342	436	.756	3.652	.003	
	Total	161.458	439				a-d
	Between Groups	7.435	3	2.553			
Risk Taking	Within Groups	140.638	436	.528	1.436	.367	
Ũ	Total	147.471	439				
Social Cohesion	Between Groups	.243	3	.063			
	Within Groups	96.539	436	.396	.168	.582	
	Total	96.262	439				
	Between Groups	4.692	3	1.534			
Game Request	Within Groups	131.198	436	.546	2.452	.032	a-c,
-	Total	136.169	439				a-d
Enjoyment	Between Groups	2.522	3	.752			
	Within Groups	121.569	436	.343	1.613 .165		
	Total	124.256	439				
Groups: Group a: No child, Group b: 1 child, Group c: 2 children, Group d: 3+ children							

Table 4: Comparison of Scores Obtained from the

 Sub-dimensions of the Scale in Terms of Having a Child

In Table 4, the comparison of the scores obtained by the research group from the subdimensions of the scale in terms of the variable of having a child is given. In the subdimensions of passion for play and desire to play, it was determined that those who did not have children scored significantly higher than those who had 3 children (p<0.05). No difference was found in terms of the variable of having a child in other sub-dimensions (p>0.05).

Teachers from the Sub-dimensions of the Scale (n = 110)							
		Passion	Risk	Social	Desire	Enlormont	
			Taking	Cohesion	to Play	Enjoyment	
Passion for Games	r	1					
r assion for Games	р	1					
Diele Taking	r	.753	1				
Risk Taking	р	.000	1				
Carial Caluation	r	087	.232	1			
Social Cohesion	р	.526	.088	1			
Come Domost	r	.415	.521	.465	1		
Game Request	р	.000	.003	.000	1		
Enjoyment	r	.354	.491	.685	.472	1	
	р	.002	.000	.000	.000	1	

Table 5: Correlation of the Scores Obtained by Male Teachers from the Sub-dimensions of the Scale (n = 110)

Table 5 shows the correlation of the scores obtained by male students from the subdimensions of the scale. Accordingly, significant relationships were found between the sub-dimensions (p<0.05). A positive and significant correlation was observed between the passion for the game and the sub-dimensions of risk taking, willingness to play, and enjoying (p<0.05). A positive and significant correlation was found between risk taking and game desire and enjoyment sub-dimensions (p<0.05). A significant positive correlation was observed between social adaptation and the sub-dimensions of game desire and enjoyment (p<0.05). In addition, a positive significant relationship was observed between the desire to play and the sub-dimensions of enjoyment (p<0.05).

	Passion	Risk	s of the Scale (Social	Desire		
		for Play	Taking	Cohesion	to Play	Enjoyment
Passion for Games	r	1				
r assion for Games	р	1				
Dist Taking	r	.633	1			
Risk Taking	р	.000	1			
0 101 1	r	.214	.257	1		
Social Cohesion	р	.003	.002	1		
Como Do averat	r	.543	.562	.363	1	
Game Request	р	.000	.000	.000	1	
Enjoyment	r	.564	.663	.354	.642	1
	р	.000	.000	.000	.000	1

Table 6: Correlation of the Scores Obtained by Female Teachers from the Sub-dimensions of the Scale (n = 340)

Table 6 shows the correlation of the scores obtained by female students from the subdimensions of the scale. Accordingly, there were significant positive correlations between all sub-dimensions (p<0.05).

4. Discussion and Results

In the study, which was conducted to determine the attitudes of preschool teachers towards playing games containing physical activity, the discussion of the meaningful results obtained in terms of gender, professional experience and having a child was included.

When the attitudes of preschool teachers towards playing games containing physical activity were examined in terms of gender, significant results were found in favor of women in the sub-dimensions of game passion and risk taking. Therefore, it can be said that male teachers' game passion and risk-taking attitudes are higher than female teachers. This result may be due to the fact that men's physical activity levels are higher. Because in many studies, it is stated that the physical activity levels of men are higher (Genç et al., 2002; Öztürk, 2005; Acree et al., 2006; Savcı et al., 2006; Shibata et al., 2007; Şanlı, 2008; Fişne, 2009; Vural et al., 2010; Genç et al., 2011).

In studies conducted on prospective teachers from different branches, it was observed that male candidates achieved higher scores in the risk-taking sub-dimension (Uludağlı and Sayıl, 2009; Marcus, 1999; Jelalia et al., 1997; Parsons et al., 1997; Paetsch and Bertnard, 1997). Since the socialization processes of men and women differ, it is stated that boys tend to act riskier than girls (Chen et al., 1997; Öztürk, 2016). In the study conducted by sports science students, no gender difference was found in the sub-dimensions of game passion and risk-taking. This result may be due to the fact that both genders are engaged in sports.

When examined in terms of professional experience, significant differences were found in the sub-dimensions of passion for play and social adaptation. It has been observed that those who have 1-3 years of experience in the passion for game subdimension have higher scores. From this point of view, the fact that new teachers' professional enthusiasm is higher may cause their passion for the game to be higher. The social cohesion levels of preschool teachers with 10 years or more experience were higher than the other groups. This result may be due to the positive effects of the years of preschool teachers on their social cohesion levels.

When examined in terms of having children, it was concluded that the scores of those who did not have children in the sub-dimensions of passion for play and desire to play were higher than those with 3 or more children. Therefore, it has been observed that those with 3 or more children have a low passion for and desire to play. It has been observed that those who do not have children have a high passion for and desire to play. Teachers with a large number of children may have caused reluctance to play with their own children enough.

When the results of the correlation of the scores obtained by the male preschool teachers from the sub-dimensions of the scale were examined, positive correlations were found. It has been determined that when the passion for the game increases, the risk taking, game desire and enjoyment factors increase, when the risk-taking increases, the game desire and enjoyment increase, when the social harmony increases, the game desire and enjoyment factors increase, and when the game desire increases, the enjoyment also increases.

When the results of the correlation of the scores obtained by the female preschool teachers from the sub-dimensions of the scale were examined, positive relations were found between all sub-dimensions. In other words, it can be said that as one variable increases, the other increases as well. In the study conducted by Alıncak (2016b) on secondary school students, positive significant relationships were also found.

As a result, in the study conducted to determine the attitudes of preschool teachers towards playing games containing physical activity, it was found that male preschool teachers' game passion and risk-taking attitudes were higher than female teachers', those with less professional experience had higher game passions than more experienced teachers. It has been determined that the social cohesion levels of those who have abovementioned experience are higher than the subgroups. While it was determined that those who did not have children had higher game passion and desire to play, a positive significant correlation was found between the scores of both male and female preschool teachers from the sub-dimensions of the scale.

Conflict of Interest Statement

There is no conflict of interest between authors.

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References

- Acree L.S., Longfors J., Fjeldstad A., Fjeldstad C., Schank B., Nickel K.J., et al. (2006). Physical activity is related to quality of life in older adults. Health and Quality of Life Outcomes. 4:37.
- Alıncak F. (2016b). Attitudes of Secondary School Students Including Physical Activity Involving Playing Games, European Journal of Physical Education and Sport Science, 2(3):1-14.
- Alıncak, F. (2016a). Evaluation of Opinions of Primary School Teachers On The Method of Education With Game, European Journal of Physical Education and Sport Science, 2(3):81-96.
- Alıncak, F., Tuzcuoğulları, T. (2016). The Evaluation of Violent Content Games For Children's Development, European Journal of Physical Education and Sport Science, 2(5):61-67.
- Ayan S., Alıncak F., Tuzcuoğulları T. (2015). Gaziantep'te Oynanan Bazı Yöresel Oyunların Hentbol Branşının Teknik Çalışmasına Yönelik Eğitsel Oyunlar Olarak Değerlendirilmesi, Uluslar arası Türk Eğitim Bilimleri Dergisi, Yıl:3, Sayı:4, Nisan 2015, ISSN2148-2314 (Gaziosmanpaşa Üniversitesi, Eğitim Bilimleri Enstitüsü)
- Ayan S., Soylu Y., Bozdal Ö., Alıncak F. (2017). Investigation of Emotional Intelligence Level of University Students, Europan Journal of Physical Education and Sport Science, 3 (5).
- Baranowski T., Bouchard C., Bar-Or O., Bricker T., Heath G., Kimm S.Y.S., Malina R., Obarzanek E., Pate R., Strong W.B., Truman B., Washington R. (1992). Assessment, prevalence, and cardiovascular benefits of physical activity in fitness in youth. Medicine and Science in Sports and Exercise, 24, 237–247.
- Biriktir, A. (2008). İlköğretim 5. Sınıf Matematik Dersi Geometri Konularının Verilmesinde Oyun Yönteminin Erişiye Etkisi, Yüksek Lisans Tezi, Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.
- Burrows M. (2007). Exercise and bone mineral accrual in children and adolescents. Journal of Sports Science and Medicine, 6, 305-312.

- Certain L.K., Kahn R.S. (2002). Prevalence, correlates and trajectory of television viewing among infants and toddlers. Journal of The American Academy of Pediatrics, 109 (4), 634–42.
- Cunningham, C., & Jones, M.A. (2004). Middle childhood and the built environment. NSW Parliamentary Committee, 1-37, 234- 278
- Çağlak S. (1999). Okul Öncesi Eğitim Kurumlarına Devam Eden 5-6 Yaş Çocuklarına Beden Eğitimi Etkinlikleri Yoluyla Kavram: Enerji Öğretimi. Yüksek Lisans Tezi. Marmara Üniversitesi. Eğitim Bilimleri Enstitüsü.
- Eastman W. (1997). Active living: physical activities for infants, toddlers, and preschoolers. Early Childhood Education Journal, 24(3), 161-164.
- Eyipinar, C. D., Büyükkalkan, F., & Semiz, K. (2021). Sentiment Analysis of Youtube Videos Comments on Sports Nutrition. International Journal of Physical Education Sport and Technologies 2(2), 27-39.
- Fishman L. (2001). Child's Play: An empirical study of the relationship between the physical form of schoolyards and children's behavior. MESc 2001, 2016 from <u>http://citeseerx.ist.psu.edu</u>
- Fişne M., Fiziksel Aktivitelere Katılım Düzeyinin, Üniversite Öğrencilerinin Akademik Başarıları, İletişim Becerileri ve Yaşam Tatminleri Üzerine Etkilerinin İncelenmesi. Yüksek Lisans Tezi. Erciyes Üniversitesi, Kayseri, 2009.
- Fowler-Brown A., Kahwati L. C. (2004). Prevention and treatment of overweight in children and adolescents. American Family Physician, 69 (11), 2591-2599.
- Genç M.E., Eğri M., Kurçer M.A., Kaya M., Pehlivan E., Karaoğlu L., Güneş G., Malatya Kent Merkezindeki Banka Çalışanlarında Fiziksel Aktivite Sıklığı. İnönü Üniversitesi Tıp Fakültesi Dergisi. 9(4): 237-240, 2002.
- Genç, A., Şener Ü., Karabacak H., Üçok K. (2011). Kadın ve erkek genç erişkinler arasında fiziksel aktivite ve yaşam kalitesi farklılıklarının araştırılması. Kocatepe Tıp Dergisi, 12(3):145-150.
- Goran M.I., Renolds K.D., Linquist C.H. (1999). Role of physical activity in the prevention of obesity in children. International Journal of Obesity, 23, Supplement 3, 18–33.
- Gordon-Larsen P., Nelson M.C., Popkin B.M. (2004). Longitudinal physical activity and sedentary behavior trends adolescence to adulthood. American Journal of Preventive Medicine, 27(4), 277-283.
- Güven, G. (2006). Kütahya'daki Okul Öncesi Eğitim Kurumlarında Uygulanan Oyun ve Spor Programlarının İncelenip Değerlendirilmesi. Yayımlanmamış Yüksek Lisans Tezi, Dumlupınar Üniversitesi Sosyal Bilimler Enstitüsü, Kütahya.
- Hamilton, I. (2002). Where do children play? CPIS factsheet. <u>http://www.ncb.org.uk/cpis</u> /cpis factsheet4 whereplay 20090824.
- Huizinga, J. (1995). Oyunun Toplumsal İşlevi Üzerine Bir Deneme. (M.A. Kılıçbay, Çev.). Ayrıntı Yayınları: İstanbul.
- Jago R., Baranowski T., Baranowski J.C., Thompson D., Greaves K.A. (2005). BMI from 3– 6 y of age is predicted by TV viewing and physical activity, not diet. International Journal of Obesity, 29, 557–565. doi:10.1038/sj.ijo.0802969.

- Janz K.F., Burns T.L., Levy S.M., Torner J.C., Willing M.C., Beck T.J. ve diğ. (2004). Everyday activity predicts bone geometry in children: The Iowa bone development study. Medicine & Science in Sports & Exercise, 36, 1124–31.
- Janz K.F., Levy S.M., Burns T.L., Torner J.C., Willing M.C., Warren J.J. (2002). Fatness, physical activity and television viewing in children during the adiposity rebound period: The Iowa bone development study. Journal of Preventive Medicine, 35, 563–71.
- Malina R.M. (2001). Physical activity and fitness: Pathways from childhood to adulthood. American Journal of Human Biology, 13(2), 162–72.
- Muratlı, S. (1997). Çocuk ve Spor, Ankara: Bağırgan Yayınevi:
- Oliver M., Schofield G.M., Schluter P.J. (2010). Parent influences on preschoolers' objectively assessed physical activity. Journal of Science and Medicine in Sport, 13, 403–409.
- Öztürk M. (2005). Üniversitede eğitim-öğretim gören öğrencilerde Uluslararası Fiziksel Aktivite Anketinin geçerliliği ve güvenirliği ve fiziksel aktivite düzeylerinin belirlenmesi. Yüksek Lisans Tezi. Hacettepe Üniversitesi Sağlık Bilimleri Enstitüsü, Ankara.
- Öztütüncü, S., Özdal, M., & Vural, M. (2018). Aile gelir düzeyinin 8-14 yaş arası bireylerin vücut kompozisyonuna etkisi. Gaziantep Üniversitesi Spor Bilimleri Dergisi, 3(3), 48-58.
- Pate R.R., Baranowski T., Dowda M., Trost S.G. (1996). Tracking of physical activity in young children. Medicine & Science in Sports & Exercise. 28 (1),92-96.
- Pate R.R., Trost S., Dowda M. ve diğ. (1999). Tracking of physical activity, physical inactivity and health-related physical fitness in rural youth. Pediatric Exercise Science (PES), 11(4), 364–76.
- Pehlivan, H. (2005). Oyun ve Öğrenme. Anı Yayıncılık: Ankara.
- Raitakari O.T., Porkka K.V., Taimela S., Telama R., Rasanen L., Viikari J.S. (1994). Effects of persistent physical activity and inactivity on coronary risk factors in children and young adults: The cardiovascular risk in young Finns study. American Journal of Epidemiology, 140, 195–205.
- Reilly J.J., Jackson D.M., Montgomery C., Kelly L.A., Slatter C., Grant S. et al. (2004). Total energy expenditure and physical activity in young Scottish children: mixed longitudinal study. The Lancet, 363 (9404), 211–212.
- Ruhi, S. (1993). Beden Eğitimi Oyun ve Öğretimi. M.E.B.Yayınları: İstanbul.
- Sääkslahti A., Numminen P., Varstala V., Helenius H., Tammi A., Viikri J. et al. (2004). Physical activity as a preventive measure for coronary heart disease risk factors in early childhood. Scandinavian Journal of Medicine & Science in Sports, 14 (3), 143– 149.
- Savcı S., Öztürk M., Arıkan H., İnce D.E., Tokgözoğlu L. (2006). Üniversite öğrencilerinin fiziksel aktivite düzeyleri. Türk Kardiyoloji Derneği Arşivi, 34: 166-172.
- Shibata A., Oka K., Nakamura Y., Muraoka I. (2007). Recommended level of physical activity and health-related quality of life among Japanese adults. Health and Quality of Life Outcomes. 5:64,.

- Siesmaa, E.J., Blitvich, J.D., White, P.E. & Finch, C.K (2011). Measuring children's selfreported sport participation, risk perception and injury history: Development and validation of a survey instrument. Journal of Science and Medicine in Sport 14, 22– 26.
- Slutzky, C.B. & Simpkins, S.D. (2009). The link between children's sport participation and self-esteem: Exploring the mediating role of sport selfconcept. Psychology of Sport and Exercise, 10, 381–389
- Strickland E. (2004). Growing stronger with purposeful play. Early Childhood Today/ Scholastic; 19(2), Academic Research Library, 6.
- Strong W.B., Malina R.M., Blimkie C.J.R., Daniels S.R., Dishman R.K., Gutin B. et al. (2005). Evidence based physical activity for school-age youth. The Journal of Pediatrics, 146(6), 732–737.
- Şanlı E., Öğretmenlerde Fiziksel Aktivite Düzeyi-Yaş, Cinsiyet ve Beden Kütle İndeksi İlişkisi. Yüksek Lisans. Gazi Üniversitesi, Ankara, 2008.
- Timmons, L. (2003). A right to play? Examining childhood and a child's right to recreation. <u>http://www.stfx.ca/people/svincent/socianth391/timmonsliam.html</u>.
- Trost S.G., Sirard J.R., Dowda M., Pfieffer K.A., Pate R.R. (2003). Physical activity in overweight and nonoverweight preschool children. International Journal of Obesity, 27(7), 834–839.
- United States Department of Health and Human Services. (1996). Physical Activity and Health: A Report of the Surgeon General. Atlanta, GA: Centers for Disease Control and Prevention.
- United States Department of Health and Human Services. Healthy people 2010: 2nd ed. with understanding and improving health and objectives for improving health. 2 vols. Washington, DC: U.S. Government Printing Office; 2000. Available from: URL: www.health.gov/healthypeople.
- Valentine, G, & Mckendrick, J. (1997). Children's outdoor play: Exploring parental concerns about children's safety and the changing nature of childhood. Geoforum, 28, 219-235
- Vural Ö., Eler S., Güzel N.A. (2010). Masa başı çalışanlarda fiziksel aktivite düzeyi ve yaşam kalitesi ilişkisi. Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi, 8(2):69-75
- Vural, M., Özdal, M., & Öztütüncü, S. (2017). The effect of 4-week two different strength training programs on body composition. European Journal of Physical Education and Sport Science.
- World Health Organization (2004). Global strategy on diet, physical activity and health. Geneva: WHO.
- Yıkılmaz, A. (2019). Evaluation of The Meetings Related The College of Physical Education In The Secondary School Students. European Journal of Physical Education and Sport Science, 5(4), 35-46.
- Yıkılmaz, A., Kurşun, S. (2018). Okul Öncesi Öğretmen Adaylarının Oyun Kavramına İlişkin Görüşlerinin Değerlendirilmesi. Akademik Sosyal Araştırmalar Dergisi, 6 (78), 610-620.

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