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Description of teacher candidates' attitudes to playing physıcal activity games: Kırşehir Ahi Evran University example.

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Abstract

The use of the game in the educational process depends on the attitude of the teachers towards the game. Attitudes are important as a guide in understanding the behavior of individuals. The purpose of this research is to describe the attitudes of teacher candidates towards playing games containing physical activity. In the research, the scanning method, "Personal Information Form" and "Game Proneness Scale" were used in the data collection process. In the analysis of the data, independent t-test and one-way analysis of variance (ANOVA) across the scale, together with statistics such as frequency (f), percentage (%), weighted mean (X) and standard deviation (SD), and Mann Whitney U and Kruskall Wallis in sub-dimensions techniques have been used. The eta square was used for the effect size. The attitudes of pre-service teachers towards playing games containing physical activity are at the level of neutral. While the attitudes of pre-service teachers towards playing games containing physical activity do not differ significantly according to the gender and grade level variable, they differ significantly according to the department variable. The averages of classroom teachers and preschool teachers were found to be higher.

Keywords: physical activity; game; attitude

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1.Introduction

1.1 Introduce the problem

Play is a phenomenon that has been going on for centuries and is an important part of human life. The game, which is thought to emerge as a natural part of human movements, is now taking place in various shapes and platforms (Yeltekin and Altıncak, 2021). Play is one of the ways for children to express themselves. The child uses play to understand the world, examine existing relationships, and grasp the past and future. In this respect, play is a learning tool and a universal language used by every child (Erkan, 2002). The game holds an important place in the education of the child and the development of the personality. At the same time, it helps the child to establish a relationship with his environment and to reflect his feelings and thoughts (Hazar, 2005). In Tamer's (1990) definition, game is a social adaptation through voluntary participation, which is done in an environment different from real life in order to develop physical and mental abilities, social harmony and emotional maturity, does not provide any material benefit in the end, has its own specific rules, lasts in a limited place and time. It is a fun activity that creates a group and keeps the participants completely under their influence.

Game, people; ability, which develops social cohesion and emotional maturity, forms a group through voluntary participation, with physical and mental abilities, within a limited place and time, with its own rules, for a specific purpose (such as entertainment, education, health, etc.) They are activities that are based on intelligence, attention, skill and coincidence, that affect the participants and mostly the audience, accompanied by a sense of tension, and ultimately do not provide financial benefits (Hazar, 2000). With the game technique, the subjects become interesting, class studies can be made more motivating and more meaningful. However, it requires more attention, creativity, imagination, humor and synthesis power compared to other techniques (Bilen, 1999). Foulquie (1994) defines play as “a bodily or mental activity that is generally based on rules, has no interest, and has no purpose other than itself in the consciousness of the perpetrator, the pleasure it provides”.

During the game, the child engages in mental processes such as thinking, grasping and perceiving, along with having fun (Türkoğlu & Uslu, 2016) since the child is constantly in motion, the muscle group is exercised and motor development is supported, and the regular functioning of the body system is supported. (Akandere, 2003). The presence of physical activities in games, which are so important, contributes positively to the mental, spiritual and social development of children during their development process (Buckworth & Dishman, 2007). It is seen that games are effective in terms of a strong organism, a healthy body structure, and the development of various motor skills (Yeltekin & Altıncak, 2021). Education with games contributes to better memory of what has been learned, to develop thinking skills and decision-making skills, and also to

exhibit positive behaviors (Öztürk, 2016). The most important difference of teaching with games from other teaching methods is that it focuses attention on the subject and makes the student active from a passive state (Hazar, 1991). Compliance with social rules, development of creativity, psychological, mental etc. Among the important functions and benefits of the game are the development of the child's aspects, revealing the innate abilities, skills and interests of the child (Özbey, 2004).

Play is very effective in the development of a child's educational life. The child's physical, emotional, social and mental characteristics develop through play. With various changes, it is seen that traditional games are replaced by games played on digital platforms today (Yeltekin and Altıncak, 2021). This situation causes individuals and children to lead a sedentary life. While Zorba (2010) defines physical activity as the whole of body movements in energy expenditure due to the use of muscles and joints, Scott (2008) defines it as energy expenditure with muscle system and body movements. It can be said that individuals and children are drifting towards a sedentary life, especially today, when digital games are played a lot. Considering the importance of movement in every child's life (Gallahue & Donnelly, 2003) and the importance of encouraging games that provide cognitive growth (Singer & Singer, 1998), it is important to examine the attitudes of teacher candidates, who will be the teachers of tomorrow, towards playing games containing physical activity. In this context, it is aimed to examine the attitudes of teacher candidates towards playing games containing physical activity with this research. With this main purpose, the attitudes of pre-service teachers towards playing games containing physical activity; gender, grade level and department of education were also examined in terms of variables.

2. Method

2.1. Research design

This survey method was used. The survey method is a scientific study method carried out to understand the unique features of a universe (Johnson and Christensen, 2000). It is possible to generalize in survey studies. In the light of the data obtained from the sample, generalization is made to the represented population (Cohen, Manion and Morrison, 2007).

2.2. Samples

The study was carried out with 269 teacher candidates studying at Kırşehir Ahi Evran University Faculty of Education in the 2019-2020 academic year. Information about the participants is given in Table 1.

Table 1. Participant information

		f (%)
Gender	Male	55 (20.4)
	Female	214 (79.6)
Grade Level	1th grade.	14 (5.2)
	2th grade.	68 (25.3)
	3th grade.	79 (29.4)
	4th grade.	108 (40.1)
Department	Classroom teacher	140 (52.0)
	Pre-school teacher	37 (13.8)
	Turkish teacher	34 (12.6)
	PDR	37 (13.8)
	Social studies teacher	21 (7.8)
Total		269 (100)

PDR: Guidance and Psychological Counseling Teachers

Table 1 shows that 20.4% (n=55) of the participants are male and 79.6% (n=214) are female candidates. 40.1% (n=108) of the participants are studying in the 4th grade. 52.0% (n=140) of the participants are studying in the classroom teaching department and 7.8% (n=21) are studying in the social studies teaching department

2.3. *Data Collection Tools*

"Information Form and " Game Proneness Scale" (Hazar, 2015) were used in the research.

2.4. Analysis of the Data

Normality data was checked before starting the analysis process. The analysis process was shaped in line with the normality data. Normality data is in Table 2.

Table 2. Normality data

	Kolmogorov-Smirnov		
	Statistics	df	p
General	,052	269	,075
Play compassion	,091	269	,000
Taking Risks	,066	269	,007
Social Adjustment	,107	269	,000
Play wish	,129	269	,000
To take pleasure	,153	269	,000

In line with the normality data (Table 2), parametric tests were used throughout the scale and nonparametric tests were used in the sub-dimensions. The eta-square

correlation coefficient (Büyüköztürk, 2014) was used to determine the effect size of the significant difference observed throughout the scale.

3. Findings

Table 3. Findings regarding attitude

	$\bar{X}$	SD	Level
General	3.36	.586	Neutral
Play compassion	2.53	.821	Disagree
Taking risks	2.93	.819	Neutral
Social adjustment	4.11	.576	Agree
Play wish	3.91	.737	Agree
To take pleasure	3.50	.813	Agree

It is seen that the attitudes of the participants ($\bar{X}$=3.36) are at the level of undecided. *Play compassion* ($\bar{X}$=2.53) disagree, *taking risk* ($\bar{X}$=2.93) neutral, *social adjustment* ($\bar{X}$=4.11), *play wish* ($\bar{X}$=3.91) and *to take pleasure* ($\bar{X}$=3.50) sub-dimensions are at agree level.

Table 4. Findings regarding gender across the scale

	Gender	N	$\bar{X}$	SD	t	p
General	Male	55	3.41	.591	,691	,490
	Female	214	3.35	.586		

There is no significant difference according to the gender of the participants according to the game proneness scale (p>.05).

Table 5. Findings related to gender by sub-dimensions

	Gender	N	MR	SR	U	Z	p
Play compassion	Male	55	139,69	7683,00	5627,000	-,503	,615
	Female	214	133,79	28632,00			
Taking risks	Male	55	151,97	8358,50	4951,500	-1,819	,069
	Female	214	130,64	27956,50			
Social adjustment	Male	55	126,18	6940,00	5400,000	-,948	,343
	Female	214	137,27	29375,00			
Play wish	Male	55	137,37	7555,50	5754,500	-,255	,798
	Female	214	134,39	28759,50			
To take pleasure	Male	55	146,53	8059,00	5251,000	-1,240	,215
	Female	214	132,04	28256,00			

As a result of the Mann Whitney U test, it was seen that the mean differences between the groups were not statistically significant (p>.05) (Table 5).

Table 6. Grade level values across the scale

	Grade Level	N	$\bar{X}$	SD
General	1th grade.	14	3.29	.564
	2th grade.	68	3.46	.663
	3th grade.	79	3.30	.558
	4th grade.	108	3.36	.558

When Table 6 is examined, it is seen that the highest average is in the candidates studying in the second year ($\bar{X}$=3.46) and the lowest average is in the candidates studying in the first year ($\bar{X}$=3.29). ANOVA results are given in Table 7.

Table 7. ANOVA results for grade level across scale.

		Sum of Squares	df	Mean Square	F	p
General	Between Groups	,973	3	,324	,941	,421
	Within Groups	91,331	265	,345		
	Total	92,304	268			

As a result of the ANOVA, it was observed that the mean between the groups in the scale did not differ statistically significantly (F=.941 p>.05) (Table 7).

Table 8. Findings regarding grade level by sub-dimensions

	Grade Level	N	MR	Chi-Square	sd	p
Play compassion	1th grade.	14	130,50	4.298	3	.231
	2th grade.	68	151,85			
	3th grade.	79	129,56			
	4th grade.	108	128,95			
Taking risks	1th grade.	14	146,43	5.765	3	.124
	2th grade.	68	152,21			
	3th grade.	79	123,02			
	4th grade.	108	131,44			
Social adjustment	1th grade.	14	128,32	.340	3	.952
	2th grade.	68	138,64			

	3th grade.	79	132,50			
	4th grade.	108	135,40			
Play wish	1th grade.	14	115,89	2.352	3	.503
	2th grade.	68	137,48			
	3th grade.	79	127,66			
	4th grade.	108	141,28			
To take pleasure	1th grade.	14	130,14	1.959	3	.581
	2th grade.	68	145,85			
	3th grade.	79	128,77			
	4th grade.	108	133,36			

In the Kruskal Wallis results, the mean differences between the groups were not statistically significant in the sub-dimensions (p>.05) (Table 8).

Table 9. Values by section variable across scale

	Department	N	$\bar{X}$	SD
General	Classroom teacher	140	3,49	,574
	Pre-school teacher	37	3,49	,498
	Turkish teacher	34	3,16	,638
	PDR	37	3,13	,545
	Social studies teacher	21	3,07	,521

PDR: Guidance and Psychological Counseling Teachers

When Table 9 is examined, it is seen that the highest average is in classroom teacher ($\bar{X}$=3.49) and preschool teacher candidates ($\bar{X}$=3.49), and the lowest average is in social studies teacher candidates ($\bar{X}$=3.07). ANOVA results are included in Table 10.

Table 10. ANOVA results for the section variable across scale

		Sum of Squares	df	Mean Square	F	p	Effect Size	Source of the Difference
Genel	Between Groups	7,859	4	1,965	6,142	,000	.08	1>3,4,5
	Within Groups	84,445	264	,320				2>4
	Total	92,304	268					

1: Classroom teacher, 2: Pre-school teacher, 3: Turkish teacher, 4:PDR, 5: Social studies teacher

As a result of the ANOVA, it is seen that the means between the scale groups differ statistically significantly (F=6.142 p<.05) and the effect size is medium ($\eta 2$=.08) (Table 10). It is seen that there is a significant difference between prospective classroom teachers and Turkish teacher, PDR and Social Studies teacher candidates in favor of

classroom teacher candidates (p<.05), and between preschool teacher candidates and PDR in favor of preschool teacher candidates (p<.05). These findings show that classroom teacher candidates and preschool teacher candidates' attitudes towards playing games containing physical activity are at a higher level than other teacher candidates.

Table 11. Kruskal wallis test results regarding the department variable by sub-dimensions

	Department	N	MR	Chi-Square	sd	p	Source of the Difference
Play compassion	[1]Classroom teacher	140	149,70	15,298	4	.004	1>4
	[2]Pre-school teacher	37	142,49				
	[3]Turkish teacher	34	112,22				
	[4]PDR	37	109,28				
	[5]Social studies teacher	21	105,98				
Taking risks	[1]Classroom teacher	140	145,30	12,004	4	.017	1>3,4,52> 3,5
	[2]Pre-school teacher	37	150,69				
	[3]Turkish teacher	34	111,00				
	[4]PDR	37	120,08				
	[5]Social studies teacher	21	103,81				
Social Adjustment	[1]Classroom teacher	140	144,85	9,960	4	.041	1>4,5 2>4,5
	[2]Pre-school teacher	37	148,64				
	[3]Turkish teacher	34	116,96				
	[4]PDR	37	114,65				
	[5]Social studies teacher	21	110,38				
Play wish	[1]Classroom teacher	140	147,70	19,257	4	.001	1>4 2>4
	[2]Pre-school teacher	37	153,86				
	[3]Turkish teacher	34	122,62				
	[4]PDR	37	96,20				
	[5]Social studies teacher	21	105,48				
To take pleasure	[1]Classroom teacher	140	148,68	16,784	4	.002	1>5 2>5
	[2]Pre-school teacher	37	145,39				
	[3]Turkish teacher	34	117,43				
	[4]PDR	37	115,36				
	[5]Social studies teacher	21	88,55				

In the Kruskall Wallis results, the mean differences between the groups were statistically significant (p<.05) in the sub-dimensions (Table 11). It is seen that the significant difference is in favor of the students of the classroom teacher and preschool teacher departments.

4. Discussion and Conclusion

In the discussion part of the research, the results of the general findings and sub-finds within the scope of the research were discussed in order to examine the attitudes of teacher candidates towards playing games containing physical activity.

In this direction, within the scope of the research, the attitudes of teacher candidates towards playing games containing physical activity were generally revealed at the level of neutral. This result shows that of teacher candidates' attitudes towards playing games containing physical activity are at a moderate level. There is always a desire to play games, even in different age groups, and there are types of games that individuals enjoy playing or being a spectator. Children enjoy being in the game in early childhood and reflect their every experience into the game plot (Aksoy & Dere Çiftçi, 2014). However, what is important in this process is that children use the game as a tool to understand and make sense of life. If children's need for play is not met or limited, problems will arise in the continuation of their lives as healthy individuals, who make up the future of societies (Ayan & Dündar, 2009). Teachers, as well as parents, play a major role in the development of children's playing skills. Teachers learn about the effects of games on children within the scope of the courses they take during the teacher candidacy process or during their undergraduate education. The presence of physical activities in games, which are so important, contributes positively to the mental, spiritual and social development of children during their development process (Buckworth & Dishman, 2007). In this direction, teacher candidates have experiences and form attitudes. It is thought that children will have the opportunity to acquire many skills with the combination of two concepts such as physical activity and play. Teachers are of great importance in the structuring and more systematic progression of this acquisition process. Some of the concepts such as experience, experience, perception and attitude that teachers gain in their professional lives are also acquired in the early school process. Therefore, it is thought that the high attitudes of pre-service teachers towards the concepts of physical activity and play will contribute to children's skill learning in the future. However, the fact that pre-service teachers' attitudes towards playing games containing physical activity are at a moderate level may indicate that these pre-service teachers will not have the desired effect on shaping children's knowledge, skills and behaviors in the future.

The results of the research revealed that the attitudes of teacher candidates towards playing games containing physical activity were not significant according to their gender and grade levels. This shows that attitudes towards playing games do not differ according to gender. Attitude is completely different from the opinion on a subject and the subject of interest; It consists of cognitive, affective and behavioral elements that are constantly in contact and is not future-oriented. It is the state of being willing or unwilling to experience a situation in the past. When a person has a positive attitude towards a

situation or event, he supports the situation or event, while if he develops a negative attitude, he moves away from the situation or event (Laight, 2006). It can be said that the fact that there was no difference according to the gender and grade levels of the pre-service teachers, and that they did not have a desire for physical activity and play in their past lives or among the subjects they were interested in. It is expected that there will be differences in the attitudes of teacher candidates as their undergraduate education progresses (Aksoy, 2010). In the results of the research, it is thought that many factors may be effective in the absence of differences in the attitudes of teacher candidates according to their grade levels. Among these factors, there are insufficient courses in teacher training undergraduate programs, the lack of awareness of teacher candidates until the appointment process, their lack of knowledge about the necessity of giving physical activity and play together. During the game, the child engages in mental processes such as thinking, grasping and perceiving, along with having fun (Türkoğlu & Uslu, 2016) since the child is constantly in motion, the muscle group is exercised and motor development is supported, and the regular functioning of the body system is supported. (Akandere, 2003).

In this direction, all teacher candidates should approach children with this perspective. It should be seen as a desirable situation that the attitudes of teacher candidates towards playing games containing physical activity do not differ according to their gender. Just as it is natural that there is no gender in children's games, it is expected that there will be no difference between the gender of teacher candidates in teaching children games that include physical activity. The attitudes of teacher candidates towards playing games containing physical activity differ significantly according to the variable of the department they study. Accordingly, primary school and pre-school teacher students had higher attitudes than other departments. It is thought that teaching the subjects related to this field in the teaching processes within the departments is effective in the emergence of this result. Programs designed with games and physical activity enable students to prepare for the next level of education by developing basic movements, effective and healthy living skills that they will use throughout their lives through games and physical activity (MEB, 2018). It is important that students who are willing to participate in games and physical activities, thanks to the programs that incorporate these subjects, develop the habit of participating regularly. Among the important elements for students to participate in the game willingly as a habit is to have fun and to understand the benefits of this participation in a concrete way. Games and physical activity are important tools for the formation of an active and healthy life knowledge, for students to perceive this process and to apply them in their lives by having fun (Kazu & Aslan, 2014). It allows the student to develop social relations with his environment, express himself, and share with others. It is observed that the children's ability to make decisions and solve problems during the game is developed in games, which contribute to the biological development of the child with games, physical activities, which enable the

child to develop mentally (Yan, 2007). The fact that children acquire these skills at a young age is thought to cause the attitudes of pre-school and classroom teacher candidates towards this field to differ from those of other department students.

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