

Investigation of Secondary School Students' Attitudes Towards Physical Activity

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Abstract

This research was conducted to reveal secondary school students' attitudes towards physical activity according to the opinions of the students based on dependent and independent variables. The physical activity attitude scale for secondary school students developed by Yildizer et al., (2019) was used (PAAS). PAAS consists of 5 sub-dimensions and 25 items. The necessary permissions were obtained for the scale method used in this study, with the decision of the Scientific Research and Publication Ethics Committee of Mardin Artuklu University, dated 08.06.2022 and numbered 2022/6-4. The sample group of the research consisted of 305 students, and the data obtained were analyzed with the SPSS 25.0 software. Independent sample T Test and One-Way ANOVA tests were used in the analysis of the data obtained from the participants. In the study, it was determined that the physical activity levels of female students were higher than male students. In the analyses performed in the research, a difference was found in the grade level of the secondary school students, and there was a decrease in the level of physical activity as the grade level increased. Also, "Pearson correlation analysis" was conducted in order to determine the level and direction of the relationship between dependent variables. In the correlation analysis, it was seen that the strongest relationship was between "PAAS" and the love sub-dimension ($r= 0.807$; $p<0.05$). As a result of the research, it was seen that the jobs of the mothers and fathers of the students, the number of siblings of the students, and the place of residence of the students did not lead to a difference in their attitudes towards physical activity.

Keywords: Physical Activity, Attitude, Secondary School Students.

I. INTRODUCTION

Health problems caused by sedentary lifestyle around the world are increasing the importance of physical activity. With the effect of facilitating factors such as developing technology, variety of transportation vehicles, today's people act much less than in the past, leading to the problem we call "sedentary" life. Since the general rhythm of daily life in the past consisted of functions such as walking, climbing, bending over, crouching, and carrying loads, our entire movement system is naturally full of adaptations to such a lifestyle. Technology has separated physical activity from most occupations in our industrialized society. For the completely sedentary professional, activities consisting of only commuting have been the only source of exercise. In this way of life, the quality of life of people is negatively affected. As in developed countries, the interest in physical activity is increasing in our country. The biggest indicator of our body's adaptation to movement is seen in childhood. Children are generally very active, constantly under the influence of the motives of play, movement, and displacement (Canan, 2020).

Physical activities are the activities that result from the energy consumption of the individual's continuous movements with the help of muscles and joints, resulting in increased heart and respiratory rate and varying levels of fatigue. For this reason, work activities in daily life (climbing stairs instead of elevators, walking to work, etc.) are also included in the category of physical activities (Guler and Agaoglu, 2021). Physical activity is the energy consumption resulting from any movement of the body made with skeletal muscles (Oze, 2015). Physical activities include various exercises, sports branches, games, dances, and daily activities that include bodily movements such as swimming, walking, running, jumping, cycling, head-neck movements, and arm-leg movements (Karaca et al., 2000). In today's society, it is emphasized that it is very important to be interested in physical activity in order to increase the life satisfaction of people and to be healthy. Physical activity emerges as a very important issue in the process of ensuring the normal growth and development of children (Demir and Filiz, 2004).

Physical activity has psychological, physiological, and affective impacts that will affect the child's health in adulthood and childhood. Approximately 50% of obese children at the age of six and over may become obese in later years, and if a child is

obese, especially in adolescence, the probability that he/she will become obese in adulthood is quite high. Childhood obesity should be diagnosed at an early age, and physical activity level should be increased (Zorba and Saygin, 2017).

It has been observed in the children who engage in physical activity that the imagination is more advanced, reasoning and control mechanisms develop, the concept of self-discipline and goal setting develops, the concept of taking responsibility and leadership is strengthened, playmaking in team games, entrepreneurship, team cohesion and motivation to work together increase, and they have advantages in terms of emotional consistency, patience, and anger management (Taskin, 2020). The positive effects of physical activity on health include blood pressure and insulin control, regulation of triglyceride and cholesterol levels, etc. (Bell et al., 2018). In addition, it has been stated by some study findings that physical activity has a positive effect on mood, emotional management, and coping with stress (Biddle et al., 2019; Bleair et al., 2018). It is seen that there are significant increases in the school success and mental success of children and young people who participate in physical activities. Especially, the students who participated in aerobic exercises displayed more positive increases in academic achievement and cognitive behaviors (Ahn and Fedewe, 2011).

It is known that participation in physical activities in childhood positively affects the attitude towards physical activity in adulthood (Pratt et al., 2003). In this period, the only way to reach regular and formal physical activities for children is physical education and sports lessons (Trudeau and Shephard, 2005). Physical education teachers also play an important role in children's participation in physical education (Canpolat and Ilkim, 2022). In the European Union's "Health-Promoting Physical Activities" guideline, the need to pay attention to the physical and mental problems that become evident with decreasing physical activity, sedentary lifestyle, obesity among young people has been emphasized. It has been observed that 80% of school-age children only engage in physical activities in the school environment. It has been stated that children should be involved in physical activities for at least one hour every day (Kaya, 2021).

II. Method

Screening method was used in the research. Cross-sectional survey, which is one of the screening methods, is a research method in which data are collected from a sample group determined within the population in order to measure some selected characteristics of a certain group (Buyukozturk et al., 2012).

Convenience sampling method was used. One of the most widely used sampling types in social sciences is convenience sampling. In convenience sampling, researchers select participants among individuals who are easy to reach, suitable for research, and volunteers (Gravetter and Forzano, 2012). The study group of the research consisted of 305 secondary school students studying in Mardin in the 2021-2022 academic year.

Data Collection Tools

In the research, "Personal Information Form" developed by the researcher in order to collect data about the socio-demographic characteristics of secondary school students and "Physical Activity Scale for Secondary School Students" developed by Yildizer et al. (2019) were used.

The Personal Information Form contains information about the participants' gender, grade, the educational status of the parents, the occupation of the parents, as well as the union of the parents, the number of siblings, and the place of residence. "Physical Activity Scale for Secondary School Students" consists of 25 items with 5 sub-dimensions (love, willingness, benefit, socialization, and self-confidence). The scale is a 5-point Likert type scale and is designed as "Strongly Disagree", "Disagree", "Undecided", "Agree" and "Strongly Agree". The Cronbach's Alpha value calculated to measure the reliability of the scale was found to be 0.95, and it was determined that the scale was sufficiently reliable based on the value found. The necessary permissions were obtained for the scale method used in this study, with the decision of the Scientific Research and Publication Ethics Committee of Mardin Artuklu University, dated 08.06.2022 and numbered 2022/6-4.

Analysis of the data

The skewness and kurtosis tests were applied to determine whether the data obtained from the study had a normal distribution. The fact that the skewness and kurtosis coefficients for the normal distribution of data in social science studies are in the range of (-1.5, +1.5) (Tabachnick and Fidell, 2007) or (-2,+2) (George and Mallery, 2016) indicates that the data have a normal distribution. Parametric tests were applied to the data with normal distribution, with skewness and kurtosis values being in the range of +1.5 to -1.5 as a result of the test. The skewness and kurtosis values of the sub-dimensions of the scale of attitude towards physical activity are given in Table 1.

Table 1: Normality Test Results of Physical Activity Attitude Scale and Sub-Dimensions

Scale Dimensions	N	\bar{X}	SD	Skewness	Kurtosis
Willingness	305	4,1307	,81539	[-1,325; 0,140]	[1,431; 0,278]
Love	305	3,9856	,92923	[-1,279; 0,140]	[1,386; 0,278]
Benefit	305	3,7364	,82463	[-0,837; 0,140]	[,979; 0,278]
Socialization	305	3,8705	,91071	[-1,058; 0,140]	[0,872; 0,278]
Self-confidence	305	3,7533	,84681	[-0,323; 0,140]	[-0,429; 0,278]
PAAS	305	3,9208	,63782	[-0,937; 0,140]	[1,054; 0,278]

Related to the physical activity attitude levels of secondary school students, the "Independent t-Test" was conducted to determine whether the physical activity attitude levels of secondary school students, gender and the variables of mother and father unity had a statistically significant difference, and "One-Way Variance" analysis was conducted to determine whether the variables of grade, mother and father professions, place of residence, and number of siblings had a statistically significant difference. The "LSD" test was used to determine the groups found to have statistically significant differences as a result of the "One-Way Variance" analysis. In order to determine the level and direction of the relationship between the sub-dimensions of the physical activity attitude scale of secondary school students, "Pearson Correlation" analysis was applied. Correlations between dependent variables were evaluated as follows (Kalayci, 2006): "0.00-0.25: Very weak correlation; 0.26-0.49: Weak correlation; 0.50-0.69: Moderate correlation; 0.70-0.89: High correlation; 0.90-1.00: Very high correlation".

III. Findings

In line with the aims of the research, the findings obtained from the opinions of physical education and sports teacher candidates are given below.

Table 2: Difference Between Gender and Secondary School Students' Attitudes Towards Physical Activity (T-Test)

Scale Dimensions	Gender	N	\bar{X}	SD	t	p
Willingness	Female	165	4,224	,735	2,189	,029
	Male	140	4,020	,890		
Love	Female	165	4,072	,877	1,785	,075
	Male	140	3,882	,980		
Benefit	Female	165	3,783	,750	1,073	,284
	Male	140	3,681	,903		
Socialization	Female	165	3,907	,835	,772	,441
	Male	140	3,826	,993		
Self-confidence	Female	165	3,836	,807	1,868	,063
	Male	140	3,655	,883		
Physical Activity Attitude Scale	Female	165	3,993	,587	2,159	,032
	Male	140	3,835	,684		

According to the results in Table 2, a statistically significant difference was found between willingness ($t=2.189$; $p=.029$) and physical activity attitude scale ($t=2.159$; $p=.032$), and no statistically significant difference was found in love ($t=1.785$; $p=.075$), benefit ($t=1.073$; $p=.284$), socialization ($t=.772$; $p=0.441$), self-confidence ($t=1.868$; $p=.063$) sub-dimensions ($p>0,05$).

Table 3: The Difference Between the Grades and The Physical Activity Levels of Secondary School Students (Analysis of Variance)

Scale Dimensions	Grade	N	\bar{x}	SD	Sd	F	P	Significant Difference
Willingness	5	88	3,902	,868	3/301	5,002	,002	5-6, 5-8, 7-8
	6	69	4,213	,888				
	7	53	4,032	,769				
	8	95	4,336	,672				
Love	5	88	3,800	1,025	3/301	1,668	,174	-----
	6	69	4,078	,981				
	7	53	4,056	,950				
	8	95	4,050	,759				
Benefit	5	88	3,711	,865	3/301	,735	,532	-----
	6	69	3,814	,834				
	7	53	3,822	,714				
	8	95	3,654	,838				
Socialization	5	88	3,804	1,047	3/301	,575	,632	-----
	6	69	3,985	,969				
	7	53	3,820	,851				
	8	95	3,876	,756				
Self-confidence	5	88	3,505	,873	3/301	3,676	,013	5-6, 5-7, 5-8
	6	69	3,884	,827				
	7	53	3,820	,766				
	8	95	3,850	,842				
Physical Activity Attitude Scale	5	88	3,764	,669	3/301	2,726	,044	5-6, 5-8
	6	69	4,017	,709				
	7	53	3,927	,622				
	8	95	3,991	,535				

According to the results in Table 3, a statistically significant difference was found between willingness ($F=5.002$; $p=.002$), self-confidence ($F=3.676$; $p=.013$) and physical activity attitude scale ($F=2.726$; $p=.044$), and no statistically significant difference was found in love ($F=1.668$; $p=.174$), benefit ($F=.575$; $p=.532$), socialization ($F=.575$; $p=.632$) sub-dimensions ($p>.05$).

In the results of the LSD test performed to determine the source of this difference, it was determined that the difference in willingness sub-dimension was between 5th and 6th grades, 5th grade and 8th grade, and 7th grade and 8th grade groups.

It was found in the LSD test results that the difference in the self-confidence sub-dimension was between 5th grade and 6th grade, 5th grade and 7th grade, and 5th grade and 8th grade groups.

The difference in the Physical Activity Attitudes Scale was found to be between the 5th grade and 6th grade, and the 5th and 8th grade groups in the LSD test results.

Table 4: The Difference Between the Professions of The Mothers of Secondary School Students and Their Physical Activity Attitudes (Analysis of Variance)

Scale Dimensions	Profession	N	\bar{x}	SD	Sd	F	P	Significant Difference
Willingness	Officer	15	3,847	1,222	4/300	2,775	,027	2-4, 2-5, 3-2, 3-5
	Craftsman	4	3,357	1,084				
	Worker	13	3,681	,942				
	Housewife	234	4,164	,779				
	Other	39	4,267	,689				
Love	Officer	15	3,453	1,316	4/300	1,670	,157	-----
	Craftsman	4	3,550	,443				
	Worker	13	4,153	,721				
	Housewife	234	4,022	,915				
	Other	39	3,959	,895				
Benefit	Officer	15	3,773	1,036	4/300	,399	,809	-----
	Craftsman	4	3,550	,597				
	Worker	13	3,492	1,150				
	Housewife	234	3,757	,770				
	Other	39	3,697	,964				
Socialization	Officer	15	3,666	1,136	4/300	,331	,857	-----
	Craftsman	4	3,625	1,266				
	Worker	13	3,884	,927				
	Housewife	234	3,873	,897				
	Other	39	3,948	,892				
Self-confidence	Officer	15	3,816	,923	4/300	,102	,982	-----
	Craftsman	4	3,687	,625				
	Worker	13	3,826	,868				
	Housewife	234	3,756	,856				
	Other	39	3,692	,803				
Physical Activity Attitude Scale	Officer	15	3,720	1,008	4/300	,963	,428	-----
	Craftsman	4	3,530	,638				
	Worker	13	3,793	,630				
	Housewife	234	3,942	,599				
	Other	39	3,948	,689				

According to the results in Table 4, a statistically significant difference was found between willingness (F=2.775; p=.027) sub-dimension, and no statistically significant difference was found in love (F=1.670; p=.157), benefit (F=.399; p=.809), socialization (F=.331; p=.857), self-confidence (F=.102; p=.982), physical activity attitude scale (F=.963; p=.428) sub-dimensions (p>0,05).

In the results of the LSD test performed to determine the source of this difference, the difference in the willingness sub-

dimension was found to be between craftsman-housewife, craftsman and other, worker and housewife, and worker and other groups.

Table 5: The Difference Between the Professions of The Fathers of Secondary School Students and Their Physical Activity Attitudes (Analysis of Variance)

Scale Dimensions	Profession	N	\bar{x}	SD	Sd	F	P	Significant Difference
Willingness	Officer	24	4,148	,903	4/300	,764	,549	-----
	Craftsman	50	4,037	,872				
	Worker	114	4,094	,877				
	Housewife	35	4,073	,755				
	Other	82	4,257	,681				
Love	Officer	24	4,050	,869	4/300	,598	,664	-----
	Craftsman	50	4,032	,773				
	Worker	114	4,057	,986				
	Housewife	35	3,862	,944				
	Other	82	3,890	,951				
Benefit	Officer	24	3,750	,927	4/300	,789	,533	-----
	Craftsman	50	3,636	,734				
	Worker	114	3,835	,839				
	Housewife	35	3,622	,965				
	Other	82	3,704	,762				
Socialization	Officer	24	4,010	,731	4/300	,667	,616	-----
	Craftsman	50	3,700	,954				
	Worker	114	3,921	,928				
	Housewife	35	3,857	,897				
	Other	82	3,868	,917				
Self-confidence	Officer	24	3,885	,780	4/300	,531	,713	-----
	Craftsman	50	3,680	,809				
	Worker	114	3,719	,855				
	Housewife	35	3,685	,974				
	Other	82	3,835	,827				
Physical Activity Attitude Scale	Officer	24	3,985	,665	4/300	,436	,782	-----
	Craftsman	50	3,844	,577				
	Worker	114	3,947	,670				
	Housewife	35	3,844	,656				
	Other	82	3,943	,618				

According to the results in Table 5, no statistically significant difference was found in willingness (F=.764; p=.549), love (F=.598; p=.664), benefit (F=.789; p=.533), socialization (F=.667; p=.616), self-confidence (F=.531; p=.713), physical activity attitude scale (F=.436; p=.782) sub-dimensions (p>0,05).

Table 6: The Difference Between the Parents' Living Together and Secondary School Students' Physical Activity Attitude Levels (Analysis of Variance)

Scale Dimensions	Living together	N	\bar{x}	SD	t	P
Willingness	Living together	261	4,098	,835	-1,711	,088
	Separated	44	4,324	,661		
Love	Living together	261	3,979	,941	-,286	,775
	Separated	44	4,022	,862		
Benefit	Living together	261	3,740	,815	,198	,844
	Separated	44	3,713	,885		
Socialization	Living together	261	3,864	,922	-,259	,796
	Separated	44	3,903	,847		
Self-confidence	Living together	261	3,770	,845	,845	,399
	Separated	44	3,653	,857		
Physical Activity Attitude Scale	Living together	261	3,913	,639	-,522	,602
	Separated	44	3,967	,631		

According to the results in Table 6, no statistically significant difference was found in willingness ($t=-1.711$; $p=.88$), love ($t=-.286$; $p=.775$), benefit ($t=.198$; $p=.844$), socialization ($t=-.259$; $p=.796$), self-confidence ($t=.845$; $p=.399$), physical activity attitude scale ($t=-.522$; $p=.602$) sub-dimensions ($p>0,05$).

Table 7: The Difference Between the Number of Siblings and The Secondary School Students' Physical Activity Attitude Levels (Analysis of Variance)

Scale Dimensions	Number of Siblings	N	\bar{x}	SD	Sd	F	P	Significant Difference
Willingness	(1) 0-2	86	4,250	,754	3/301	2,502	,059	-----
	(2) 3-5	110	4,141	,859				
	(3) 6-8	73	3,919	,906				
	(4) 9+	36	4,238	,509				
Love	(1) 0-2	86	3,916	,895	3/301	4,852	,003	1-4, 2-4, 3-4
	(2) 3-5	110	3,978	1,044				
	(3) 6-8	73	3,821	,882				
	(4) 9+	36	4,505	,449				
Benefit	(1) 0-2	86	3,795	,820	3/301	1,379	,249	-----
	(2) 3-5	110	3,720	,834				
	(3) 6-8	73	3,602	,900				
	(4) 9+	36	3,916	,594				
Socialization	(1) 0-2	86	3,953	,911	3/301	1,268	,285	-----
	(2) 3-5	110	3,931	,914				
	(3) 6-8	73	3,702	,947				
	(4) 9+	36	3,826	,803				
Self-confidence	(1) 0-2	86	3,726	,868	3/301	,049	,986	-----

	(2) 3-5	110	3,756	,825				
	(3) 6-8	73	3,763	,799				
	(4) 9+	36	3,784	,978				
Physical Activity Attitude Scale	(1) 0-2	86	3,961	,639	3/301	2,220	,086	-----
	(2) 3-5	110	3,929	,702				
	(3) 6-8	73	3,777	,602				
	(4) 9+	36	4,088	,421				

According to the results in Table 7, a statistically significant difference was found in love ($F=4.852$; $p=.003$) sub-dimension, and no statistically significant difference was found in willingness ($F=2.502$; $p=.059$), benefit ($F=1.379$; $p=.249$), socialization ($F=1.268$; $p=.286$), self-confidence ($F=.049$; $p=.986$), physical activity attitude scale ($F=2.220$; $p=.086$) sub-dimensions ($p>0.05$).

In the results of the LSD test performed to determine the source of this difference, it was found that the difference in the sub-dimension of love was between groups 1-4, 2-4, 3-4.

Table 8: Difference Between Place of Residence and Secondary School Students' Physical Activity Attitude (Analysis of Variance)

Scale Dimensions	Place of Residence	N	\bar{x}	SD	Sd	F	P	Significant Difference
Willingness	City	127	4,199	,837	2/302	,768	,465	-----
	District	108	4,086	,789				
	Village	70	4,075	,817				
Love	City	127	3,892	,976	2/302	1,087	,338	-----
	District	108	4,046	,917				
	Village	70	4,060	,854				
Benefit	City	127	3,790	,880	2/302	,475	,622	-----
	District	108	3,703	,763				
	Village	70	3,688	,816				
Socialization	City	127	3,899	,945	2/302	1,401	,248	-----
	District	108	3,761	,935				
	Village	70	3,985	,795				
Self-confidence	City	127	3,718	,856	2/302	,268	,765	-----
	District	108	3,756	,847				
	Village	70	3,810	,837				
Physical Activity Attitude Scale	City	127	3,931	,706	2/302	,118	,889	-----
	District	108	3,897	,611				
	Village	70	3,938	,547				

According to the results in Table 8, no statistically significant difference was found in willingness ($F=.768$; $p=.465$), love ($F=1.087$; $p=.338$), benefit ($F=.475$; $p=.622$), socialization ($F=1.401$; $p=.248$), self-confidence ($F=.268$; $p=.765$), physical activity attitude scale ($F=.118$; $p=.889$) sub-scales ($p>0.05$).

Table 9: Correlation Analysis for the Relationship Between PAAS and Its Sub-Dimensions

		Willingness	Love	Benefit	Socialization	Self-confidence	Physical Activity Attitude Scale
Willingness	r	1					
	p						
	N	305					
Love	r	,467**	1				
	p	,000					
	N	305	305				
Benefit	r	,381**	,595**	1			
	p	,000	,000				
	N	305	305	305			
Socialization	r	,368**	,614**	,645**	1		
	p	,000	,000	,000			
	N	305	305	305	305		
Self-confidence	r	,449**	,253**	,237**	,219**	1	
	p	,000	,000	,000	,000		
	N	305	305	305	305	305	
Physical Activity Attitude Scale	r	,772**	,807**	,766**	,752**	,558**	1
	p	,000	,000	,000	,000	,000	
	N	305	305	305	305	305	305

When the correlation analysis results in Table 9 were examined, it was observed that the highest level of correlation was between the "secondary school students' level of participation in physical activity scale" and the "love" ($r=0.807$; $p=0.000$) sub-dimension. In addition to this result in which there was a positive and very high correlation, it was also found that there was a positive and high correlation between the "PAAS" and the "willingness" ($r=0.772$; $p=0.000$) sub-dimension. It was determined that the lowest level of relationship was between self-confidence and socialization ($r=0.2019$; $p=0.000$) sub-dimensions.

IV. Discussion and Conclusion

Physical activity, beyond protecting and improving health for individuals with limitation of movement, also prevents the occurrence of diseases caused by sedentary life. A sedentary lifestyle also poses a serious health risk for children and teenagers. Apart from genetic, environmental, and biological factors, the most important factors in the occurrence of chronic diseases are inactivity (sedentary life) and malnutrition (Demirel et al., 2014). According to the findings of the Turkey Childhood Obesity Survey, it has been determined that 40.2% of children, on weekdays, and 69.9% of the children, on the weekends, spend two hours or more with technological devices such as television, tablet, and smart phone in their spare time out of class hours (Evcir Kiraz et al., 2021). Childhood is a critical period in which physical activity habits are acquired and maintained throughout life. In this study, the attitudes of secondary school students towards physical activity were examined.

As a result of the findings obtained within the scope of the research, it was determined that the scores of the willingness sub-dimension and the physical activity attitude scale according to the gender variable were statistically and significantly higher in males. Birgun et al. (2020) found that the willingness sub-dimension scores in males and the benefit sub-dimension scores in females were statistically and significantly higher. Contrary to our research findings, Bulca et al. (2020), Araújo and Dosil (2015), Cengiz et al. (2018), Aksoydan and Cakir (2011), Bas et al. (2005) found that male students' participation in physical activity scores was higher than female students' participation in physical activity scores. Similarly, Nicaise and Kahan (2013) stated in their study that male students' level of participation in physical activity was higher than that of females. Similar to our research findings, Salman (2020) and Tapsin et al. (2021) found that physical activity attitude scores in terms of gender were close to each other in females and males.

In the examination of the attitudes of secondary school students towards physical activity according to their grades, the results revealed that while there was a significant difference in the sub-dimensions of willingness, self-confidence and physical activity attitude scale, no significant difference was found in the sub-dimensions of love, socialization, and benefit. It was determined that 6th grade students had the highest average in other sub-dimension values except willingness and benefit values. This situation can be explained by the full adaptation of this age group to secondary school and their participation in physical education and sports classes. Birgun et al. (2020) and Tapsin et al. (2021) stated that there was no difference in the sub-dimensions of physical activity attitude level of secondary school students according to grades. Islicik (2017) determined that

physical education and sports course scores made a significant difference according to grades. It was thought that this difference was due to the fact that the mean score of the 6th grades was higher than the mean score of the other grades, and it was seen that the 6th grades were followed by the 7th, the 5th and finally the 8th grades according to their mean scores. In the study conducted by Zande and Unlu (2019), it was observed that the students studying in the 5th grade were mostly involved in the movement and continuity stages, and it was emphasized that the students in the 6th grade were in the preparatory and continuity level, and the students in the 7th and 8th grade were in the pre-dispositional and dispositional level, and the level of physical activity of the students decreased as the grade level of the students increased. Aydin Yildirim and Onan (2021) and Keskin et al. (2016) stated in their studies that the physical activity attitude scores of the 5th and 6th grade students were higher than the scores of the secondary school students in higher grades. It can be stated that secondary school students have to adopt a sedentary lifestyle as they prepare for exams and cannot find enough opportunities in terms of exercise, physical activity, and sports.

In the research group, there was no significant difference in the secondary school students' physical activity attitude scores according to the profession of mothers and fathers. However, a statistical difference was found in the willingness dimension, which is the sub-dimension of the physical activity scale, according to the mother's profession. It can be stated that mothers who are housewives support their children's participation in physical activities, and they ensure their children's participation in physical activity because they have enough time. Alagoz (2019) determined that the professions of the mothers and fathers of the students did not have an effect on the physical activity levels. In the examination of the scale scores of the participants in terms of their mothers' working status in the study of Gumus et al. (2014) on leisure time physical activity constraints in secondary education institutions, it was found that the scores of the students whose mothers were unemployed were higher than the scores of the students whose mothers were employed. This situation is based on the proposition that a more liberal lifestyle is dominant in students whose mothers are employed compared to those who are not. Senturk (2019) stated that there was no statistically significant difference between cognitive, affective, and general sub-dimension averages and father's profession in his study examining the attitudes of students and their families towards physical education lesson. Bicer, on the other hand, stated that there was no significant difference between the mother's profession and the attitudes of the students towards physical education and sports lessons.

As a result of the findings obtained within the scope of the research, there was no significant difference in the attitude scores of secondary school students towards physical activity according to the variable of the parents' status of living together. In the research conducted by Colak (2019) examining the attitudes of secondary school students towards physical education and sports lessons, it was stated that the individuals with a broken family had higher attitude scores towards physical education and sports lessons compared to individuals with nuclear and extended families. Bicer (2021) found that there was no significant difference between the general, cognitive, and affective sub-dimensions of the physical education and sports lesson attitude scale and the people with whom the students lived. Colak (2020) concluded in his research on the scale for secondary school students' attitude towards physical education and sports lessons that there was no significant difference in the scores of students with broken, nuclear, and extended families.

As a result of the findings obtained within the scope of the research, when the sub-dimensions of physical activity attitude were examined according to the number of siblings variable, there was a significant difference in the sub-dimension of love, while there was no significant difference in the sub-dimensions of willingness, benefit, socialization, self-confidence, and physical activity attitude scale. In the study, it was observed that the low or excessive number of siblings did not affect participation in physical activity. It can be said that this situation was due to the influence of parents' attitudes towards physical activity. Senturk (2019) stated that while there was no difference between the perceptual, functional, importance and general sub-dimension results of the attitude scale and the number of children the families had, the support score of families with 1-2 children was significantly higher than that of families with five or more children. Colak (2019) stated that the attitude scores of individuals with extended families and individuals with nuclear families towards physical education and sports lessons were in parallel. In the study of Ozcelik (2021) examining the social, emotional, and moral development of secondary school students participating in extracurricular activities, it was stated that there was no significant difference in the social-emotional and moral development scale scores of the variable of the number of siblings in the students participating in extracurricular sports activities.

No significant difference was found in the attitude scale and sub-dimensions of secondary school students towards physical activity according to the variable of place of residence data of the research group. Physical activity attitudes of secondary school students, who were peers by age, were similar because they had similar conditions. In the study conducted by Albaylar et al. (2020) on the physical activity status of individuals living in urban and rural areas, inactivity rates in rural areas were found to be lower than those living in cities. In the research of Ekinci (2019) on secondary school students' extracurricular leisure time activities, it was stated that the activities that the participants were most interested in were various entertainment, sports, and activities with the family, respectively, and this situation was similar for students living in the village and district.

As a result of the correlation analysis performed in the study group, it was determined that the highest level of relationship was between the "secondary school students' level of participation in physical activity scale" and the "love" ($r=0.807$; $p=0.000$) sub-

dimension. Secondary school students have an active metabolism due to their age. It can be suggested that the children in this period want to move, play games, participate in physical education lessons and sports, and constantly take part in physical activity. In this respect, the high correlation between the love sub-dimension of secondary school students and the physical activity attitude scale can be considered as a natural result.

As a result, it was seen that secondary school students' attitude scores towards physical activity were high. It is thought that the factors such as the contemporary and modern society structure, being healthy and looking beautiful through internet and technological developments are effective in the high participation level of the female students in physical activities. It was concluded that the students' physical activity attitudes decreased as their grades increased and they were engaged in academically focused studies for high school exams. It is known that individuals who participate in physical activity and sports from a young age participate in physical activities in order to be physically and mentally healthy in later ages. Accordingly, there are benefits brought by physical activity at all ages. Children and young people who do not care about physical activity and sit in front of the computer or television for hours should gain the habit of physical activity and integrate this behavior into their lifestyle.

V. Recommendations

- Practical activities for informing about the importance of physical activity in human life should be carried out for the students studying at secondary school.
- Programs should be planned to enable secondary school students whose families are at the poverty line to participate in physical activity outside the school.
- It should be ensured that male and female students who do not participate in physical activities participate in physical activities in cooperation with students, teachers, and parents.

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