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## **DETERMINING THE RELATIONSHIP BETWEEN HIGH SCHOOL STUDENTS' ATTITUDES TOWARDS PHYSICAL EDUCATION COURSE, HUMAN VALUES AND BODILY INTELLIGENCE**

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### **ABSTRACT**

*The aim of this study is to determine the relationship between high school students' attitudes towards physical education course, human values and bodily intelligence, and to analyze the differences between various variables and measurement tools. A total of 471 students studying at 4 different high schools participated in the study, and the data belonging to the study group were collected with the "Physical Education Course Attitude Scale", the "Human Values Scale (HVS)" scale and the "Bodily/Kinesthetic Intelligence Scale". In the analysis of the data, descriptive statistics have been evaluated with independent sample t-test, one-way analysis of variance Anova, post hoc tests and pearson correlation analysis. When the research findings were examined, it has been determined that the participants exhibited a high level of attitude, human values and bodily intelligence. At the same time, it has been determined that students' attitudes towards physical education course, human values and bodily intelligence show significant differences with variables such as gender, grade, school, income, exercising or doing sports outside of school, exercising regularly in a club. In addition, it has been concluded that there has been a significant positive correlation between the measurement tools. As a result, it can be said that students' attitudes towards physical education course, human values and bodily intelligence are high and certain variables significantly differentiate these levels.*

**Key words:** *Physical education, attitude, human values, bodily intelligence*

## INTRODUCTION

Attitude can be defined as the path, direction and guide determined by individuals in their life processes. The attitude they take in the face of their experiences takes action accompanied by cognitive processes and emotions. Attitudes are also the ideal way of expressing a reaction to an event, object or action. Attitudes can be directed to many elements in life, as well as to factors in the education life that starts in the first years of life. Physical education course, which is one of them, takes the lead among the courses that are expected to have a positive attitude in terms of physical, mental and psycho-social development of students.

Attitude towards physical education course has been examined in many studies within the scope of literature (Alemdağ et al., 2014; Balyan et al., 2012; Çelik Kayapınar et al., 2011; Erhan and Tamer, 2009; Gülay, 2008, Güllü, 2007; Karadağ, 2012; Öncü, 2007; Philips, 2011; Şişko and Demirhan, 2002, Yıldırım, 2006; Sivrikaya and Kılçık, 2018; Zengin, 2013). Physical education course is at an important point in terms of physical and psychological development of people and adaptation to the environment (Cengiz, Kılıç, and Soylu, 2018). It is very valuable for the future of the society that the youth, that is, high school students, who are part of the segment that will form the future of the society, grow up as healthy individuals both mentally and physically (Göksel and Caz, 2016). Today, physical education and attitude towards sports are becoming an extremely important issue, and there are many studies in national and international literature on this subject. In particular, it is supported by the literature that physical education and sports have positive effects on young students. It is seen that it is important for countries to determine that physical education and sports cause positive results especially for young people today and to make plans for this (Kılıç and Çimen, 2018).

Making people love games and sports, which are a natural need in all developmental periods, and making them a lifestyle, goes through school, teacher and physical education courses. In this period, individuals with a developed level of satisfaction with physical education and sports will have gained the habit of spending their free time with games and sports (Hazar, Pepe and Hazar, 2021). Encouraging people to love games and sports from an early age can help them develop a positive attitude towards physical activity and make it a regular part of their lifestyle. Schools and physical education courses can play a crucial role in promoting physical activity and sports participation among students.

By promoting physical activity and sports participation in schools, individuals can develop a sense of satisfaction and enjoyment from being physically active. This, in turn, can lead to a lifelong habit of spending their free time engaging in sports and other physical activities. Physical education and sports

course, which is an important part of general education, is also a course that students throw away their energy accumulated in theoretical courses throughout the day, have a pleasant time, renew themselves mentally and physically, and participate with pleasure. However, students' interests and attitudes towards this course change from time to time, and in some cases, there are some problems in terms of participation in the course. At this point, it is seen that students' attitudes towards physical education and sports courses are an important problem situation (Hazar, Pepe, and Hazar, 2021). While students' attitudes towards physical education and sports courses can be a problem, it is important for educators to address the issue and find ways to promote engagement and participation. By creating a positive learning environment and addressing the factors that may be contributing to negative attitudes, educators can help students develop a lifelong habit of physical activity and promote their overall health.

It is important for individuals to develop positive attitudes towards physical education and sports courses in terms of gaining exercise and sports activity habits in order to spend their adulthood and old age in a healthy way. In this sense, the secondary school-high school period is an important and critical period for students to develop positive attitudes towards physical education and sports courses. It is the secondary education-high school period, which is one of the critical periods for individuals to gain lifelong sports habits (Hazar, Pepe and Hazar, 2021). The secondary school-high school period is a critical time for individuals to develop positive attitudes towards physical education and sports courses. During this period, students are in the process of developing lifelong habits and attitudes towards physical activity and sports. It is important for educators to create a positive learning environment and provide opportunities for students to engage in a variety of physical activities and sports. Furthermore, the habits and attitudes that students develop during this period can also affect their future choices and behaviors related to physical activity and sports.

Attitudes and values are two different elements that are closely related to each other, sometimes described as interchangeable, but differ in certain points. On the other hand, values, attitudes and behaviors are in the same cluster. Although the concept of value is sometimes used together with or instead of concepts such as attitude, belief, norm, ethics and need, it differs from these concepts in terms of various features (Keskin, 2014). Attitudes can have a general and broad meaning, while values can be more specific and oriented towards the minor object or event.

The concept of value can be defined as the value provisions that they accept as correct and want to be applied in order to ensure that societies/individuals exist, ensure their continuity and act together. In other words, good-bad, right-wrong, beautiful-ugly etc. are the guides for individuals who make up society that

should be followed and avoided, that determine the course of action, that need to be renewed according to time or to adopt different judgments. Because values don't always stay the same. In human life, they vary from country to country with organizations and civilizations. Values, which should be taught to individuals especially from a young age, are of great importance in terms of social unity and peace. Among the prominent functions of values are directing social life and thus social relations (Özkan and Soylu, 2014). Value is an indispensable process for the individual and society. Integration and socialization of individuals with the society they live in can only be possible with the values gained through education. Values are the standards that people put forward to define the good, the right, the beautiful and the ugly. There is a need for an organ that the individual must perform and regulate his actions (Tatlıoğlu, 2012). In the best way, this body is the schools where the education and training processes are structured.

Human values are the pillars of life. Human values and moral values are concepts that overlap with each other. What behaviors are good or not varies from person to person. Whether the behavior is good or not varies from person to person as well as from society to society, opinions differ on what the concept of good and bad is (Kulaksızoğlu and Dilmaç, 2000).

The need for human values stems from the realities and beliefs of the society in which we live. Every parent makes an effort to help their children gain some values at home, and after they start school, this effort is made by the state. Thus, it is desired to raise young people with certain human values and to form a happy society (Sarıçam et al., 2014). Values in psychology, as an element with a central role in the cognitive world of the individual, exist as a whole by combining with the individual's emotions, perceptions, attitudes, motives, beliefs, perspectives on events, evaluation forms, norms and expectations of the society (Tatlıoğlu, 2012).

The social rules that enable people to live together in a happy and peaceful way are seen as the rules that they fulfill in an obligatory way. However, these rules need to be supported by human values. Values such as love, righteousness, peace and cooperation make it easier for people to obey the rules (Sarıçam et al., 2014).

In particular, the role of the school in making students adopt human values and the ways and methods to be used in this process are discussed. Although it is not possible to fully agree on all the values that should be taught to students due to the nature of affective education, basic human values such as honesty, respect, responsibility and tolerance are accepted by everyone. It is another interesting issue whether these values can be gained through activities held in schools (Akgül, 2013).

Educational institutions design education programs in order to contribute to physical development as well as social development. In this direction, the

development of students' multiple intelligence types is among these goals. Bodily intelligence, which is among the related intelligence types, is considered as an important type of intelligence in which students recognize and make sense of their bodies.

The concept of intelligence, which forms the basis of multiple intelligence types, and how it should be defined has been the field of interest of many educators for many years. Some educators, while developing various IQ tests that assume that they measure human intelligence based on human mental functions or performances, define intelligence as "the quality that these tests measure" (i.e. intelligence degree, intelligence level or intelligence quotient), which they prepared, others have interpreted intelligence as the "learning power" possessed by an individual (Aslan, Dalkıran and Özer, 2015).

According to the definition of Stanford (2003), bodily intelligence is described as "the ability to use the body to express emotion, to play a game, and to create a new product". Bodily intelligence refers to the way an individual uses his body and movements. Individuals with high bodily intelligence can easily practice sportive movements and regular-rhythmic games. Coordination, balance, speed, dexterity and flexibility are remarkable in these individuals. Dancers, actors, athletes, pantomime artists, surgeons, technicians, sculptors can be given as examples (Talu, 1999).

Considering the education and training institutions, the types of schools in which the students study can be considered as an environmental factor affecting the development of their intelligence areas. Because each type of school has its own general objectives, special education programs and different courses. For example, the student who goes to social sciences high school mainly attends social sciences courses, the student who goes to vocational high school takes the courses required by the vocation, the student who goes to general high school mainly attends general culture courses, the student who goes to fine arts mainly attends painting and music courses and the student who goes to a sports high school mainly takes physical education and sports courses. Therefore, the courses she/he has studied for four years may affect her/him to develop some intelligence areas better or not to develop some intelligence areas (Güllü and Tekin, 2009).

A positive attitude towards the physical education course can contribute positively to the human values of the individuals, as well as the development of their bodily intelligence. Based on this assumption, a research problem was created, and a survey study was conducted on the relationship between high school students' attitudes towards physical education course, their human values and their bodily intelligence. Differentiation states of various variables to attitudes, values and intelligence have been examined within the scope of the study.

## METHOD

### *Research model and study group*

The research was prepared with the quantitative method and the screening model was used. The study was carried out with 471 students studying at Imam Hatip High School, Commercial Vocational High School, Science High School and Haydar Öztaş Anatolian High School, which continue their educational activities in Ankara in the 2021-2022 academic year.

### *Data collectionı*

The data were obtained with a face-to-face questionnaire, and 3 different measurement tools were used in addition to the personal information form in collecting the data.

### *Physical Education Course Attitude Scale*

The Physical Education Course Attitude Scale, developed by Phillips and Silverman (2012) and translated into Turkish by Varol et al. (2016), consists of 15 items and two sub-dimensions. It was determined that 7 items were reverse coded in the sub-dimensions called cognitive and affective. The lowest score that can be obtained from the scale is 15 and the highest score is 75. The measurement tool, prepared in a 5-point Likert type, is among the ratings of "1-Strongly disagree, 2-Disagree, 3-I am undecided, 4-Agree, 5-Strongly Agree".

### *Human Values Scale (HVS):*

In this study, the "Human Values Scale (HVS)" developed by Dilmaç (2007) for secondary school students was used to determine the human values of students. In the scale, the human values process consists of the sub-dimensions of responsibility, fellowship/friendship, being peaceful, respect, tolerance and honesty, each consisting of 7 items. The measurement tool, consisting of 42 items, is a Likert-type scale that can be applied individually or in groups. Items in the scale were expressed as a five-step "Likert Type" rating scale (A: Never, B: Rarely, C: Occasionally, D: Often, E: Always). Increasing/decreasing scores show that individuals have/do not have more human values.

### *Bodily/Kinesthetic Intelligence Scale*

The measurement tool created to determine multiple intelligence areas is rated as "1-It is not suitable for me at all-1.00-1.80" "2-Very little suitable for me-1.81-2.60", "3- Partially suitable for me-2.61-3.40", "4-Very suitable for me-3.41-4.20", "5-Completely suitable for me-4.21- 5.00" (Gülşen, 2015). The measurement tool, consisting of 8 different modules, examines the dimensions of verbal/

linguistic intelligence, logical/mathematical intelligence, visual/spatial intelligence, musical/rhythmic intelligence, bodily/kinesthetic intelligence, interpersonal/social intelligence, intrapersonal/ introspective intelligence and naturalist/natural intelligence separately and holistically. The bodily/kinesthetic intelligence scale used in this context consists of 10 items and a single sub-dimension.

#### *Analysis of data*

Data were analyzed with SPSS 25 program, reliability coefficients, descriptive statistics, independent sample t test, one-way analysis of variance ANOVA and pearson correlation test were used in the analysis.

**Table 1.** Percentage and frequency distributions for the study group

	Variable	N=(402)	
		f	%
Gender	Female	281	59,7
	Male	190	40,3
School	Imam Hatip High School	121	25,7
	Commercial Vocational High School	44	9,3
	Science High School	132	28,0
	Haydar Öztaş Anatolian High School	174	36,9
Grade	9 <sup>th</sup> Grade	248	52,7
	12 <sup>th</sup> Grade	223	47,3
Individuals Living Together	Together with the Parents	405	86,0
	Mother	28	5,9
	Father	10	2,1
	Other	28	5,9
The State of Doing Sports or Exercise Outside of School	Yes	226	48,0
	No	245	52,0
Doing Sports Regularly in the Club	Yes	51	10,8
	No	420	89,2
Status of Being a Licensed Athlete in the Family	Yes	53	11,3
	No	418	88,7
Height	1,60<	139	29,5
	1,60-1,70	192	40,8
	1,71 and over	140	29,7
Weight	50<	123	26,1
	50-55	74	15,7
	56-60	90	19,1
	61 and over	184	39,1

**Table 2.** Arithmetic Mean, Standard Deviation and Kurtosis Skewness Values of Student Attitude, Human Values and Bodily/Kinesthetic Intelligence Scales

	N=(417)					
	Min.	Max.	$\bar{x}$	sd	Skewness	Kurtosis
Total Student Attitude	1,27	5,00	3,71	,74	-,310	-,419
Cognitive	1,00	5,00	3,85	,86	-,411	-,199
Affective	1,57	5,00	3,54	,68	-,320	-,593
Total Human Values	1,00	5,00	3,54	,44	-,653	3,461
Responsibility	1,00	5,00	3,62	,58	-,583	,752
Fellowship_Friendship	1,00	5,00	3,78	,74	-,747	,562
Being_peaceful	1,00	5,00	3,44	,68	-,550	,786
Respect	1,00	5,00	3,66	,69	-,406	,140
Tolerance	1,00	5,00	3,54	,51	-,419	1,898
Honesty	1,00	5,00	3,19	,56	,033	,850
Bodily_Kinesthetic_Intelligence	1,00	5,00	3,53	,74	-,437	,306

Attitudes towards physical education and sports courses were above the average and scores were obtained in the highest cognitive and lowest affective sub-dimensions. Human values scores were also high, fellowship/friendship values were the highest, and honesty values had the lowest averages. When the bodily intelligence is examined, it is observed that the participants similarly got a score above the average. Since it was determined that the kurtosis skewness values were in the normal distribution ranges, the operations were performed with parametric tests.

**Table 3.** Independent sample T-Test results between student attitude, human values, bodily/kinesthetic intelligence and gender variables

	Gender	n	N=(417)		t	p
			$\bar{x}$	sd		
Total Student Attitude	Female	281	3,63	,74	-2,872	0,004*
	Male	190	3,83	,74		
Cognitive	Female	281	3,78	,84	-2,227	0,026*
	Male	190	3,96	,87		
Affective	Female	281	3,45	,68	-3,533	0,000*
	Male	190	3,68	,65		
Total Human Values	Female	281	3,60	,41	3,565	0,000*
	Male	190	3,45	,46		
Responsibility	Female	281	3,66	,58	1,479	0,140
	Male	190	3,57	,58		
Fellowship_Friendship	Female	281	3,85	,74	2,698	0,007*
	Male	190	3,67	,73		
Being_peaceful	Female	281	3,54	,64	4,164	0,000*
	Male	190	3,28	,71		
Respect	Female	281	3,76	,66	3,886	0,000*
	Male	190	3,50	,71		



Tolerance	Female	281	3,56	,48	0,804	0,422
	Male	190	3,52	,55		
Honesty	Female	281	3,22	,53	1,290	0,198
	Male	190	3,15	,60		
Bodily_Kinesthetic_Intelligence	Female	281	3,46	,76	-2,487	0,013*
	Male	190	3,63	,70		

$p < 0,05^*$

When the independent sample t-test findings between the participants' attitudes towards physical education and sports courses, human values and physical intelligence and gender variables were examined, it was determined that male students' attitudes towards physical education and sports courses and their bodily kinesthetic intelligence were higher, while females had higher human values.

**Table 4.** Independent sample T-Test results between student attitude, human values, bodily/kinesthetic intelligence and grade variables

	N=(417)					t	p
	Simf	n	$\bar{x}$	sd			
Total Student Attitude	9 <sup>th</sup> Grade	248	3,83	,73	3,858	0,000*	
	12 <sup>th</sup> Grade	223	3,57	,73			
Cognitive	9 <sup>th</sup> Grade	248	3,99	,84	3,636	0,000*	
	12 <sup>th</sup> Grade	223	3,70	,85			
Affective	9 <sup>th</sup> Grade	248	3,66	,67	3,801	0,000*	
	12 <sup>th</sup> Grade	223	3,42	,67			
Total Human Values	9 <sup>th</sup> Grade	248	3,58	,3	2,217	0,027*	
	12 <sup>th</sup> Grade	223	3,49	,49			
Responsibility	9 <sup>th</sup> Grade	248	3,73	,51	4,110	0,000*	
	12 <sup>th</sup> Grade	223	3,51	,63			
Fellowship_Freindship	9 <sup>th</sup> Grade	248	3,89	,70	3,599	0,000*	
	12 <sup>th</sup> Grade	223	3,65	,76			
Being_peaceful	9 <sup>th</sup> Grade	248	3,45	,67	0,526	0,599	
	12 <sup>th</sup> Grade	223	3,42	,69			
Respect	9 <sup>th</sup> Grade	248	3,67	,68	0,504	0,614	
	12 <sup>th</sup> Grade	223	3,64	,71			
Tolerance	9 <sup>th</sup> Grade	248	3,58	,47	1,505	0,133	
	12 <sup>th</sup> Grade	223	3,51	,55			
Honesty	9 <sup>th</sup> Grade	248	3,16	,56	-1,160	0,247	
	12 <sup>th</sup> Grade	223	3,23	,57			
Bodily_Kinesthetic_Intelligenc e	9 <sup>th</sup> Grade	248	3,50	,74	-0,969	0,333	
	12 <sup>th</sup> Grade	223	3,56	,74			

$p < 0,05^*$

When Table 4 is examined, attitudes and human values towards physical education and sports courses differ according to the grade variable. When the

attitude is examined, it can be said that the 9<sup>th</sup> graders exhibit more positive attitudes than the other grades. It is possible to say that the significant difference in the sub-dimensions of total human values, responsibility and fellowship/friendship is again in favor of the 9<sup>th</sup> graders. There is no significant difference between the bodily intelligence and the grade variables of the participants.

**Table 5.** One-way analysis of variance ANOVA test results between student attitude, human values, bodily/kinesthetic intelligence and school variables

		N=(417)				
	School	n	$\bar{x}$	sd	F	p
Total Student Attitude	Imam Hatip High School	121	3,65	,71	6,595	0,000*
	Commercial Vocational High School	44	3,70	,75		
	Science High School	132	3,94	,71		
	Haydar Öztaş Anatolian High School	174	3,57	,76		
	Total	471	3,71	,74		
Cognitive	Imam Hatip High School	121	3,80	,87	6,404	0,000*
	Commercial Vocational High School	44	3,84	,82		
	Science High School	132	4,11	,83		
	Haydar Öztaş Anatolian High School	174	3,69	,84		
	Total	471	3,85	,86		
Affective	Imam Hatip High School	121	3,49	,59	5,644	0,001*
	Commercial Vocational High School	44	3,55	,73		
	Science High School	132	3,74	,64		
	Haydar Öztaş Anatolian High School	174	3,43	,72		
	Total	471	3,54	,68		
Total Human Values	Imam Hatip High School	121	3,50	,47	0,578	0,630
	Commercial Vocational High School	44	3,55	,48		
	Science High School	132	3,57	,37		
	Haydar Öztaş Anatolian High School	174	3,53	,45		
	Total	471	3,54	,44		
Responsibility	Imam Hatip High School	121	3,58	,63	0,358	0,783
	Commercial Vocational High School	44	3,65	,62		
	Science High School	132	3,64	,55		
	Haydar Öztaş Anatolian High School	174	3,636	,56		
	Total	471	3,62	,58		
Fellowship_Freindship	Imam Hatip High School	121	3,81	,82	0,449	0,718
	Commercial Vocational High School	44	3,67	,67		
	Science High School	132	3,81	,71		
	Haydar Öztaş Anatolian High School	174	3,76	,72		
	Total	471	3,78	,74		
Being_peaceful	Imam Hatip High School	121	3,43	,74	0,503	0,680

	Commercial Vocational High School	44	3,50	,69		
	Science High School	132	3,47	,63		
	Haydar Öztaş Anatolian High School	174	3,39	,68		
	Total	471	3,44	,68		
Respect	Imam Hatip High School	121	3,58	,71		
	Commercial Vocational High School	44	3,57	,70		
	Science High School	132	3,74	,66		
	Haydar Öztaş Anatolian High School	174	3,66	,70		
	Total	471	3,66	,69		
Tolerance	Imam Hatip High School	121	3,57	,55	1,305	0,272
	Commercial Vocational High School	44	3,53	,62		
	Science High School	132	3,57	,44		
	Haydar Öztaş Anatolian High School	174	3,51	,50		
	Total	471	3,54	,51		
Honesty	Imam Hatip High School	121	3,04	,59	4,747	0,003*
	Commercial Vocational High School	44	3,36	,62		
	Science High School	132	3,21	,49		
	Haydar Öztaş Anatolian High School	174	3,24	,55		
	Total	471	3,19	,56		
Bodily_Kinesthetic_Intelligence	Imam Hatip High School	121	3,36	,78	4,965	0,002*
	Commercial Vocational High School	44	3,40	,92		
	Science High School	132	3,70	,63		
	Haydar Öztaş Anatolian High School	174	3,54	,71		
	Total	471	3,53	,74		

$p < 0,05^*$

When the one-way analysis of variance between attitudes towards physical education and sports courses and bodily intelligence and school type is examined, it is seen that the participants who study in science high school, which is one of the school types, exhibit higher attitude scores than other students. When the analyzes between human values and school type were examined, it was determined that there was no statistically significant difference.

On the other hand, it is observed that the attitudes and human values of the participants do not differ with the place they live, and those who state that they live with other individuals have higher bodily intelligence in the type of bodily intelligence.

When the income level, which is another variable, is examined, it can be said that income differentiates the attitude towards physical education and sports courses and bodily intelligence, and the highest income group has higher averages. It has been determined that human values do not differ with income level.

**Table 6.** Independent sample T-Test results between student attitude, human values, bodily/kinesthetic intelligence, and the variable of making use of out-of-school leisure time with exercise

	N=(417)					
	Doing Exercise	n	$\bar{x}$	sd	t	p
Total Student Attitude	Yes	224	3,85	,72	4,047	0,000 *
	No	245	3,57	,74		
Cognitive	Yes	224	3,99	,83	3,554	0,000 *
	No	245	3,71	,86		
Affective	Yes	224	3,68	,65	4,362	0,000 *
	No	245	3,41	,68		
Total Human Values	Yes	224	3,52	,45	-0,737	0,461
	No	245	3,55	,42		
Responsibility	Yes	224	3,62	,58	0,067	0,946
	No	245	3,62	,58		
Fellowship_Freindship	Yes	224	3,74	,73	-1,011	0,313
	No	245	3,81	,75		
Being_peaceful	Yes	224	3,42	,70	-0,614	0,539
	No	245	3,46	,66		
Respect	Yes	224	3,67	,72	0,592	0,554
	No	245	3,63	,67		
Tolerance	Yes	224	3,52	,50	0,592	0,554
	No	245	3,56	,51		
Honesty	Yes	224	3,15	,56	-0,840	0,401
	No	245	3,23	,56		
Bodily_Kinesthetic_Intelligence	Yes	224	3,66	,68	3,908	0,000 *
	No	245	3,40	,76		

$p < 0,05^*$

When Table 6 is examined, it has been observed that there is a statistically significant difference between attitudes towards physical education and sports courses, bodily intelligence and exercise in leisure time, and that human values do not change according to exercise status.

According to the findings, it was determined that those who exercise or do sports in their leisure time out of school exhibit higher attitude and intelligence scores in both significant differences.

**Table 7.** Independent sample T-Test results between student attitude, human values and bodily/kinesthetic intelligence, and the status of exercising regularly at the club

			N=(417)		t	p
	Exercising at the Club	n	$\bar{x}$	sd		
Total Student Attitude	Yes	51	4,15	,68	4,608	0,000*
	No	420	3,65	,73		
Cognitive	Yes	51	4,30	,81	3,984	0,000*
	No	420	3,80	,85		
Affective	Yes	51	3,99	,57	5,059	0,000*
	No	420	3,49	,67		
Total Human Values	Yes	51	3,61	,31	1,270	0,205
	No	420	3,53	,45		
Responsibility	Yes	51	3,63	,56	0,099	0,921
	No	420	3,62	,58		
Fellowship_Friendship	Yes	51	3,90	,59	1,237	0,217
	No	420	3,76	,75		
Being_peaceful	Yes	51	3,52	,57	0,881	0,379
	No	420	3,43	,69		
Respect	Yes	51	3,71	,64	0,615	0,539
	No	420	3,65	,70		
Tolerance	Yes	51	3,52	,46	-0,325	0,745
	No	420	3,55	,51		
Honesty	Yes	51	3,39	,43	2,683	0,008*
	No	420	3,17	,57		
Bodily_Kinesthetic_Intelligence	Yes	51	3,81		,58	2,927
	No	420	3,49	,75		

$p < 0,05^*$

When the findings were examined, the attitude towards physical education and sports courses and physical intelligence revealed a significant difference in favor of those who regularly exercise in the club in student attitude, similarly, there was a significant difference in human values only in the sub-dimension of honesty, and a significant difference was determined in favor of those who regularly exercise in the club. Being a licensed athlete in the family, which is another variable, does not significantly differentiate all three scales.

**Table 8.** Pearson correlation analysis between student attitude, human values, and bodily/kinesthetic intelligence scales

Total Student Attitude	1									
Cognitive	.973**	1								
Affective	.944**	.843**	1							
Total Human Values	.184**	.184**	.166**	1						
Responsibility	.156**	.150**	.151**	.734**	1					
Fellowship_Freindship	.225**	.225**	.204**	.688**	.430**	1				
Being_peaceful	.112*	.115**	.097*	.736**	.427**	.363**	1			
Respect	.125**	.139**	.093*	.772**	.492**	.391**	.548**	1		
Tolerance	.111*	.119*	.089	.665**	.420**	.373**	.374**	.418*	1	
Honesty	.012	-.008	.040	.557**	.322**	.195**	.292**	.307*	.308**	1
Bodily_Kinesthetic_Intelligence	.224**	.194**	.246	.114**	.166**	.137**	.012	.079	.006	.062

$p < 0,01^*$

When the relationship between the measurement tools is examined, it can be said that there is a statistically significant, positive and weak relationship in general ( $r=.184;.224$ ). Therefore, it can be concluded that positive attitudes towards physical education and sports courses, positive human values and development of physical intelligence can follow a parallel curve.

## DISCUSSION AND CONCLUSION

When the high school students' attitudes towards physical education and sports courses, their human values and bodily intelligence levels were examined and the differences between them and certain variables were examined, it was determined that the participants exhibited a high level of attitude, human values and bodily intelligence. At the same time, it has been determined that students' attitudes towards physical education course, human values and bodily intelligence show significant differences with variables such as gender, grade, school, income, exercising or doing sports outside of school, exercising regularly in a club.

Studies in the literature generally indicate that the attitude towards physical education and sports courses is high (Yaldız and Özbek, 2018). The finding that the attitude towards physical education and sports courses differs significantly in favor of males is supported by the literature (Akandere, Özyalvaç and Duman, 2010; Alemdağ, Öncü and Sakallioğlu, 2014; Arslan and Altay, 2009; Böke, Güllü and Winter, 2020; Cengiz, Kılıç and Soylu, 2018; Hazar, Pepe and Hazar, 2021; Öncü and Cihan, 2012; Yıldız, 2010). At the same time, studies revealing that female students' attitudes towards physical education and sports courses are higher than male students (Aydoğan et al., 2016; Zekioğlu et al.; 2020), as well as

studies in which gender does not change attitudes towards physical education and sports, are also frequently found in the literature (Dalaman, 2015; Göksel and Caz, 2016; Keskin, Öncü and Küçük, 2016; Kılıç and Çimen, 2018; Sivrikaya and Kılçık, 2018). Considering that gender differentiates the attitudes towards physical education and sports courses in favor of males, it can be said that female participants' attitudes towards the course should be increased in a positive way.

When human values are examined, it has been determined that the human value level of females is higher than that of males. In parallel with the current research finding, Sariçam et al. obtained a similar finding in their research in 2014. Barteve tested a similar finding in his research on secondary school students in 2017 and determined that female participants exhibited higher levels of human value. Keskin also (2014) revealed that female students have higher human value scores. Özkan and Soylu (2014) and Karababa and Dilmaç (2015) found that the gender variable does not significantly differentiate human values. When it comes to human values, females come to the fore. Male participants should be provided with more training on human values and gain in this direction.

The current study finding that the bodily intelligence levels show a significant difference in favor of males is in line with the research findings of Bozdağ and Sarı (2021). Erturan and Göde (2008) found that female students have higher bodily intelligence levels. Another research finding is that bodily intelligence does not differ significantly according to gender (Ermiş, İmamoğlu and Erilli, 2012). Çalı and Kangalgil (2020), Kaya, Karakaş and Gizdem (2015), and Güllü and Tekin (200) also stated that gender does not differentiate bodily intelligence. The literature indicates that bodily intelligence does not differ according to gender.

When the grade variable is examined, various studies support the relevant finding, considering that 9<sup>th</sup> graders have a positive attitude towards higher physical education and sports courses (Kılıç, Uğurlu and Cenik, 2018; Yıldız and Özbek, 2018). In various studies, it has been determined that the grade variable does not change the attitude towards the physical education course (Göksel and Caz, 2016; Sivrikaya and Kılçık, 2018). The findings of the current research show that the grade variable of human values differentiates human values. Contrary to the present finding, Karababa and Dilmaç (2015) observed that the grade variable did not significantly change human values. The finding that bodily intelligence does not differ significantly with the grade variable was obtained in the present study. In parallel with the relevant finding, many studies are found in the literature (Çalı and Kangalgil, 2020; Güllü and Tekin, 2009; Kaya, Karakaş and Gizdem, 2015).

It has been determined that the attitudes of individuals who do exercise or sports in their leisure time towards physical education and sports education course are higher than those who do not exercise or do sports. When the literature is examined, it is observed that the relevant finding is supported (Akandere,

Özyalvaç and Duman, 2010; Alemdağ, Öncü and Sakallıoğlu, 2014; Cengiz, Kılıç and Soylu, 2018; Dalaman, 2015; Hazar, Pepe and Hazar, 2021; Kılıç, Uğurlu and Cenik, 2018; Yıldız and Özbek, 2018). Based on the current research findings, it is possible to say that the bodily intelligence level of the participants who state that they exercise in their leisure time is higher than those who do not do sports. Ermiş, İmamoğlu and Erilli (2012) stated in their research that the higher bodily intelligence scores of those who graduated from sports high school can be considered proportional to their sports life. Contrary to Erturan and Göde's (2008) studies stating that doing sports does not differentiate bodily intelligence, there are more studies in the literature stating that bodily intelligence of those who do sports is higher (Bozdağ and Sarı, 2021; Çalı and Kangalgil, 2020; Ermiş, 2012; Şentürk and Yazıcı, 2020). Therefore, it can be said that the obtained finding is similar to the studies in the literature.

As a result of the analyzes made on the assumption that positive attitudes towards physical education and sports courses will increase the human values, which is another positive element, bodily intelligence will increase in parallel with this and these three elements will be related to each other, it has been concluded that there has been a significant positive correlation between the measurement tools. As a result, it can be said that students' attitudes towards physical education course, their human values and physical intelligence are high, and certain variables significantly differentiate these levels.

Students are likely to gain experience in understanding human values through physical education courses. It is obvious that the physical practices included in the content of the course will also increase the bodily gains of the individuals. All these positive achievements are supported by the researches in the literature. Considering these gains in education and training processes, it is recommended to program the activities to be implemented in this direction.

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