

# Determination of the attitudes of university students who receive training on disabilities and non-exercise towards the education and inclusion of disabled individuals

Zeynep Yildirim

Faculty of Sports Sciences, Bartın University, Turkey.

---

## ABSTRACT

The aim of this study is to determine the attitudes of the students studying in the Physical Education and Sports Teaching Department of the Faculty of Sports Sciences, where the students are trained on disabilities and exercise, towards the education and inclusion of disabled individuals. Based on this purpose, a personal information form containing demographic information and the Attitude Scale for the Education of Disabled Individuals developed by Kosterioglu in 2013 were applied to 71 students who were studying at Bartın University, Department of Physical Education and Sports Teaching and had never received any training on disabilities and education before, and who participated voluntarily. After the scales applied, a 12-hour training program was applied to the participants once a week for twelve weeks. This program was implemented online through Zoom and includes the types of disabilities, the importance of education and physical education programs in individuals with disabilities. The training program was implemented by an expert trainer in the field. The same measurements were taken again after the training application. When the arithmetic averages of the participants' Attitude Scale for the Education of Disabled Individuals and its sub-dimensions are compared, it is seen that there is a decrease in the sub-dimensions and total post-test scores of Right to Education, Dissemination of Education, Volunteer Participation, and an increase in the sub-dimensions of the scale's Investment in the Special Education Area of Belief regarding the Education Results. However, although the mean scores were high, there was no statistically significant difference ( $p \geq 0.05$ ) in the results of the Wilcoxon signed-rank test. The participants' attitude scale for the education of individuals with disabilities, voluntary participation sub-dimension post-test scores were found to be statistically significant in favor of men according to gender ( $U = 387.50$ ,  $p < 0.05$ ). Although there was no difference in the volunteer participation pre-test scores of the participants according to gender, a statistically significant difference was found in the volunteer participation post-test scores in favor of women. The attitude scale of the participants towards the education of disabled individuals was found to be statistically significant in favor of men according to gender ( $0.012$ ,  $p < 0.05$ ). Although there was no difference in the volunteer participation pre-test scores of the participants according to age, a statistically significant difference was found in favor of those aged 23 and over in the post-test scores of investment in the field of special education. As a result, although the attitude of the education program given to the students studying in the physical education and sports teaching department towards the education and inclusion of disabled individuals was high in terms of mean scores in the pretest and posttest results, no statistically significant result was obtained. It is thought that this result may change with the face-to-face training provided and the practice of disabled individuals and teacher candidates.

**Keywords:** Disabled, education, inclusive education.

---

Email: zerol@bartin.edu.tr.

---

## INTRODUCTION

Since the existence of humanity, living conditions and needs are known from the past to the present. One of the most basic needs of individuals is education. Education is the most natural right of every person and every person should have the right to equal education. Because it should be known that there are individuals with disabilities as well as the presence of individuals without disabilities from the past to the present. In this regard, education should be reduced to the levels of individuals with disabilities (Kan, 2007). Ideas such as "inadequacy and imperfection" towards disabled individuals shape our perspective and personal thoughts about them. It is thought that the current exclusion and pity behaviors in our society cause disabled individuals to live comfortable life and fall behind the social activities experienced collectively and cannot benefit from these opportunities (Hollender, 2011).

Attitudes that will facilitate their lives should be exhibited to these individuals and they should be empowered in the social structure. Ideas such as "inadequacy and imperfection" toward disabled individuals shape our perspective and personal thoughts about them (Firoz, 2016). Attitudes that will facilitate their lives should be exhibited to these individuals and they should be empowered in the social structure (Eripek, 2003).

In this sense, the biggest task falls primarily to our educators working in the field of special education. It is possible for educators working in this field to be able to live as independent and productive individuals in society against individuals with disabilities by determining their training needs and offering appropriate training areas to their needs. Our educators need to be pioneers in this regard. (Karaca et al., 2016). Although there are very important tasks for the management of the training center, the family, and the educators in the Special Education and Rehabilitation centers, the training materials to be used for individuals with special needs and the training methods that will contribute to their social development must be specific to each individual and appropriate (Ertürk, 2016). These tools are used for individuals with special needs, these methods are applied and the personnel working enables individuals with special needs to discover their skills, gain their competencies, gain a profession and prepare them for life. Differences and inadequacies of individuals can only be eliminated by education (Baio, 2014). In this regard, education should be reduced to the levels of individuals with disabilities. All prospective teachers need to be made aware of this issue, as well as physical education teacher candidates need to be made aware of it and they need to get support on this issue in their education (Baykoç, 2017).

Physical education covers all of the regular and planned studies conducted to ensure the physical,

intellectual and spiritual development of individuals, to prepare individuals for daily life and the conditions of business life, to gain national awareness and to increase the sense of citizenship. Physical education teachers, on the other hand, are the people who try to communicate all these features to the student in a disciplined and regular manner (Altuntaş et al., 2016). Thus, the physical education program applied in schools is expected to be adapted and implemented in a way that will improve the psychomotor, affective, cognitive social development and communication skills of the students. Thus, this program should be a quality program that will make the child willing to exercise for life, direct the child, develop skills in him/her, and enable him/her to exhibit positive attitudes and behaviors towards movement. Thus, physical education teachers who have matured with a well-equipped and modern program will be able to carry out this program (Pehlivan et al., 2005).

Physical education and sports, which are an indispensable part of general education, are one of the most ideal areas to teach cooperation, equal competition, personal and social responsibility. It is said that individuals with special needs cannot develop the knowledge, skills and attitudes necessary to achieve an active and healthy lifestyle on their own and this development can only be achieved during the learning process. For this reason, physical education and sports lessons for people with special needs are rich, interesting and exciting such as "jumping, running, bouncing". Since sports include individual and group games, it is very important for the development of people with special needs (Demirci et al., 2014).

## METHODOLOGY

### Population and sample

The population of the research is composed of students studying in the Physical Education and Sports Teaching Department of the Faculty of Sports Sciences of the universities. The sample consisted of 71 randomly selected students who study at Bartın University, Faculty of Sport Sciences, Department of Physical Education and Sports Teaching who had not received training on "Disabilities and Exercise" before and participated completely voluntarily.

### Data collection process

Online training was applied to the participants between 28 February and 16 May at 17:00-18:00 on Monday of each week through the Zoom Cloud Meeting Program (Table 1).

**Table 1.** Training program.

1st Session	Explanation of the terms Disability, Inadequacy, RAM (guidance research center)
2nd Session	Explanation of Special Education for handicapped group, Special Sub-Class, Inclusive Education
3rd Session	Training System and Training Requirements for the Disabled
4th Session	Types of Obstacles and Diagnosis Processes
5th Session	Types of Mental Disabilities and Education
6th Session	Mental Disability and Exercise
7th Session	Transition from Diffuse Developmental Disorder to Autism Spectrum Disorder
8th Session	Autism Spectrum Disorder and Education
9th Session	Down Syndrome, and Education
10th Session	Down Syndrome and Exercise
11th Session	Cerebral Palsy and Education
12th Session	Cerebral Palsy and Exercise

Before starting the training, a personal information form containing the demographic information of the participants and the Attitude Scale for the Education of Disabled Individuals were applied. The same measurements were applied again after the training.

#### Data collection tool

The "Attitude Scale for the Education of Disabled Individuals" developed by Age and gender Kortelioglu (2013) was used in order to examine the pretest and post-test differences in the attitudes of the participants towards the education and inclusion of disabled individuals in the study. After the reliability study, the Cronbach Alpha reliability coefficient of the scale, which was reduced to 20 items, was determined as 0.89, while the KMO Barlett coefficient applied for construct validity was determined as 0.79. Based on the findings obtained, a scale with 20 items and a 5-dimensional structure with construct validity was created by Kiselioglu (2013). The scale, which was reduced to 20 items after the reliability study, has 32 answers for each item with a 5-point Likert-type structure. The answers received were scored as "totally agree=5", "agree=4", "no idea (partially agree-partially disagree) = 3", "disagree= 2", "strongly disagree=1".

#### Analysis of data

The collected data were analyzed through SPSS 23 data analysis program. The distribution of descriptive characteristics of the participants was presented as frequency and percentage values. A normality test was applied to the data to select the appropriate tests to be used in the analysis of the data. "Shapiro-Wilks test is used when the study group size is less than 50, and Kolmogorov-Smirnov (K-S) test is used when it is greater than 50" (Büyüköztürk, 2018).

As a result of the data collected, it was observed that the data obtained from the pre and post-tests did not show normal distribution. For this reason, Wilcoxon signed-rank test was used to analyze whether the students in the experimental and control groups differed according to their pretest and posttest total scores. "Wilcoxon Signed Ranks Test is used instead of the associated t-test in cases where it does not show normal distribution to test whether there is a significant difference between the scores of the two related measurement sets" (Büyüköztürk, 2018). In addition, the difference in scale and sub-dimension scores according to demographic variables was analyzed with Mann Whitney U and Kruskal Wallis tests, which are non-parametric test techniques. The Mann-Whitney U test was used to examine the group differences in differences that were significant as a result of the Kruskal Wallis test. The level of significance was based on .05.

#### RESULTS

Table 2 shows the frequency percentage values of the participants. Table 3 shows the Wilcoxon signed-rank test results regarding the participants' attitude scale pretest and posttest scores for the education of individuals with disabilities.

According to Table 3, when the arithmetic averages of the participants' Attitude Scale for the Education of Disabled Individuals and its sub-dimensions are compared, it is seen that there is a decrease in the sub-dimensions and total post-test scores of Right to Education, Dissemination of Education, Volunteer Participation, and an increase in the sub-dimensions of the scale's Investment in the Special Education Area of Belief regarding the Education Results. According to the results of the Wilcoxon signed-rank test, there was no statistically significant difference ( $p \geq 0.05$ ) between the pre-test and post-test mean rank scores of the participants regarding the scale and its sub-dimensions.

**Table 2.** Demographic information of the participant.

		n	%
Gender	Female	36	50.70
	Male	35	49.30
	Total	71	100.00
Age	20	10	14.08
	21	25	35.21
	22	17	23.94
	23 and above	19	26.76
	Total	71	100.00
Educational level of mother	Primary school	37	52.11
	Secondary school	19	26.76
	High school	10	14.08
	Undergraduate and Postgraduate	5	7.05
	Total	71	100.00
Educational level of father	Primary school	26	36.62
	Secondary school	20	28.17
	High school	17	23.94
	Undergraduate and Postgraduate	8	11.27
	Total	71	100.00
Family income level	Low	5	7.04
	Average	58	81.69
	High	8	11.27
	Total	71	100.00
Family disability status	Available	6	8.45
	None	65	91.50
	Total	71	100.00
Status of disability in the environment	Available	28	39.44
	None	43	60.56
	Total	71	100.00

According to Table 4, the participants' attitude scale for the education of individuals with disabilities, and voluntary participation sub-dimension post-test scores were found to be statistically significant in favor of men according to gender ( $U = 387.50$ ,  $p < 0.05$ ). There was no statistically significant difference in the gender variable, the total and sub-dimension pre-test scores and the total and right to education of the scale, the dissemination of education, the belief in the results of education, and the post-test scores of the investment sub-dimensions in the field of special education ( $p \geq 0.05$ ). Accordingly,

although there was no difference in the volunteer participation pre-test scores of the participants according to gender, a statistically significant difference was found in the volunteer participation post-test scores in favor of women.

According to Table 5, the attitude scale of the participants towards the education of disabled individuals was found to be statistically significant in favor of men according to gender ( $0.012$ ,  $p < 0.05$ ). There was no statistically significant difference in the age variable, the total and sub-dimension pre-test scores and the total and

**Table 3.** Wilcoxon signed rank test results regarding the attitude scale preliminary and posttest scores of the participants for the education of disabled individuals.

Score averages and standard deviations of scale and sub-dimensions	Wilcoxon signed ranks test									
	n	Mean	ss		N	Rank average	Rank total	z	P	
Right to education pretest	71	20.37	5.57	Pretest- Posttest	Negative Rank (-)	26 <sup>a</sup>	33.62	874.00	-.378 <sup>b</sup>	0.705
Right to education post-test	71	20.34	3.63		Positive Rank (+)	31 <sup>b</sup>	25.13	779.00		
Dissemination of education pretest	71	5.97	4.42	Pretest- Posttest	Negative Rank (-)	7 <sup>d</sup>	18.21	127.50	-1.722 <sup>b</sup>	0.085
Dissemination of education post-test	71	5.25	3.99		Positive Rank (+)	21 <sup>e</sup>	13.26	278.50		
Belief regarding education results pretest	71	15.52	4.88	Pretest- Posttest	Negative Rank (-)	29 <sup>g</sup>	24.38	707.00	-.672 <sup>b</sup>	0.501
Belief regarding education results posttest	71	16.07	4.89		Positive Rank (+)	21 <sup>h</sup>	27.05	568.00		
Investment in special education area pretest	71	9.65	3.16	Pretest- Posttest	Negative Rank (-)	24 <sup>j</sup>	33.21	797.00	-.227 <sup>b</sup>	0.820
Investment in special education area post-test	71	9.79	2.69		Positive Rank (+)	31 <sup>k</sup>	23.97	743.00		
Volunteer participation pretest	71	3.35	2.26	Pretest- Posttest	Negative Rank (-)	14 <sup>m</sup>	19.75	276.50	-.892 <sup>b</sup>	0.372
Volunteer participation posttest	71	3.10	2.15		Positive Rank (+)	22 <sup>n</sup>	17.70	389.50		
Total score pretest	71	54.86	11.86	Pretest- Posttest	Negative Rank (-)	33 <sup>p</sup>	32.44	1070.50	-.224 <sup>c</sup>	0.823
Total score post-test	71	54.55	9.90		Positive Rank (+)	33 <sup>q</sup>	34.56	1140.50		

**Table 4.** Mann-Whitney U test results regarding the differentiation of the pre and post-test scores of the participants' attitude scale for the education of disabled individuals by gender.

		N	Pretest				Post-test			
			Rank average	Rank total	u	p	Rank average	Rank total	u	p
Educational right	Female	36	38.81	1397	529	0.234	36.07	1298.5	627.50	0.974
	Male	35	33.11	1159						
Dissemination of education	Female	36	35.44	1276	610	0.779	33.44	1204	538	0.093
	Male	35	36.57	1280						
Belief regarding education results	Female	36	38.56	1388	538	0.266	34.85	1254.5	588.50	0.584
	Male	35	33.37	1168						
Investment in special education area	Female	36	40.29	1450.50	475.50	0.069	34.35	1236.5	570.50	0.438
	Male	35	31.59	1105.50						
Volunteer participation	Female	36	32.94	1186	520	0.155	29.26	1053.5	387.50	<b>0.001</b>
	Male	35	39.14	1370						
Total score	Female	36	36.99	1331.50	594.50	0.682	32.18	1158.5	492.50	0.106

**Table 5.** Kruskal-Wallis H test results regarding the differentiation of the pre and post test scores of the participants' attitude scale for the education of disabled individuals by age.

		N	Pretest				Post-test			
			Rank average	Kruskal-Wallis H	df	p	Rank average	Kruskal-Wallis H	df	p
Educational right	20	10	28.40	0.509	3	0.917	37.45	5.766	3	0.124
	21	25	31.44				30.40			
	22	17	32.00				35.18			
	23 and above	10	33.90				22.05			
Dissemination of education	20	10	33.20	1.910	3	0.591	29.70	4.217	3	0.239
	21	25	31.12				29.56			
	22	17	28.29				36.18			
	23 and above	10	36.20				30.20			
Belief regarding education results	20	10	28.35	0.555	3	0.907	32.60	1.419	3	0.701
	21	25	32.88				31.30			

**Table 5.** Continues.

	22	17	30.79				28.59			
	23 and above	10	32.40				35.85			
	20	10	36.00				19.45			
Investment in special education area	21	25	29.06	1.215	3	0.749	37.10	10.886	3	<b>0.012</b> (23 and> 20, 21, 22)
	22	17	32.68				27.56			
	(23 and>	10	31.10				36.25			
	20	10	26.90				31.25			
	21	25	30.62				30.92			
Volunteer participation	22	17	34.53	1.624	3	0.654	31.88	0.108	3	0.991
	(23 and>	10	33.15				32.55			
	20	10	29.30				29.05			
	21	25	30.76				31.76			
Total score	22	17	33.44	0.407	3	0.939	32.06	0.241	3	0.971
	(23 and>	10	32.25				32.35			

right to education of the scale, the dissemination of education, the belief in the results of education and the post-test scores of the voluntary participation sub-dimensions ( $p \geq 0.05$ ). Accordingly, although there was no difference in the volunteer participation pre-test scores of the participants according to age, a statistically significant difference was found in favor of those

aged 23 and over in the post-test scores of investment in the field of special education.

According to Table 6, the mother education level variable did not make a statistically significant difference in the total and sub-dimension pre-post test scores of the participants ( $p \geq 0.05$ ).

According to Table 7, the father education level

variable did not make a statistically significant difference in the total and sub-dimension pre-post test scores of the participants ( $p \geq 0.05$ ).

According to Table 8, the variable of being disabled in their environment did not make a statistically significant difference in the total and sub-dimension pre-post test scores of the participants ( $p \geq 0.05$ ).

**Table 6.** Kruskal-Wallis H test results regarding the differentiation of the pre and post test scores of the participants' attitude scale for the education of disabled individuals by mother's education level.

	N	Pretest				Post-test				
		Rank average	Kruskal-Wallis H	df	p	Rank average	Kruskal-Wallis H	df	p	
Educational right	Primary school	37	33.92	0.957	3	0.812	33.47	1.977	3	0.577
	Secondary school	19	37.84				37			
	High school	10	37.55				41.95			
	License	5	41.3				39			

**Table 6.** Continues.

Dissemination of education	Primary school	37	37.99	4.742	3	0.192	36.07	3.369	3	0.338
	Secondary school	19	29.97				32.61			
	High school	10	35.05				41.9			
	License	5	46.1				36.6			
Belief regarding education results	Primary school	37	39.47	2.952	3	0.399	34.7	2.548	3	0.467
	Secondary school	19	34.18				39.71			
	High school	10	28.55				30.55			
	License	5	32.1				42.4			
Investment in special education area	Primary school	37	36.78	3.867	3	0.276	33.47	1.598	3	0.666
	Secondary school	19	33.84				39.58			
	High school	10	29.85				37.25			
	License	5	50.7				38.6			
Volunteer participation	Primary school	37	36.78	0.702	3	0.873	37.61	2.522	3	0.471
	Secondary school	19	33.21				34.82			
	High school	10	36.65				37.55			
	License	5	39.5				25.5			
Total score	Primary school	37	39.61	3.835	3	0.280	33.73	1.01	3	0.799
	Secondary school	19	31.37				38.66			
	High school	10	28.5				38.85			
	License	5	41.9				37			

**Table 7.** Kruskal-Wallis h test results regarding the differentiation of the pre and post test scores of the participants' attitude scale for the education of disabled individuals by father's education level.

	N	Pretest				Post-test				
		Rank average	Kruskal-Wallis H	df	p	Rank average	Kruskal-Wallis H	df	p	
Educational right	Primary school	37	33.92	0.957	3	0.812	33.47	1.977	3	0.577
	Secondary school	19	37.84				37			
	High school	10	37.55				41.95			
	License	5	41.3				39			



Table 7. Continues.

Dissemination of education	Primary school	37	37.99	4.742	3	0.192	36.07	3.369	3	0.338
	Secondary school	19	29.97				32.61			
	High school	10	35.05				41.9			
	License	5	46.1				36.6			
Belief regarding education results	Primary school	37	39.47	2.952	3	0.399	34.7	2.548	3	0.467
	Secondary school	19	34.18				39.71			
	High school	10	28.55				30.55			
	License	5	32.1				42.4			
Investment in special education area	Primary school	37	36.78	3.867	3	0.276	33.47	1.598	3	0.66
	Secondary school	19	33.84				39.58			
	High school	10	29.85				37.25			
	License	5	50.7				38.6			
Volunteer participation	Primary school	37	36.78	0.702	3	0.873	37.61	2.522	3	0.471
	Secondary school	19	33.21				34.82			
	High school	10	36.65				37.55			
	License	5	39.5				25.5			
Total score	Primary school	37	39.61	3.835	3	0.280	33.73	1.01	3	0.799
	Secondary school	19	31.37				38.66			
	High school	10	28.5				38.85			
	License	5	41.9				37			

Table 8. Mann-Whitney U test results regarding the differentiation of the pre and post test scores of the participants' attitude scale for the education of disabled individuals by their disability status.

	N	Pretest				Post-test				
		Rank average	Rank total	u	p	Rank average	Rank total	u	p	
Educational right	Available	28	38.02	1064.50	545.500	0.496	38.18	1069.00	541.000	0.415
	None	43	34.69	1491.50			34.58	1487.00		

Table 8. Continues.

Dissemination of education	Available	28	36.73	1028.50	581.500	0.768	33.05	925.50	519.500	0.123
	None	43	35.52	1527.50			37.92	1630.50		
Belief regarding education results	Available	28	41.29	1156.00	454.000	0.067	35.70	999.50	593.500	0.909
	None	43	32.56	1400.00			36.20	1556.50		
Investment in special education area	Available	28	32.75	917.00	511.000	0.273	34.46	965.00	559.000	0.566
	None	43	38.12	1639.00			37.00	1591.00		
Volunteer participation	Available	28	35.00	980.00	574.000	0.711	34.84	975.50	569.500	0.635
	None	43	36.65	1576.00			36.76	1580.50		
Total score	Available	28	37.11	1039.00	571.000	0.715	35.68	999.00	593.000	0.914
	None	43	35.28	1517.00			36.21	1557.00		

## DISCUSSION

When the arithmetic averages of the participants' Attitude Scale for the Education of Disabled Individuals and its sub-dimensions are compared, it is seen that there is a decrease in the sub-dimensions and total post-test scores of Right to Education, Dissemination of Education, Volunteer Participation, and an increase in the sub-dimensions of the scale's Investment in the Special Education Area of Belief regarding the Education Results. According to the results of the Wilcoxon signed-rank test, there was no statistically significant difference ( $p \geq 0.05$ ) between the pre-test and post-test mean rank scores of the participants regarding the scale and its sub-dimensions. When the relevant literature was researched, it was determined that there was no significant difference between the attitudes of the university students who participated in the study, which was titled "the effect of the education

program on the attitudes towards the disabled" in 2013 by Şahin and Güldenoğlu, according to the status of receiving education about the disabled. This situation shows similar results to our study. In their studies conducted by Ozyürek in 2013 and Sezer in 2012, they aimed to change the attitudes of high school students towards physically disabled individuals and in this study, students with and without disabilities with equal status worked in summer camp. As a result, it was observed that the attitudes of university students who had a disability or did not have a social interaction with those who did not have a disability before changed positively, and those who had a social interaction with those who had a disability for at least one year before continued to have a positive attitude towards the disabled individual. It has been stated that the interaction of disabled individuals with non-disabled individuals and their education in the same class sometimes have an effect on the positive change in attitudes towards

disabled people. These results differ from our study. Although the mean pretest and posttest scores obtained from our study were high, no statistically significant result was obtained. This is thought to be due to the fact that the training program given unlike other studies was carried out through zoom. It is thought that if the training program was conducted face-to-face and the teacher candidates were given the opportunity to work with disabled individuals during the training, the results might support other studies. Participants' attitude scale for the education of individuals with disabilities, and voluntary participation sub-dimension post-test scores were found to be statistically significant in favor of men according to gender ( $U = 387.50$ ,  $p < 0.05$ ). There was no statistically significant difference in the gender variable, the total and sub-dimension pre-test scores and the total and right to education of the scale, the dissemination of education, the belief in the results of education, and the post-test

scores of the investment sub-dimensions in the field of special education ( $p \geq 0.05$ ). Accordingly, although there was no difference in the volunteer participation pre-test scores of the participants according to gender, a statistically significant difference was found in the volunteer participation post-test scores in favor of women.

The attitude scale of the participants towards the education of disabled individuals was found to be statistically significant in favor of men according to gender (0.012,  $p < 0.05$ ). There was no statistically significant difference in the age variable, the total and sub-dimension pre-test scores and the total and right to education of the scale, the dissemination of education, the belief in the results of education and the post-test scores of the voluntary participation sub-dimensions ( $p \geq 0.05$ ). Accordingly, although there was no difference in the volunteer participation pre-test scores of the participants according to age, a statistically significant difference was found in favor of those aged 23 and over in the post-test scores of investment in the field of special education. When the relevant literature was researched, it was found that gender did not create an attitude difference among the students studying at the university (Kaner, 2000; Tervo et al., 2004; Özida, 2008). In some studies, it was observed that women's attitudes towards disabled people were higher than men and they were more willing to communicate with disabled individuals (Yıldırım and Dökmen, 2004; Avcıoğlu et al., 2005; Laws and Kelly, 2005; Nabors and Lehmkuhl, 2005; Meegan and MacPhail, 2006; Findler et al., 2007; Hergenrath and Rhodes, 2007). It is thought that the reason why these results obtained have different results from our study is due to the applied training program and that male participants are more professional than women in the education of disabled individuals.

There was no statistically significant difference between the variables of mother's education level, father's education level and being disabled in their environment, and the total and sub-dimension pre-post test scores of the participants ( $p \geq 0.05$ ). When the literature is examined, Vural et al. (2018) did not find a significant result in their study titled Exercise and sports education department students' attitudes towards disabled people, which supports our research, on the variables of parent education level, presence of any disabilities and presence of disabilities in their environment.

## Conclusion

As a result, although the mean scores of the pre-test and post-test results of the students studying in the department of physical education and sports teaching were high, no statistically significant results were found. It is thought that the training program can be changed as a result of face-to-face training and providing the opportunity for disabled individuals and teacher

candidates to do exercise practices. In order to contribute to the field, it is recommended that similar studies be conducted by increasing the application studies in the exercise training program.

## REFERENCES

- Altuntaş, E. A., Kul, M., and Karataş, İ. (2016).** The relationship between physical education teacher candidates' attitudes towards the teaching profession and their self-efficacy. *International Journal of Current Education Research*, 2(2): 196-215.
- Avcıoğlu, H., Sazak-Pınar, E., and Öztürk, T. (2005).** Investigation of teachers' and parents' attitudes towards inclusion applied in inclusive practices preschool education institutions. XIV. National Special Education Congress Proceedings Book pp. 69-89.
- Baio, J. (2014).** Prevalence of autism spectrum disorder among children aged 8 years-autism and developmental disabilities monitoring network. 11 sites, United States.
- Baykoç, N. (2017).** Children with special needs and special education. (4. Edition). Ankara: Eğiten Kitap.
- Demirci, P., Çınar, İ., and Demirci, N. (2014).** Examining the problems of classroom teachers arising from the physical education curriculum and inclusive education in students who need special education. *International Journal of Turkish Educational Sciences*, 2: 136-150.
- Eripek, S. (2003).** Placing children with disabilities in normal classrooms. *Anadolu University Faculty of Education Journal*, 1(2): 157-167.
- Ertürk, R. (2016).** Teachers' work motivation. *Journal of Educational Theory and Application Research*, 2(3): 1-15.
- Findler, L., Vilchinsky, N., Werner, S. (2007).** The multidimensional attitudes scale towards persons with disabilities (Mas): Construction and validation. *Rehabilitation Counseling Bulletin*, 50(2): 166-176.
- Firoz, H. (2016).** Attitude towards disabled people. *International Journal of Innovative Research and Development*, 5(5): 41-55.
- Hergenrath, K., and Rhodes, S. (2007).** Exploring undergraduate student attitudes towards persons with disabilities. Application of the Disability Social Relationship Scale. *Rehabilitation Bulletin*, 50(2): 66-75.
- Hollender, I. (2011).** The development and validation of a teacher efficacy for inclusion scale (Unpublished Doctoral Dissertation). The City University of New York. UMI Microform Number: 3443933.
- Kan, A. (2007).** Evaluation of teacher candidates in terms of scale development and teaching-teaching self-efficacy for teaching-teaching self-efficacy. *Mersin University Faculty of Education Journal*, 3(1): 35-50.
- Kaner, S. (2000).** The effect of the introductory course to special education on the attitudes of prospective teachers towards the mentally disabled. *Journal of Child Development and Education*, 1(1), 32-43.
- Karaca, P., Başgöl, Ş., Cangöl, E., Aslan, E., and Cangöl, S. (2016).** Opinions of the personnel working in special education and rehabilitation centers on the sexual education of disabled individuals. *Balıkesir Journal of Health Sciences ISSN: 2146-9601 e-ISSN:2147-2238*.
- Kosterioğlu, İ. (2013).** Development of attitude scale to educate disabled individuals. *Journal of Ahi Evran University Kirsehir Education Faculty*, 14(3): 211-226.
- Laws, G., and Kelly, E. (2005).** The attitudes and friendship intentions of children in the United Kingdom mainstream schools towards peers with physical or intellectual disabilities. *International Journal of Disability, Development and Education*, 52(2): 79-99.
- Meegan, S., and Macphail, A. (2006).** Irish physical educator's attitude towards teaching students with special educational needs. *European Physical Education Review*, 12(1): 75-97.
- Nabors, L., A., and Lehmkuhl, H. D. (2005).** Young adults' perceptions of children with cerebral palsy. *Rehabilitation Psychology*; 50(3): 292-296.
- Özida, M. (2008).** How does society understand disability? Ankara: Republic of Turkey Prime Ministry Disability Administration Publications.

- Özyürek, M. (2013).** Changing attitudes towards the disabled, Ankara: Kök Publishing, (4th Edition).
- Pehlivan, Z., Dönmez, B., and Yaşat, H. (2005).**The opinions of classroom teachers about physical education course. Gazi Journal of Physical Education and Sports Sciences, 3: 51-62.
- Sezer, F. (2012).** Preventive guidance study to develop a positive attitude towards disabled individuals is an experimental practice. E-Journal of New World Science Academy, S:7 (1).
- Şahin, F., and Güldenöğlü, B. (2013).** The effect of the training program on the disabled on the attitudes towards the disabled. Amasya University Faculty of Education Journal, S: 2 (1).
- Tervo, R.C., Palmer, G., and Redinius, P. (2004).** Health professional student attitudes towards persons with disability. Clinical Rehabilitation; 18: 908-915.
- Vural, M., Esentaş, M., and Işıkgöz, M. E. (2018).** Examining the attitudes of the students of the department of exercise and sports education towards the disabled. CBU Journal of Physical Education and Sports Sciences, 13(1).
- Yıldırım, F., and Dökmen, Z. Y. (2004).** Relationships between attitudes towards disabled people and social superiority orientation, fair world belief and locus of control belief. 6. National Social Services Conference on Globalization, Social Justice and Social Services (pp. 180-195). Ankara: Social Workers Association Headquarters Publication No:9.

---

**Citation:** Yıldırım, Z. (2022). Determination of the attitudes of university students who receive training on disabilities and non-exercise towards the education and inclusion of disabled individuals. African Educational Research Journal, 10(1): S15-S26.

---