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

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#### **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 Bartin 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≥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.

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#### 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 wellequipped 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 Bartin 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 Could 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 Likerttype 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 ( $p \ge 0.05$ ) 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	%
	Female	36	50.70
Gender	Male	35	49.30
	Total	71	100.00
	20	10	14.08
	21	25	35.21
Age	22	17	23.94
	23 and above	19	26.76
	Total	71	100.00
	Primary school	37	52.11
	Secondary school	19	26.76
Educational level of mother	High school	10	14.08
	Undergraduate and Postgraduate	5	7.05
	Total	71	100.00
	Primary school	26	36.62
	Secondary school	20	28.17
Educational level of father	High school	17	23.94
	Undergraduate and Postgraduate	8	11.27
	Total	71	100.00
	Low	5	7.04
Family income level	Average	58	81.69
rainily income level	High	8	11.27
	Total	71	100.00
	Available	6	8.45
Family disability status	None	65	91.50
	Total	71	100.00
	Available	28	39.44
Status of disability in the environment	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 deviation dimensions	ons of	scale	and sub-	Wilcoxon signed ranks test									
	n	Mean	SS			N	Rank average	Rank total	z	Р			
Right to education pretest	71	20.37	5.57	Pretest- Posttest	Negative Rank (-)	26ª	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					
					Neutral (=)	14 <sup>c</sup>							
Dissemination of education pretest	71	5.97	4.42	Pretest- Posttest	Negative Rank (-)	<b>7</b> <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					
					Neutral (=)	43 <sup>f</sup>							
Belief regarding education results pretest	71	15.52	4.88	Pretest-	Negative Rank (-)	<b>29</b> <sup>g</sup>	24.38	707.00	672 <sup>b</sup>	0.501			
				Posttest	.,				072	0.501			
Belief regarding education results posttest	71	16.07	4.89		Positive Rank (+)	21 <sup>h</sup>	27.05	568.00					
					Neutral (=)	21 <sup>i</sup>							
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					
					Neutral (=)	16 <sup>l</sup>							
Volunteer participation pretest	71	3.35	2.26	Pretest-	Negative Rank (-)	14 <sup>m</sup>	19.75	276.50	892 <sup>b</sup>	0.372			
	71	2.10	2.15	Posttest	.,	<b>22</b> n	17.70	200 50					
Volunteer participation posttest	/ 1	3.10	2.10		Positive Rank (+) Neutral (=)	22 <sup>n</sup> 35 <sup>o</sup>	17.70	389.50					
					iveuiiai (=)	30°							
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					
					Neutral (=)	5 <sup>r</sup>							

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		
		IN	Rank average	Rank total	u	р	Rank average	Rank total	u	р
Educational right	Female	36	38.81	1397	F20	0.224	36.07	1298.5	627.50	0.074
Educational right	Male	35	33.11	1159	529	0.234	35.93	1257.5	627.50	0.974
Disconsistation of advantage	Female	36	35.44	1276	04.0	0.770	33.44	1204	500	0.000
Dissemination of education	Male	35	36.57	1280	610	0.779	38.63	1352	538	0.093
D.P. Communication of the state	Female	36	38.56	1388	500	0.000	34.85	1254.5	500.50	0.504
Belief regarding education results	Male	35	33.37	1168	538	0.266	37.19	1301.5	588.50	0.584
love the set in second ledes the	Female	36	40.29	1450.50	475 50	0.000	34.35	1236.5	570.50	0.400
Investment in special education area	Male	35	31.59	1105.50	475.50	0.069	37.7	1319.5	570.50	0.438
National and anti-direction	Female	36	32.94	1186	500	0.455	29.26	1053.5	207.52	0.004
Volunteer participation	Male	35	39.14	1370	520	0.155	42.93	1502.5	387.50	0.001
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.

		NI NI		Pretest				Post-test		
		N	Rank average	Kruskal-Wallis H	df	р	Rank average	Kruskal-Wallis H	df	р
	20	10	28.40				37.45			
Educational right	21	25	31.44	0.500	2	0.017	30.40	5.766	3	0.424
Educational right	22	17	32.00	0.509	3	0.917	35.18	5.700	3	0.124
	23 and above	10	33.90				22.05			
	20	10	33.20				29.70			
Dissemination of	21	25	31.12	1.910	0	0.504	29.56	4.217	0	0.220
education	22	17	28.29	1.910	3	0.591	36.18		3	0.239
	23 and above	10	36.20				30.20			
Belief regarding education	20	10	28.35	0.555	2	0.907	32.60	1.419	3	0.701
results	21	25	32.88	0.555	3	0.907	31.30	1.419	3	0.701

Table 5. Continues.

		4-	00.70				22.52			
	22	17	30.79				28.59			
	23 and above	10	32.40				35.85			
	20	10	36.00				19.45			0.012
Investment in special	21	25	29.06	1.215	2	0.740	37.10	10.006	2	0.012
education area	22	17	32.68	1.215	3	0.749	27.56	10.886	3	(23 and>
	(23 and>	10	31.10				36.25			20, 21, 22)
	20	10	26.90				31.25			
Volunteer participation	21	25	30.62	1.624	3	0.654	30.92	0.400	2	0.001
volunteer participation	22	17	34.53	1.024		0.654	31.88	0.108	3	0.991
	(23 and>	10	33.15				32.55			
	20	10	29.30				29.05			
Tatalasana	21	25	30.76	0.407	0	0.000	31.76	0.044	0	0.074
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 ( $p \ge 0.05$ ).

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 ( $p \ge 0.05$ ).

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 ( $p \ge 0.05$ ).

**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.

		NI		Pretest		Post-test				
		IN	Rank average	Kruskal-Wallis H	df	р	Rank average	Kruskal-Wallis H	df	р
	Primary school	37	33.92				33.47			
Educational right	Secondary school	19	37.84	0.957	3	0.040	37	4.077	2	0.577
	High school	10	37.55			0.812	41.95	1.977		0.577
	License	5	41.3				39			

Table 6. Continues.

	Primary school	37	37.99				36.07			
Discouring time of a description	Secondary school	19	29.97	4.740	0	0.400	32.61	0.000	•	0.000
Dissemination of education	High school	10	35.05	4.742	3	0.192	41.9	3.369	3	0.338
	License	5	46.1				36.6			
	Primary school	37	39.47				34.7			
5.04	Secondary school	19	34.18	0.050		0.000	39.71	0.540	•	0.407
Belief regarding education results	High school	10	28.55	2.952	3	0.399	30.55	2.548	3	0.467
	License	5	32.1				42.4			
	Primary school	37	36.78				33.47			
Investment in special education area	Secondary school	19	33.84	0.007	•	0.070	39.58	4.500	•	0.000
	High school	10	29.85	3.867	3	0.276	37.25	1.598	3	0.666
	License	5	50.7				38.6			
	Primary school	37	36.78				37.61			
Valuate an acuticipation	Secondary school	19	33.21	0.700	2	0.070	34.82	0.500	_	0.474
Volunteer participation	High school	10	36.65	0.702	3	0.873	37.55	2.522	3	0.471
	License	5	39.5				25.5			
	Primary school	37	39.61				33.73			
Total score	Secondary school	19	31.37	0.005		0.000	38.66	4.04	_	0.700
	High school	10	28.5	3.835	35 3	0.280	38.85	1.01	3	0.799
	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				
		N	Rank average	Kruskal-Wallis H	df	р	Rank average	Kruskal-Wallis H	df	р
	Primary school	37	33.92				33.47			
Educational right	Secondary school	19	37.84	0.957	•	0.040	37	4.077	•	0.577
	High school	10	37.55		3	0.812	41.95	1.977	3	0.577
	License	5	41.3				39			

Table 7. Continues.

	Primary school	37	37.99				36.07			
Dissemination of education	Secondary school	19	29.97	4.742	3	0.192	32.61	3.369	3	0.338
Dissernination of education	High school	10	35.05	4.742	3	0.192	41.9	3.309	3	0.336
	License	5	46.1				36.6			
	Primary school	37	39.47				34.7			
Deliaf regarding advection regular	Secondary school	19	34.18	2.952	2	0.200	39.71	2.540	2	0.407
Belief regarding education results	High school	10	28.55	2.952	3	0.399	30.55	2.548	3	0.467
	License	5	32.1				42.4			
	Primary school	37	36.78				33.47			
Investment in special education area	Secondary school	19	33.84	0.007	0	0.070	39.58	4.500	•	0.00
	High school	10	29.85	3.867	3	0.276	37.25	1.598	3	0.66
	License	5	50.7				38.6			
	Primary school	37	36.78				37.61			
William and the first	Secondary school	19	33.21	0.700	•	0.070	34.82	0.500	•	0.474
Volunteer participation	High school	10	36.65	0.702	3	0.873	37.55	2.522	3	0.471
	License	5	39.5				25.5			
	Primary school	37	39.61				33.73			
Total score	Secondary school	19	31.37	0.005	•	0.280	38.66	4.04	•	0.700
	High school	10	28.5	3.835	3		38.85	1.01	3	0.799
	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					
		IN	Rank average	Rank total	u	р	Rank average	Rank total	u	р	
Educational right	Available	28	38.02	1064.50	E4E E00	0.406	38.18	1069.00	541.000	0.415	
Educational right	None	43	34.69	1491.50	545.500	0.496	34.58	1487.00	341.000	0.415	

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	0011000	0.7.00	37.92	1630.50	0.0.00		
	Available	28	41.29	1156.00			35.70	999.50			
Belief regarding education results	None	43	32.56	1400.00	454.000	0.067	36.20	1556.50	593.500	0.909	
		.0	32.30	30.00			33.20	.000.00			
	Available	28	32.75	917.00	E44 000	0.070	34.46	965.00	FF0 000	0.500	
Investment in special education area	None	43	38.12	1639.00	511.000	0.273	37.00	1591.00	559.000	0.566	
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	3	J	36.76	1580.50	300.000	5.555	
	A	00	07.44	4000.00			05.00	000.00			
Total score	Available	28	37.11	1039.00	571.000	0.715	35.68	999.00	593.000	0.914	
Total Score	None	43	35.28	1517.00	5/1.000	5/1.000 0./15 	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 subdimensions and total post-test scores of Right to Education, Dissemination of Education, Volunteer Participation, and an increase in the subdimensions 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 ≥ 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 pretest 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 ≥ 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; Hergenrather 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.

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