



Empathic Tendencies and Attitudes Toward People with Disabilities in Healthy Developing Children and Their Relationship Between Empathic Tendencies of Parents

Normal Gelişim Gösteren Çocukların Empatik Eğilimleri ve Engellilere Yönelik Tutumlarının Ebeveynlerinin Empatik Eğilimleri ile İlişkisi

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ABSTRACT

Objective: This study was conducted to investigate empathic tendencies and attitudes toward people with disabilities in healthy developing children and the relationship between their parents' empathic tendencies.

Methods: Fifty-fourth grade primary school students and their parents were included in this study. KA-SI Empathic Tendency Scale-Child Form (KA-SI), Chedoke-Mcmaster Attitudes Towards Children with Handicaps Scale and Empathetic Tendency Scale (ETS) for parents were used.

Results: When the total scores were considered, there was a moderate correlation between children's empathic tendencies and attitudes towards the disabled ($r=0.594$; $p<0.0001$). Any correlation was not observed among the empathic tendencies of parents and children's empathic tendencies and attitudes towards the disabled ($r=0.263$ and $r=0.270$; $p>0.05$, respectively). Parents with a college degree had a higher level of empathy in their children ($p<0.05$).

Conclusion: In this study, which examined the empathic tendencies of normally developed children and their attitudes towards the disabled and their relationship with the empathic tendencies of their parents, it was concluded that the increase in empathic tendencies of children supported their attitudes towards the disabled in a moderately positive way. The relationship between the level of education of parents and the increase in empathic tendencies of children may indicate the importance of education in this regard. Ensuring the development of children in terms of empathy and

ÖZ

Amaç: Bu araştırma normal gelişim gösteren çocukların empatik eğilimleri ve engellilere yönelik tutumları ile ebeveynlerin empatik eğilimleri arasındaki ilişkinin incelenmesi amacıyla yapılmıştır.

Yöntemler: Çalışmaya ilköğretim 4. sınıfta eğitim gören 50 öğrenci ve ebeveynleri dahil edildi. Çalışmada; KA-SI Empatik Eğilim Ölçeği-Çocuk Formu (KA-SI), çocukların engellilere yönelik tutumlarının değerlendirildiği Chedoke-Mcmaster Engelli Çocuklara Yönelik Tutumlar Ölçeği ve ebeveynlere yönelik Empatik Eğilim Ölçeği (EEÖ) kullanıldı.

Bulgular: Toplam puanlar dikkate alındığında çocukların empatik eğilimleri ile engellilere yönelik tutumları arasında orta düzeyde ilişki bulunmuştur ($r=0,594$; $p<0,0001$). Ebeveynlerin empatik eğilimleri ile çocukların empatik eğilimleri ve engellilere yönelik tutumları arasındaki bağıntı bulunmadı (sırasıyla; $r=0,263$ ve $r=0,270$; $p>0,05$). Üniversite mezunu olan ebeveynlerin çocuklarında empati düzeyinin daha fazla olduğu görüldü ($p<0,05$).

Sonuç: Normal gelişim gösteren çocukların empatik eğilimleri ve engellilere yönelik tutumlarının, ebeveynlerinin empatik eğilimleri ile ilişkisinin incelendiği bu çalışmada çocukların empatik eğilimlerindeki artmanın engellilere yönelik tutumlarını orta düzeyde olumlu yönde desteklediği sonucuna varılmıştır. Ebeveynlerin eğitim düzeyinin artması ile çocukların empatik eğilimlerindeki artış eğitimin bu konudaki önemini işaret edebilir. Çocukların empati ve olumlu tutum açısından gelişimlerinin

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positive attitudes and improving the education levels of parents can support the participation of people with disabilities into life by supporting positive attitudes towards them.

Keywords: Empathic tendency, attitude towards the disabled, social participation, occupational therapy

sağlanması ve ebeveynlerin eğitim düzeylerinin ilerlemesi engelli bireylere karşı tutumları olumlu yönde destekleyerek yaşama katılımlarını destekleyebilir.

Anahtar Sözcükler: Empatik eğilim, engellilere yönelik tutum, toplumsal katılım, ergoterapi

Introduction

Human, who is a social and social being, tends to communicate and interact with the people around him/her. Empathy, which is one of the most basic conditions of establishing a healthy relationship with other people and which is at the base of social skills, is defined as the potential of an individual to understand the other person in human relations (1). It is accepted that empathy skills, the first clues of which date back to infancy, are formed with mechanisms that begin to function at birth and with a biological tendency, and develop in the process as in other developmental areas. In this development, the attitudes of parents, who are the first persons with whom children experience communication, and the environmental factors with which they interact have an important place (2). The empathy skills of the parents in the child's life and the level of these skills are highly related to the development of the children's empathy skills, and it has been stated that if the parents' empathy skills are low, their children's empathy skills are also low (3). As a result of the studies, it has been determined that the ability to empathize prevents communication conflicts and enables the establishment of more positive relationships, increases social sensitivity, adaptation to society, cooperation and other prosocial behaviors, has a reducing effect on aggression and other antisocial behaviors, and increases the academic success of children (4).

Disability is defined as the restriction or inability to fulfill the roles expected from the person, depending on age, gender, social and cultural factors, caused by a disease, accident or loss of function that can occur from birth or may occur during the life process of the person (5,6). Attitudes, on the other hand, are the tendencies that are not observed but assumed to lead to certain behaviors that can be observed (7,8). Attitudes of people with normal development towards disabled people are determinative for disabled people to lead their lives in harmony with society. Negative attitudes create real obstacles for people with disabilities to fulfill their roles and achieve their life goals. For this reason, it is important for social participation and integration to determine the attitudes of individuals with normal development towards the disabled and to change the negative attitudes towards the disabled (7).

It is important for children to develop a positive attitude towards the differences in their environment in the early period, in terms of respecting the differences and developing their empathy skills (9). Children quickly grasp what they experience and see in early childhood, and they also form their own identities, attitudes and perceptions by taking the adults around them as role models (10). Therefore, while adults' awareness of disabled people, knowing their rights and accepting them with their differences, affect

social cohesion positively, it can make it easier for the children of these adults to adopt similar social acceptance attitudes (11).

Social participation is expressed as being a part of family and social life, fulfilling roles and responsibilities, and being an active and participatory member of society (12). As a result of the literature research, it has been stated that participation in society is one of the areas where disabled people have the most difficulty and that most of the problems they experience in participation in society are caused by people's negative attitudes. Examining the attitude of the child, who is the most basic part of the society and the most open to change, towards the disabled, within the framework of his/her own empathic tendencies, will enable to make changes at the level of the individual, family and society and to draw a more effective way in intervention programs.

This research was conducted to examine the relationship between the empathic tendencies of normally developing children and their attitudes towards the disabled, and the empathic tendencies of parents. In addition, the relationship between children's attitudes towards the disabled and their empathic tendencies, the relationship between the empathic tendencies and education level of the parents and the children's empathic tendencies and attitudes towards the disabled were also investigated. Thus, it was aimed to understand whether there was a need for the development of these tendencies and attitudes in children and to shed light on the areas of intervention if needed.

Methods

The study was carried out in Tiryaki Hasanpaşa Primary School in Bağcılar district of İstanbul province between February and June 2020. The ethics committee approval required for the study was obtained from the Bezmialem Vakıf University Non-Interventional Clinical Research Ethics Committee with the decision number 01/20. Fifty children, who were 4th grade primary school students and who were not diagnosed as having any developmental disorder, and their parents, who were most interested in their development since birth, were included in the study. Written consent was obtained from the participants. The data collection tools used in the study are listed below:

Sociodemographic Data Form for Families

This form was developed by the researchers to determine the sociodemographic characteristics of the participants. With this form, demographic data that defined the child and family, educational status of family members, occupation, average monthly income, the neighborhood they lived in, and whether there was a disabled person in the family or in the environment were questioned.

Empathic Tendency Scale (ETS)

It was developed by Dökmen (13) in 1988 to measure the tendency of people to empathize in their daily life. The scale consists of twenty items, and some items also include negative questions in order to prevent individuals' tendency to answer "yes" all the time. In the items in the form, a five-point Likert-type scale is used as "(1) Completely contrary, (2) Quite contrary, (3) Undecided, (4) Quite agreeable, (5) Completely appropriate". Negative questions are items 3, 6, 7, 8, 11, 12, 13 and 15 and are scored reversely. The highest score that can be obtained from the scale is 100 and the lowest score is 20. A high score means that the tendency to empathize is high, and a low score means that the tendency to empathize is low (13).

The Sociodemographic Data Form for Families and EES were sent to the families through their children and they were asked to be filled out by the parents who were most interested in the development of the children since their birth.

KA-SI Empathic Tendency Scale-Child Form (KA-SI)

It was developed by Kaya and Siyez (1) in 2010 to determine the empathy tendency levels of children. It consists of thirteen items. It was shown to be valid and reliable in a study conducted on primary school students in Turkey. The questions in the form are evaluated with a four-point Likert-type scale: "(1) Not at all suitable for me, (2) Somewhat suitable for me, (3) Quite suitable for me, and (4) Completely suitable for me". The scale has two sub-dimensions that measure emotional and cognitive empathy. The lowest score to be obtained from the emotional empathy sub-dimension is 7, the highest score is 28. The lowest score to be obtained from the cognitive empathy sub-dimension is 6 and the highest score is 24. Thus, the total empathic disposition score is the lowest 13 and the highest 52. An increase in the score obtained from the scale indicates that the empathic tendency of the child increases (1).

Chedoke-Mcmaster Attitudes Towards Children with Handicaps Scale (CATCH)

It was developed by Rosenbaum et al. in 1986 to measure the attitudes of primary school children towards their disabled peers. Çiçek and Önel showed that the Turkish version of the scale was valid and reliable in the 9-13 age group. The response style of the scale was arranged in a 5-point structure as "(0) I strongly disagree, (1) I disagree, (2) I am undecided, (3) I agree, (4) I strongly agree". The scale consists of positive and negative statements. Items with negative expressions are scored inversely. A high score in each negative statement indicates that the child's attitude on this issue is negative. The highest score that can be obtained from the scale is 124. Higher scores support positive attitudes towards children with disabilities (14).

The KA-SI Empathic Tendency Scale-Child Form and the Chedoke-Mcmaster Attitudes Towards Children with Handicaps Scale were filled in by the children participating in the study under the supervision of the researcher in the classroom.

Statistical Analysis

For statistical analysis, version 26.0 of the Windows-based SPSS (Statistical Package for the Social Sciences) analysis program was

used. Significance level was accepted as $p < 0.05$. Mean \pm standard deviation was used for the variables determined by measurement, and the percentage value was calculated for the variables determined by counting. Correlation analysis was performed to evaluate the relationships between the variables. Pearson correlation coefficient was calculated in correlation analysis since the data were suitable for normal distribution. The correlation coefficient values between 0.3-0.4 indicate a weak correlation, between 0.4-0.6 moderate, between 0.6-0.7 high, between 0.7-0.75 very high, and >0.75 perfect correlation (15). Independent groups t-test was used to test the difference between the means of the same variables in two different groups, and one-way ANOVA test was used to compare three or more groups.

Results

Fifty normally developing children and their parents were included in our study. Of the children, 58% were girls, 42% were boys, and the mean age was 9.94 ± 0.31 years. Of the parents who completed the ETS, 72% were females and 28% were males. It was observed that the number of children who did not have a disabled person in their family or around was higher than the children who did. The most common education level among parents was primary school graduation (Table 1). The mean, standard deviation and minimum-maximum values of the scales are presented in Table 2.

In general, it was seen that there was a moderate ($r=0.594$; $p < 0.0001$) positive correlation between the total scores of the KA-SI, which measured the empathic tendency in children, and the CATCH scales, which evaluated the attitude towards

Table 1. Distribution of children participating in the study by demographic features

		n	%
Gender	Female	29	58
	Male	21	42
Presence of disabled individuals in the family or in the environment	Yes	18	36
	No	32	64
Mother's education status	Illiterate	3	6
	Primary school	20	40
	Middle School	10	20
	High school	7	14
Father's education status	University	10	20
	Primary school	16	32
	Middle School	11	22
	High school	13	26
Total	University	10	20
		50	100
	X \pm SD	Min-Max	
Age (years)	9.94 \pm 0.313	9-11	

n: Number of participants, X: Arithmetic mean, SD: Standard deviation, min: Minimum, max: Maximum

disabled children. The correlation of the “emotional empathy” dimension of the KA-SI scale with the CATCH scale total score ($r=0.618$; $p<0.0001$) was higher than the “cognitive empathy” dimension ($r=0.475$; $p<0.0001$). The “emotional empathy” dimension of the KA-SI scale showed a stronger correlation with the “avoidance” and “similarity” dimensions compared to the other dimensions of the CATCH scale ($r=0.544$; $p<0.0001$ and $r=0.517$; $p<0.0001$, respectively) seen. No correlation was found between the “cognitive empathy” dimension of the KA-SI scale

and the “pity” and “similarity” dimensions of the CATCH scale ($r=0.231$; $p>0.05$ and $r=0.163$; $p>0.05$, respectively) (Table 3).

No correlation was found between the ETS, which measured empathic tendency in adults, and the total scores of the KA-SI and CATCH scales ($r=0.263$; $p>0.05$ and $r=0.270$; $p>0.05$, respectively) (Table 4).

When the children’s empathy and attitudes towards the disabled were compared according to their gender, no statistically significant difference was found between boys and girls ($p>0.05$) (Table 5 and Table 6).

When children’s empathic tendencies were compared with reference to the education level of their parents, it was observed that the cognitive and emotional empathy levels of children were higher in families with higher education levels compared to families with lower education levels (Table 7 and Table 8).

When the children’s attitudes towards the disabled were compared based on whether there was a disabled person in the family or in the environment, it was observed that there was no significant difference between the groups in terms of both sub-components and total scores ($p=0.836$) (Table 9).

Discussion

The main purpose of this study was to examine the relationship between the empathic tendencies of normally developing children and their attitudes towards the disabled, and the empathic tendencies of parents. While there was a moderate correlation between the children’s empathic tendencies and their attitudes towards the disabled, it was found that there was no correlation between the empathic tendencies of the parents and the empathic tendencies of the children and their attitudes towards the disabled.

Table 2. KA-SI, CATCH and ETS values (n=50)

Assessment parameters		X ± SD	Min-max
KA-SI Empathic Tendency Scale for Children (KA-SI)	Cognitive empathy	19.18±3.67	10-24
	Emotional empathy	22.26±3.94	13-28
	Total	41.44±7.05	26-52
Chedoke-Mcmaster Attitudes Towards Children with Handicaps Scale (CATCH)	Interaction and acceptance	28.70±6.63	13-38
	Avoidance	31.82± 6.33	14-40
	Pity	6.10±37.75	0-20
	Sense of affinity	13.14±34.70	4-20
	Total	79.76±14.16	46-105
Empathic Tendency Scale for Adults (ETS)		71.18±8.09	51-88

n: Number of participants, X: Arithmetic mean, SD: Standard deviation, min: Minimum, max: Maximum

Table 3. Relationship between KA-SI and CATCH subparameters

		1	2	3	4	5	6	7	8
1. KA-SI cognitive empathy	r	1	0.709	0.919	0.350*	0.469**	0.231	0.163	0.475**
	p		0.000	0.000	0.013	0.001	0.107	0.259	0.000
2. KA-SI emotional empathy	r			0.930	0.492**	0.544**	0.064	0.517**	0.618***
	p			0.000	0.000	0.000	0.659	0.000	0.000
3. KA-SI total	r				0.458**	0.549**	0.156	0.374	0.594**
	p				0.001	0.000	0.279	0.007	0.000
4. CATCH interaction and acceptance	r					0.555	0.082	0.359	0.827
	p					0.000	0.572	0.010	0.000
5. CATCH avoidance	r						0.188	0.327	0.838
	p						0.190	0.020	0.000
6. CATCH pity	r							-0.021	0.384
	p							0.883	0.006
7. CATCH sense of affinity	r								0.554
	p								0.000
8. CATCH total	r								1
	p								

p: Significance level, r: Correlation coefficient, $p<0.05$
 *: Weak moderate correlation, **: Moderate correlation, ***: Good correlation

Empathy is a key element of communication, interaction, problem solving, acceptance of differences and tolerance. The dimensions of empathy, acceptance of differences and tolerance may come to the fore in interacting with people with disabilities. High empathic tendency can provide positive support for the attitudes people develop towards each other. As the level of empathy increases, the potential to cause positive changes in one's behavior increases (16). On the contrary, it has been shown that individuals with negative attitudes are less likely to approach other people empathetically (17). When the current literature is examined, it is seen that the number of research reports examining the empathic tendencies of normally developing children and their attitudes towards the disabled is quite limited. A few studies

conducted examine attitudes towards mainstreaming students. In one of these studies, it was found that there was a significant relationship between the attitudes of normally developing primary school students towards mainstreaming students and their level of empathic tendency (18). In the study conducted by Armstrong et al. (19) on the interaction of students between the ages of 7 and 16 with disabled people, it was found that high empathic tendency mediated the development of positive attitudes. The results of this study also showed that as the empathy levels of the students increased, their attitudes towards disabled individuals also changed positively. This finding supports the relevant literature in terms of enabling children with high empathy skills to develop a positive attitude towards people with disabilities. When examined in terms of sub-parameters of empathic tendency, children's "cognitive empathy" scores were higher than their "emotional empathy" scores and when examined in terms of the sub-parameters of the attitude towards the disabled, it was observed that the "pity" sub-parameter had the lowest average compared to the other sub-parameters. Emotional empathy forms a basis for the development of empathy in early childhood and is defined as the need to share the same feelings with the other person and help with a feeling of compassion. Cognitive empathy, on the other hand, refers to the ability to understand the experience of another by placing oneself in another's situation, and it is observed in parallel with the increase in brain development in school-age children (20). The fact that the students participating in our study were at primary school

Table 4. The relationship between ETS and KA-SI and CATCH

		1	2	3
1. ETS	r	1	0.263	0.270
	p		0.066	0.058
2. KA-SI total	r			0.594
	p			0.000
3. CATCH total	r			1
	p			

p: Significance level, r: Correlation coefficient, p<0.05

Table 5. Comparison of the KA-SI scores of the children participating in the study by gender

Factor	Group	n	X	SD	t	p
KA-SI cognitive empathy	Female	29	20.00	3.52	1.88	0.066
	Male	21	18.04	3.66		
KA-SI emotional empathy	Female	29	22.75	3.72	1.03	0.309
	Male	21	21.57	4.22		
KA-SI total	Female	29	42.75	6.66	1.55	0.128
	Male	21	39.61	7.31		

Independent Samples t test, p<0.05
n: Number of participants, X: Arithmetic mean, SD: Standard deviation, t: t score, p: Significance level

Table 6. Comparison of the CATCH scores of the children participating in the study by gender

Factor	Group	n	X	SD	t	p
CATCH interaction and acceptance	Female	29	29.06	6.78	0.461	0.647
	Male	21	28.19	6.55		
CATCH avoidance	Female	29	33.06	5.79	1.62	0.112
	Male	21	30.09	6.77		
CATCH pity	Female	29	6.48	3.91	0.851	0.399
	Male	21	5.57	3.59		
CATCH sense of affinity	Female	29	12.75	3.65	-0.931	0.357
	Male	21	13.66	3.21		
CATCH total	Female	29	81.37	14.9	0.957	0.343
	Male	21	77.52	13.7		

Independent Samples t test, p<0.05
n: Number of participants, X: Arithmetic mean, SD: Standard deviation, t: t score, p: Significance level

Table 7. Comparison of the KA-SI scores of the children participating in the study according to the education level of their mothers

Factor	Group	n	X	SD	F	p	Tukey HSD
KA-SI cognitive empathy	1	3	16.00	1.00	5.60	0.001	5>1
	2	20	18.00	3.78			5>2
	3	10	18.10	3.69			5>3
	4	7	20.00	2.51			
	5	10	23.00	0.942			
KA-SI emotional empathy	1	3	21.00	2.00	3.36	0.017	5>2
	2	20	21.35	4.40			5>3
	3	10	20.60	3.77			
	4	7	22.71	2.98			
	5	10	25.80	1.81			
KA-SI total	1	3	37.00	2.64	5.24	0.001	5>1
	2	20	39.35	7.56			5>2
	3	10	38.70	6.81			5>3
	4	7	42.71	3.98			
	5	10	48.80	2.29			

One-Way Anova Test, p<0.05, n: Number of participants, X: Arithmetic mean, SD: Standard deviation, F: F value, p: Significance level
 1: Illiterate, 2: Primary School, 3: Middle School, 4: High School, 5: University

Table 8. Comparison of the KA-SI scores of the children participating in the study according to the educational status of their fathers

Factor	Group	n	X	SD	F	p	Tukey HSD
KA-SI cognitive empathy	1	-	-	-	6.32	0.001	
	2	16	18.31	3.59			5 > 2
	3	11	16.90	3.83			5 > 3
	4	13	19.46	3.15			
	5	10	22.70	1.05			
KA-SI emotional empathy	1	-	-	-	3.08	0.036	
	2	16	21.00	4.09			5 > 2
	3	11	21.09	4.72			
	4	13	22.53	3.23			
	5	10	25.20	1.98			
KA-SI total	1	-	-	-	5.27	0.003	
	2	16	39.31	7.17			5 > 2
	3	11	38.00	7.82			5 > 3
	4	13	42.00	5.52			
	5	10	47.90	2.64			

One-Way Anova test, p<0.05, n: Number of participants, X: Arithmetic mean, SD: Standard deviation, F: F value, p: Significance level
 1: Illiterate, 2: Primary school, 3: Middle school, 4: High school, 5: University

level and had higher cognitive empathy scores were consistent with the empathy development steps defined in the literature.

The development of empathy in children has some age-related features. The average age of the students participating in the study was found to be about 10 years. It has been shown that children between the ages of 10 and 12 are able to direct their empathy towards people they do not know and start to think about social problems (21). This point in the development of

empathy can also change children’s attitudes towards people with disabilities.

In this study, a moderate correlation was observed between the sub-dimensions of “emotional empathy” and “avoidance” and “sense of affinity”, which were the sub-parameters of the scale that evaluated the attitude towards the disabled. It is thought that this result is due to the fact that the questions in the dimensions of “avoidance” and “sense of affinity” in the attitude

Table 9. Comparison of the CATCH scores of the children participating in the study according to the presence of a disabled person in the family or in the environment

Factor	Group	n	X	SD	t	p
CATCH interaction and acceptance	Yes	18	27.88	7.52	-0.609	0.547
	No	32	29.15	6.16		
CATCH avoidance	Yes	18	32.16	6.93	0.277	0.784
	No	32	31.62	6.08		
CATCH pity	Yes	18	5.38	3.38	-1.04	0.302
	No	32	6.50	3.97		
CATCH sense of affinity	Yes	18	13.72	3.61	0.873	0.389
	No	32	12.81	3.40		
CATCH total	Yes	18	79.16	16.00	-0.209	0.836
	No	32	80.09	13.27		

Independent Samples t test, p<0.05

n: Number of participants, X: Arithmetic mean, SD: Standard deviation, t: t score, p: Significance level

scale towards the disabled, in accordance with the definition of emotional empathy as stated in the literature, include more emotional expressions and questions about the feelings of the other party (22).

It is natural to expect empathetic parents to better read their children's emotional cues and to be more motivated to be sensitive and understanding under conditions that facilitate their children's empathy development. However, current studies examining the relationship between parents' and their children's empathic tendency are limited. According to Köksal (23), there are individual differences in children's reactions to other people's emotional states, and individual differences can be influenced by the mother, father, and other individuals in the immediate environment that children take as models for themselves. However, in some studies, it has been stated that there is no direct relationship between the empathic skills of children and the empathic skills of their parents. In a meta-analysis by Strayer and Roberts (24), including previous studies, it was stated that although mothers reported significantly higher levels of empathy than fathers, there was no correlation between the empathy of neither mothers' nor fathers' and children's empathy contrary to what was theoretically expected. In this study, no statistically significant relationship was found between the empathic tendencies of the parents and the empathic tendencies of the children and their attitudes towards the disabled. Current studies examining the relationship between children's and their parents' empathic tendencies are rare in the literature. For this reason, we think that our study will support the literature in new researches in this field.

When the empathic tendencies of the children participating in the study were compared according to their genders, it was observed that girls had higher averages in cognitive, emotional and total empathy values compared to boys; this difference was not statistically significant. When the studies examining the differences of empathic tendency on gender in children are examined in the literature, there are studies reporting that

empathic tendency is higher in girls than boys. According to the results of Yüksel's (25) research that included children in the fifth grade of primary education, it was stated that the empathy level of female students was higher than that of male students. In another study, which examined the development of empathy according to gender as one of the research aims, and in which the average age of children was 11, it was reported that girls were more empathetic than their male peers, especially in terms of cognitive empathy (26). Kahraman and Akgün (27), who reached similar findings with our study, showed that there was no relationship between gender and empathic skills in their study in which they examined the effect of empathy skills training on empathy skills and problematic behaviors of school-age children.

In our study, when comparing children's attitudes towards the disabled by gender, it was observed that girls had a higher average total attitude score than boys, but this difference was not statistically significant. In Gümüş and Tan's (28) study examining the attitudes of students with special needs towards students with special needs, a significant relationship was found between attitude and gender, and the attitudes of female students towards students with special needs were more positive than male students. However, there are also studies that contradict these findings. The results obtained by Ayral et al. (29) showed that the gender variable of normally developing female and male students was not effective in developing attitudes towards the disabled. We think that the gender variable in our study did not affect the attitude towards the disabled, as female and male students might have similar attitudes as a result of spending most of their days at school and interacting with each other.

In this study, when children's empathic tendencies were compared according to their mothers' educational status, a statistically significant difference was found in favor of university graduates in cognitive, emotional and total empathy levels. In the literature, Çetin and Aytar (30) found that there was a significant difference between the empathy scores according to the mother's educational status in their study examining the empathy levels

of fourth grade primary school students. In Taner Derman's (31) study, it was determined that the empathy levels of children differed significantly according to the education level of the mother. In Köse and Kolburan's (32) study, it was determined that the education level of the mothers did not make a significant difference on the empathy levels of the children.

When the children's empathic tendency scores were compared with the educational status of their parents, a statistically significant difference was found in favor of university graduates in cognitive, emotional and total empathy levels. The results of studies examining similar questions in the literature differ. In the study conducted by Sayın, it was found that the educational status of their fathers caused a significant difference in the empathy level of their children (33). In the study of Derman et al. (34), a contrasting result emerged and it was stated that the educational status of the father did not show a correlation with the empathic level of the child.

There was no statistically significant difference between the groups in the comparison of the attitudes of the children participating in the study towards the disabled according to the presence of a disabled person in the family or in the environment. Similarly, Gümüş and Tan (28) stated that the attitudes of children with normal development towards the disabled did not show a statistically significant difference according to the presence of disabled people in their families and surroundings. It is thought that the presence of a disabled person in the family or in the environment may not be important enough to determine the attitude of the child, since children may frequently encounter disabled individuals outside of their family and close environment in daily life.

Conclusion

The age-related change in empathy development in children and the demonstration that the scales used have sufficient psychometric properties only in certain age groups may limit the generalization of the findings obtained from the research to children in all age groups.

In order to increase the participation of people with disabilities in society and develop strategies, positively developing the attitude of the child towards people with disabilities, who is the most fundamental part of society and the most open individual to change, can lead to positive changes in society. Children exposed to a particular pattern of behavior are more likely to copy those behaviors. Therefore, it is thought that role models displaying positive behaviors and similarly providing children with hands-on experiences with empathic actions will form a basis for future empathic behaviors. However, it is important to make correct assessments in order to be able to make the necessary interventions. For this reason, apart from the studies examining the attitudes towards inclusive students, there is a need for studies that examine the attitudes of children with normal development and different age groups towards the disabled, with sufficient sample size and which are evaluated with the right measurement tools.

Ethics

Ethics Committee Approval: Bezmialem Vakıf University Non-Interventional Research Ethics Committee (date:07.01.2020/number: 54022451-050.05.04-).

Informed Consent:

Peer-review: Externally peer-reviewed.

Authorship Contributions

Design: R.S., Ş.Ö., Ü.U., Data Collection or Processing: R.S., Analysis or Interpretation: R.S., Ş.Ö., Ü.U., Literature Search: R.S., Ş.Ö., Writing: R.S.

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