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## HOW AWARE ARE EDUCATORS ABOUT AUTISM?

### EĞİTİMCİLER OTİZMİN NE KADAR FARKINDA?

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## ABSTRACT

It is accepted that education is the most effective method in the treatment of children with autism. Therefore, it is very important for teachers to have knowledge about the subject. This research was conducted for the purpose of identifying educationalists' awareness level of autism. The descriptive research was conducted with 181 educators who work in public primary schools and independent preschools in Efeler, Aydın, in May and June 2016. For the data collection, the researchers designed one questionnaire about the participants' knowledge level concerning autism and another questionnaire about their demographic information. Among the participants, 63% were women, 37% were men, 85.1 % held a bachelor or graduate degree, and 54.7% held a teaching degree. Then, 97.8% of the educators stated that they had heard about autism, and 65.2% indicated that they usually received information about it from mass media. It was found that the educators' profession, number of years working, having a child, working in an inclusive class, and working with children with autism affected their knowledge and views ( $p < 0.05$ ). Most of the educators had knowledge about autism; however, they usually received the information from mass media.

**Key words:** Autism, children, school, teacher, awareness.

## ÖZ

Otizmlı çocukların tedavisinde en etkili yöntemin eğitim olduğu kabul edilmektedir. Bu nedenle öğretmenlerin konu hakkında bilgi sahibi olması çok önemlidir. Bu araştırma, idareci ve öğretmenlerin otizm farkındalık düzeylerini belirlemek amacıyla yapılmıştır. Tanımlayıcı türde olan bu araştırma, Mayıs-Haziran 2016 tarihleri arasında Aydın ili Efeler ilçesinde bulunan devlet ilkokulu ve bağımsız anaokullarında görevli 181 öğretmen ve idareci ile yapılmıştır. Veri toplamak için araştırmacılar tarafından katılımcıların otizm hakkındaki bilgi düzeyleri ve demografik bilgilerini içeren anket formu kullanılmıştır. Araştırmaya katılan eğitimcilerin % 63'ü kadın, % 37'si erkek, % 85.1'inin lisans ve üstü eğitime sahip, yarısından fazlası (%54.7) sınıf öğretmenliği mezunudur. Eğitimcilerin % 97.8'i otizmi daha önceden duyduğunu ve daha çok kitle iletişim araçlarından bilgi aldığını (% 65.2) belirtmiştir. Eğitimcilerin çalışma yılının, mezuniyet alanının, çocuk sahibi olmanın, kaynaştırma sınıfında görev almanın ve otistik çocuklarla çalışmanın bilgi ve görüşleri etkilediği bulunmuştur ( $p<0.05$ ). Bu araştırmada, eğitimcilerin çoğunun otizm ile ilgili bir kısım bilgilerinin olduğu, ancak bu bilgileri daha çok kitle iletişim araçlarından öğrendikleri anlaşılmıştır.

**Anahtar Kelimeler:** Otizm, çocuk, okul, öğretmen, farkındalık.

## 1. INTRODUCTION

Autism spectrum disorder (ASD) is a complex neurodevelopmental, genetic problem which effects the central nervous system and usually appears within the first three years of life (Bashir, Bashir, Lone, & Ahmad, 2014; Russell & Norwich, 2012). It has been confirmed in both retrospective and prospective studies that there are delays and problems in visual behaviors (atypical monitoring and focus on objects), motor development, play, social communication, and language development in babies and small children diagnosed with ASD (Simms & Jin, 2015). It has been assessed that the frequency of ASD might have increased due to changes in the diagnosis criteria and knowledge about the disorder (Duchan & Patel, 2012; McPartland, Reichow, & Volkmar, 2012), as well as the fact that greater importance has been placed on early response (Brugha, McManus, & Bankart, 2011). It has been confirmed that 298 (1.2%) of the 25,013 children who consult the Ankara Child Psychiatric Department at Hematology Oncology Training and Research Hospital have been diagnosed with pervasive development disorder. In terms of gender, 79.5% of the children who have been diagnosed with pervasive development disorder are male. Moreover, 63% of cases are autism, 31.2% of cases are pervasive development disorder, 5% are Rett Syndrome, 0.7% are Asperger's Syndrome (Göker, Güney, Dinç, Hekim, & Üneri, 2014).

Various methods are used in the treatment of ASD. The most efficient method for the treatment of autistic children is education. In this sense, it has been observed that starting special education at early ages with early response to the cases in the treatment of children with autism increases achievement. Children's autistic behaviors decreased with education programs (Girli, 2007). Yet the inclusion of children with autism presents various problems, and the priority that emerges is for school staff to receive education about over teaching by proof and over behavior managing (Bryson, Rogers, & Fombone, 2003). Since teachers are the secondary adults for children after parents, educators have six times more chances to detect ASD (Rosenberg, Daniels, Law, Law, & Kaufmann, 2009). There was a 45% rate of agreement among educators who work in public schools who diagnose developmental disorders and 78 evaluators who diagnosed ASD in children in a hospital environment (Williams, Atkins, & Soles, 2009). The social problems of a child with autism in the classroom affect the child's relationship with the teacher (Robertson, Chamberlain, & Kasari, 2003). It is beneficial for both children with autism and typically developing children to receive education in the same general classrooms (Carter & Hughes, 2006), and this fact brings the responsibility of understanding the special learning skills of children with autism to teachers (Loiacono & Valenti, 2010). Karabekiroğlu et al.'s (2009) study of parents and teachers of children with autism showed that teachers need education to challenge misinformation and stigma. With these aims, the following research questions were formulated:

- Do teachers have sufficient knowledge about autism?
- What are teachers' sources of information about autism?

## 2. METHOD

### 2.1. Research Design

This research was done for the purpose of identifying administrators' and teachers' awareness levels concerning autism. The descriptive research was done with teachers and administrators who worked in public primary schools and independent preschools in Efeler, Aydın, in May and June 2016. Permission was obtained from the Directorate of National Education (24.11.2015; E.12082469) and Faculty of Medicine Non-Interventional Clinical Research Ethics Committee (2015/725).

### 2.2. Research Sample

The target population of the descriptive research is 68 public schools in the city center of Aydın and 7 independent preschools. While all of the independent preschools were taken into study, 11 primary schools were chosen as follows. A random selection of primary schools was ordered alphabetically, and the schools ranked 6th, 12th, 18th, 24th, 30th, 36th, 42nd, 48th, 54th, 60th, and 66th were selected. The target population of the research is 181 teachers and administrators who volunteered for the study.

### 2.3. Research Instrument and Procedure

Data were collected using questionnaires designed by the researchers on the participants' knowledge level concerning autism and their demographic information, respectively. The Demographic Information Form contained questions about the participants' age, gender, number of years working in the profession, and field of teaching or administration. The Form on Autism Knowledge Level included questions about the

participants' knowledge level and views on autism. It was prepared based on a literature search and Karabekiroğlu et al. (2009). The two questionnaire forms were given to the teachers and administrators, along with a Form of Informed Consent and instructions and information such as aim of the study, assurance that the data the participants provided would only be used for the study and that giving one's name was optional, the time given to fill out the form, the voluntary nature of participation, and that the participants could end their participation at any time. If the participants had any questions, the researchers answered the questions and then the participants filled out the questionnaires. **Data Analysis** In the assessment and coding of the data, SPSS 20.0 was used. The data were analyzed using frequency, percentage, and chi-square tests.

### 3. RESULTS

Information about the educators' sociodemographic characteristics are given in Table 1.

**Table 1.** Educators' Sociodemographic Characteristics (N = 181)

Sociodemographic Characteristics	<i>n</i>	%
<b>Gender</b>		
Female	114	63.0
Male	67	37.0
<b>Have a child</b>		
Yes	159	87.8
No	22	12.2
<b>Educational background</b>		
Associate degree	27	14.9
Bachelor's or postgraduate degree	154	85.1
<b>Number of years working in the field</b>		
0–5 years	21	11.6
6–10 years	30	16.6
11–20 years	54	29.8
21 years or more	76	42.0
<b>Occupation</b>		
Teacher	167	92.3
Administrative educator	14	7.7
<b>Field of graduation</b>		
Primary school teaching	99	54.7
Preschool teaching	43	23.8
Special education teaching	2	1.1
Branch teachers	23	12.7
Other fields	14	7.7
<b>Working in an inclusive class</b>		
Yes	55	30.4
No	126	69.6
<b>Duration of working in an inclusive class</b>		
0–1 years	20	11.0
1–3 years	30	16.6
4 years or more	14	7.8
<b>Getting special training for inclusive students</b>		
Yes	60	33.1
No	121	66.9
<b>Disabled groups with which you work in an inclusive class</b>		
Children with mental disabilities	50	27.6
Spastic children	6	3.3
Children with hearing and speaking disorders	30	16.6
Autistic children	21	11.6
<b>Age avg.</b>	X = 41.28	SS = 8.78

As Table 1 shows, 63% of the educators who participated in the research were women, 37% were men, and 87.8% had children. Also, 85.1% held a bachelor or postgraduate degree. More than half (54.7%) had a degree in primary school teaching, 42% had been working in the field for 21 years or more, and 92.3% worked as teachers. Moreover, 33.1% had received special training on inclusive classes, and 30.4% worked in an inclusive class. The disabled group that was the group most often worked with in inclusive classes consisted of children with mental disabilities (27.6%).

**Table 2.** Educators' Views on Autism (N = 181)

Views	<i>n</i>	%
<b>Heard of autism before</b>		
Yes	177	97.8
No	4	2.2
<b>Who/what they heard about autism from</b>		
Relatives	11	6.1
Mass media	118	65.2
Healthcare personnel	4	2.2
Colleagues	48	26.5
<b>Autism is a language and speaking disorder</b>		
Yes	84	46.4
No	97	53.6
<b>Autism is strange repetitive behaviors</b>		
Yes	124	68.5
No	57	31.5
<b>Autism is a kind of mental deficiency</b>		
Yes	22	12.2
No	159	87.8
<b>Autism is a social interaction disorder</b>		
Yes	135	74.6
No	46	25.4
<b>The best treatment for autism</b>		
Drug therapy	7	3.9
Special education	159	87.8
Psychotherapy	15	8.3
<b>Autistic children have talents for different fields</b>		
Yes	180	99.4
No	1	0.6

According to the data given in Table 2, 97.8% of the educators had heard of autism before and they usually received information about it from mass media (65.2%). The percentages of educators who agreed with the questionnaire statements are as follows: "Autism is a language and speaking disorder" (46.4%), "Autism is strange repetitive behaviors" (68.5%), "Autism is a kind of mental deficiency" (12.2%), and "Autism is a social interaction disorders" (74.6%). In addition, the educators indicated that they believed the best treatment for autism is special education (87.8%) and children with autism have talents for different fields (99.4%).

**Table 3.** Educators' Knowledge and Views on Autism (N = 181)

Knowledge and views	I agree		I am indecisive		I do not agree	
	<i>n</i> *	%	<i>n</i> *	%	<i>n</i> *	%
Autism is a disease	85	47.0	41	22.7	55	30.3
Children with autism are also highly gifted	79	43.6	63	34.8	39	21.5
All children with autism have behavioral problems	101	55.8	44	24.3	36	19.9
Children with autism cannot make eye contact	123	68.0	39	21.5	19	10.5
Children with autism are very interested in revolving objects, advertisements, and television	126	69.6	46	25.4	9	5.0
Even if autism is treated, it does not go away	80	44.2	80	44.2	21	11.6
Children with autism must be educated in special schools	96	53.0	42	23.2	43	23.8

Children diagnosed with autism disturb class	56	30.9	79	43.6	46	25.4
Siblings of children with autism have psychological problems	25	13.8	61	33.7	95	52.5
Autism is a disorder that is common in society	40	22.1	52	28.7	89	49.2
Children with autism being together with other children in all classes contributes to children being diagnosed with autism	73	40.3	69	38.1	39	21.5
Children with autism being together with other children in all classes contributes to other children's learning in the class	57	31.5	75	41.4	49	27.1
I prefer not to have a child with autism in my class	51	28.2	69	38.1	61	33.7
Child with autism can improve academically with proper education	155	85.6	23	12.7	3	1.7
Having a student with autism in my class causes a reaction from other parents	53	29.3	69	38.1	59	32.6
I think children diagnosed with autism have also inadequacy in gross motor skills (using big muscle groups for running, etc.)	62	34.3	64	35.4	55	30.4
I think children with autism have also inadequacy in fine motor skills (using small muscle groups for buttoning, tying shoelaces, etc.)	89	49.2	58	32.0	34	18.8
Training services have been given in a special room for inclusive education at our school	134	74.0	17	9.4	30	16.6
In-class training services for inclusive classes have been given at our school	139	76.8	20	11.0	21	11.6
I have difficulty teaching subjects to my student with autism	15	8.3	7	3.9	3	1.7
I think IEPs (Individualized Education Programs) for children with autism are productive	15	8.3	8	4.4	2	1.1

As Table 3 shows, 47% of the educators agreed with the statement “Autism is a disease” and 43.6% agreed that children with autism are highly gifted. More than half believed that children with autism have behavioral problems (55.8%), cannot make eye contact (68.0%), and are very interested in revolving objects, advertisements, and television (69.6%). Roughly half of the educators thought that even if autism is treated, it does not go away, and 53% agreed with the statement that children with autism must be educated in special schools. While more than half of them did not agree with the opinion that “Siblings of children with autism have psychological problems,” approximately half (49.2%) agreed that autism is a disorder that is common in society. The educators were indecisive about their view of the fact that children with autism being together with other children in all classes benefits both the children with autism and the other children in the class (38.1%, 41.4%). They were also indecisive about their opinion regarding having a child with autism in class and parents' reaction to it (38.1%, 38.1%). Although the educators saw children with autism as having inadequacy in gross motor skills (34.3%) and fine motor skills (49.2%), they believed that children with autism can improve academically with proper education (85.2%).

The sociodemographic and professional characteristics of educators and their knowledge and views on autism are compared in Tables 4 and 5. The number of years working in the field, field of graduation, having a child, working in an inclusive class, and working with children with autism affected the educators' knowledge and views, but the other variables did not show any significant influence. Bonferroni correction was done to determine in which group the difference originated and to correct the Type 1 error. A significant difference was found between the number of years the educators had worked in their field and the views that “Children with autism cannot make eye contact” ( $x^2 = 14.344$ ,  $p < .001$ , Difference = 6–10 years), “Children diagnosed with autism disturb class” ( $x^2 = 27.620$ ,  $p < .001$ , Difference = 0–5 years), “Attending all classes benefits both children with autism and other children” ( $x^2 = 23.255$ ,  $p < .001$ , Difference = 11–20 years;  $x^2 = 16.694$ ,  $p < .001$ , Difference = 0–5 years), “I do not want to have a student with autism in my class” ( $x^2 = 17.813$ ,  $p < .001$ , Difference = 21 years and more), “Children with autism are deficient in gross motor skills” ( $x^2 = 16.871$ ,  $p < .001$ , Difference = 21 years and more), and “Education is given in a special room for autism at the school” ( $x^2 = 13.883$ ,  $p < .001$ , Difference = 0–5 years). A significant difference was found between the field of graduation and the views that “Private school is necessary for children with autism” ( $x^2 = 20.702$ ,  $p < .001$ , Difference = Preschool teaching), “Autism is a disorder that is common in society” ( $x^2 = 21.954$ ,  $p < .001$ , Difference = Graduated from other fields), “Attending all classes benefits children with autism” ( $x^2 = 21.136$ ,  $p < .001$ , Difference = Preschool teaching), “I do not want to have a student with autism in my class” ( $x^2 = 27.581$ ,  $p < .001$ , Difference = Preschool teaching), and “Children with autism are deficient in fine motor skills” ( $x^2 = 18.837$ ,  $p < .001$ , Difference = Special education teaching). A significant difference was found between having a child and the views that “Autism is a disease” ( $x^2 = 7.942$ ,  $p = .019$ ), “Attending all classes benefits both children with autism and other children” ( $x^2 = 8.177$ ,  $p = .017$ ;  $x^2 = 12.839$ ,  $p = .002$ ), and “Individualized



Education Programs are beneficial for children with autism” ( $\chi^2 = 9.792$ ,  $p = .007$ ) ( $p < 0.05$ ). A significant difference was found between working in an inclusive class and the views that “Autism is a disease” ( $\chi^2 = 6.435$ ,  $p = .040$ ), “Children with autism are highly gifted” ( $\chi^2 = 6.140$ ,  $p = .046$ ), “Children with autism focus on revolving objects” ( $\chi^2 = 6.515$ ,  $p = .038$ ), and “I do not want to have a student with autism in my class” ( $\chi^2 = 8.505$ ,  $p = .014$ ) ( $p < 0.05$ ). Further, a significant difference was found between working with children with autism and the views that “There is no complete recovery for autism” ( $\chi^2 = 13.113$ ,  $p = .001$ ), “Children diagnosed with autism disturb class” ( $\chi^2 = 10.469$ ,  $p = .005$ ), “I do not want to have a student with autism in my class” ( $\chi^2=20.432$ ,  $p = .000$ ), and “Autism is deficient in fine motor skills” ( $\chi^2 = 7.352$ ,  $p = .002$ ) ( $p < 0.05$ ).

**Table 4.** Comparison of the Educators’ Sociodemographic and Professional Characteristics with Their Knowledge and Views on Autism

Properties	Knowledge and Views on Autism							
	Autism is a disease	Children with autism are highly gifted	Children with autism cannot make eye contact	There is no complete recovery for autism	Private school is necessary for children with autism	Children diagnosed with autism disturb class	Autism is a disorder that is common in society	Attending all classes provides benefit for children with autism
Number of years working in the field								
0–5 years	33.7	38.1	52.4	42.9	38.1	0.0	38.1	71.4
6–10 years	40.0	43.3	90.0	56.7	46.7	40.0	16.7	53.3
11–20 years	46.3	46.3	59.3	40.7	44.4	27.8	31.5	31.5
21 years or more	53.9	43.4	69.7	42.1	65.8	38.2	13.2	32.9
<b>Test and Significance</b>	$\chi^2=10.615$ $p=.101$	$\chi^2=10.608$ $p=.101$	$\chi^2=14.344$ $p=.026$	$\chi^2=2.978$ $p=.081$	$\chi^2=11.684$ $p=.069$	$\chi^2=27.620$ $p=.000$	$\chi^2=10.615$ $p=.119$	$\chi^2=23.255$ $p=.001$
Field of graduation								
Primary school teaching	46.5	47.5	64.6	47.5	60.6	33.3	16.2	37.4
Preschool teaching	34.9	46.5	74.4	39.5	32.6	18.6	34.9	65.1
Special education teaching	50.0	50.0	50.0	50.0	0.0	50.0	0.0	0.0
Branch teachers	69.6	26.1	82.6	47.8	56.5	34.8	30.4	21.7
Other fields	50.0	35.7	50.0	28.6	64.3	42.9	14.3	21.4
<b>Test and Significance</b>	$\chi^2=12.502$ $p=.130$	$\chi^2=12.160$ $p=.144$	$\chi^2=9.878$ $p=.274$	$\chi^2=5.378$ $p=.717$	$\chi^2=20.702$ $p=.008$	$\chi^2=13.287$ $p=.104$	$\chi^2=21.954$ $p=.005$	$\chi^2=21.136$ $p=.007$
Have a child								
Yes	50.3	42.8	69.2	44.7	54.1	33.3	20.1	36.5
No	59.1	50.0	59.1	40.9	45.5	13.6	36.4	68.2
<b>Test and Significance</b>	$\chi^2=7.942$ $p=.019$	$\chi^2=0.656$ $p=.720$	$\chi^2=1.715$ $p=.424$	$\chi^2=0.388$ $p=.824$	$\chi^2=0.959$ $p=.619$	$\chi^2=8.684$ $p=.013$	$\chi^2=3.346$ $p=.188$	$\chi^2=8.177$ $p=.017$
Working in an inclusive class								
Yes	32.7	54.5	63.6	38.2	40.0	23.6	25.5	40.0
No	53.2	38.9	69.8	46.8	58.7	34.1	20.6	40.5
<b>Test and Significance</b>	$\chi^2=6.435$ $p=.040$	$\chi^2=6.140$ $p=.046$	$\chi^2=5.077$ $p=.079$	$\chi^2=2.219$ $p=.330$	$\chi^2=6.031$ $p=.049$	$\chi^2=2.360$ $p=.307$	$\chi^2=0.519$ $p=.772$	$\chi^2=0.005$ $p=.998$
Working with children with autism								
Yes	52.6	52.4	71.4	52.4	33.3	47.6	28.6	52.4
No	33.3	48.9	71.1	28.9	46.7	20.0	22.2	42.2
<b>Test and Significance</b>	$\chi^2=2.205$ $p=.332$	$\chi^2=4.607$ $p=.100$	$\chi^2=0.224$ $p=.894$	$\chi^2=13.113$ $p=.001$	$\chi^2=2.522$ $p=.283$	$\chi^2=10.469$ $p=.005$	$\chi^2=0.331$ $p=.849$	$\chi^2=0.680$ $p=.712$

**Table 5.** Comparison of the Educators' Sociodemographic and Professional Characteristics with Their Knowledge and Views on Autism (Cont'd.)

Properties	Knowledge and Views on Autism					
	Attending classes together benefits other children	I do not want to have a child with autism in my class	Children with autism are deficient in gross motor skills	Children with autism are deficient in fine motor skills	Education is given in a special room for autism at the school	IEPs are beneficial for children with autism
<b>Number of years working in the field</b>						
0–5 years	61.9	14.3	28.6	47.6	47.6	50.0
6–10 years	36.7	23.3	30.0	56.7	73.3	66.7
11–20 years	25.9	24.1	20.4	38.9	75.9	83.3
21 years or more	25.0	36.8	47.4	53.9	80.3	42.9
<b>Test and Significance</b>	$\chi^2=16.694$ p=.010	$\chi^2=17.813$ p=.007	$\chi^2=16.871$ p=.010	$\chi^2=11.205$ p=.082	$\chi^2=13.883$ p=.031	$\chi^2=9.633$ p=.141
Field of graduation						
Primary school teaching	31.3	34.3	42.4	56.6	79.8	57.1
Preschool teaching	46.5	11.6	25.6	44.2	65.1	72.7
Special education teaching	0.0	0.0	0.0	0.0	50.0	100.0
Branch teachers	17.4	34.8	26.1	43.5	69.6	33.3
Other fields	14.3	28.6	21.4	28.6	71.4	33.3
<b>Test and Significance</b>	$\chi^2=13.708$ p=.090	$\chi^2=27.581$ p=.001	$\chi^2=13.511$ p=.095	$\chi^2=18.837$ p=.016	$\chi^2=12.544$ p=.129	$\chi^2=6.950$ p=.542
Having a child						
Yes	27.7	28.3	35.2	48.4	76.1	70.0
No	59.1	27.3	27.3	54.5	59.1	20.0
<b>Test and Significance</b>	$\chi^2=12.839$ p=.002	$\chi^2=1.807$ p=.405	$\chi^2=2.691$ p=.260	$\chi^2=2.610$ p=.271	$\chi^2=4.269$ p=.118	$\chi^2=9.792$ p=.007
Working in an inclusive class						
Yes	34.5	20.0	34.5	56.4	72.7	71.4
No	30.2	31.7	34.1	46.0	74.6	45.5
<b>Test and Significance</b>	$\chi^2=2.614$ p=.271	$\chi^2=8.505$ p=.014	$\chi^2=0.299$ p=.861	$\chi^2=1.917$ p=.383	$\chi^2=2.633$ p=.268	$\chi^2=1.833$ p=.400
Working with children with autism						
Yes	28.9	9.5	23.8	42.9	71.4	69.2
No	42.9	28.9	37.8	57.8	80.0	66.7
<b>Test and Significance</b>	$\chi^2=1.479$ p=.477	$\chi^2=20.432$ p=.000	$\chi^2=1.610$ p=.447	$\chi^2=7.352$ p=.002	$\chi^2=1.165$ p=.559	$\chi^2=0.336$ p=.845

#### 4. DISCUSSION, CONCLUSIONS, AND SUGGESTIONS

This study revealed that 97.8% of the educators had heard of autism, but 65.2% of them had heard about it from mass media. The fact that educators who work in inclusive education receive information about autism from mass media is extremely challenging, and it is an issue that is worth stressing. While 68.5% of the educators saw autism as strange, repetitive behavior and 46.4% described it as a language and speaking problem, the fact that 53.6 % of them did not recognize any language or speaking problem arises from the fact that mass media are highly visible and educators' source of information about autism is mass media, which emphasizes behaviors that attract other people easily. In a study of special education teachers working with children with autism, it was found that the teachers had knowledge about autism but lacked

knowledge about strategies for skill development (Hendrick, 2011). In this study, 43.6% of the educators indicated that they believed children with autism are highly gifted, and 34.8% stated that they were indecisive about this statement. The teachers might have held these ideas due to the characteristics of some media characters, such as the famous musician Fazıl Say, who was diagnosed with autism, and the autistic character who is highly talented in math in the film *Rain Man*. It has been stated that 70% of individuals with ASD have intelligence scores in the 50–70 range, and 30% of them have scores of 70 or higher (akt. Özlü-Fazlıoğlu & Baran, 2004:14). Another study found that the cognitive skills of children with ASD were generally lower than those of typically developing children, as only 20% of the group with ASD was found to have an intelligence score of 70 or above (Long, Gurka, & Blackman, 2011).

The rate of autism has been increasing over the years. In this study, 49% of the educators indicated that autism is not very common in society, and 28.7 of them reported that they were indecisive. Depending on the evidence reviewed, the prevalence of ASD is around 62/10.000 (Elsabbagh et al., 2012). While it has been reported that ASD, which is one of the most common neurodevelopmental disorders, seen 1 out of 88 children in 2012 according to the data of the Center for Disease Control and Prevention (Barton, Robins, Jashar, Brennan, & Fein, 2013), it was reported in the data of the same center in 2014 that 1 out of every 68 children is affected by this disorder (Ketcheson, Hauck, & Ulrich, 2016). In research done in Sweden with 18,416 children aged 6–17 years old, with the aim of examining neurodevelopmental disorders in the 2012/2013 and 2013/2014 academic years, it was found that the rate of the children who had attention deficit and hyperactivity disorder was 2.4%, and the rate of children with ASD was 1.6% (Beckman, Janson, & von Kobyletzki, 2016).

While 34.4% of the educators stated that children with ASD have inadequacy in gross motor skills, 35.4 % of them reported having an indecisive view. While 49.2% of them stated that children with ASD have inadequacy in fine motor skills, 32% of them reported having an indecisive view. Although the participation of children with ASD in physical activity has many benefits like a decrease in stereotypic behaviors, increase in potential of social interaction and appropriate responses, the motor development area is neglected (Todd & Reid, 2006). Sensorimotor disorders in ASD affect not only limited areas but also eye contact, which is coordinated with speaking and gestures, interpreting others' behaviors, and responding in an appropriate way (Hannant, Tavassoli, & Cassidy, 2016). There is a relationship between the motor skills of small children with ASD and their daily life skills, social skills, and communication skills (McDonald, Lord, & Ulrich, 2013). In this study, 55.8% of the educators believed that children with autism have behavioral problems, and 30.9% stated that children with autism disturb class. Behavioral and emotional problems such as anxiety, depression, attention, and hyperactivity are seen commonly in students with ASD (Ashburner, Ziviani, & Rodger, 2010). Neural mechanisms are active in the emotion disorders that are experienced with ASD (Richey et al., 2015).

Children with autism have difficulty recognizing and expressing their own emotions and recognizing and understanding the emotions of other people. They also have difficulty understanding nonverbal communication clues such as gesture, mimic, tone of voice, and social rules (Darıca, Abidoğlu, & Gümüştü, 2005:47-48). Generally, negative behaviors of children with ASD are mentioned; however, children with ASD also exhibit many positive behaviors such as not telling lies, not acting detrimentally in an intentional way, not having feelings of hatred, and not evading responsibility (Çopuroğlu & Mengi, 2014). It has been stated that nervousness, temper tantrums, aggression, or behavior of hurting oneself can be decreased with the development of education programs aimed at the emotion organizer process and medicine use, which has serious side effects (Samson et al., 2014). In this sense, the role of the teacher is very important. It has been reported that the common attitude of the teachers, school managers, and special education teachers is highly influential. Moreover, there is a need for education on the topic, for the effective implementation of personalized education of autistic children with their peers (Segall & Campbell, 2012). While 44.2% of the educators believed that autism cannot be recovered from completely, 44.2% reported having an indecisive view. ASD is a lifelong social adaptation problem. However, adaptation to society can be increased with early response. Indeed, 85.6% of the educators believed that children with autism could improve academically with proper education.

In this research, the educators reported indecisive views (38.1%, 41.4%) about the fact that children with autism being together with other children in all classes benefits both. While 38.1% of the educators reported having indecisive views about the possibility that parents of other children in the class would not want a child with autism in the same class, 32.6% reported that they had not observed any such reactions, and 29.3% reported that parents would react negatively. The general approach of society to an individual



affected by autism consists of pity, excluding the individual due to assessing the disability as a deficiency, keeping away due to perceiving the individual as aggressive and dangerous based on certain behaviors, or hurting the individual (Çopuroğlu & Mengi, 2014).

While overreaction to voice can be seen in some children who have a general sensitivity, personal differences such as insensitivity, avoiding touch, or desire for touching all the time can be seen in some children. It is important that explanations are given before a child enters a classroom because each new situation causes fear and anxiety for a child (Ehiemua, 2014). Teachers are important role models for children, and the teacher's perception of a student with special needs affects the other students' perceptions (Vuran, 2007). A teacher's misunderstandings or unrealistic expectations can lead to a lack of success in mainstream classes. When teachers are well-informed, their expectations change realistically (Segall & Campbell, 2012). It has been reported that having specific training and having experience in this area have a positive effect on educators' self-confidence in their ability to involve and teach children at the school (Ashburner, Ziviani, & Rodger, 2010).

The educators' profession, number of years working in the field, having a child, working in an inclusive class, and working with children with autism affected their knowledge and views. It is important to remember that children with ASD have requests and needs like other children. In this scope,

- Because autism affects not only the individual but the whole society, increasing social awareness works;
- In mainstream education, the attitude of the school manager and the teacher is important. Therefore, all the parents should inform in parent meetings, and the manager and teacher should show their open support for having an inclusive classroom;
- To create a positive perception for mainstream education, educators who have received education on the topic should be missioned as managers;
- Typically developing children should be informed about their entering autistic classmate and asked for their support;
- Staff who have roles in the process should be supported through e-education and using the on-the-job education techniques;
- A strong communication network should be created between schools and families, and it should have positive outcomes according to an evaluation process.

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