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The Self-Awareness Scale for Anti-Bias Education: A Reliability and Validity Study[1]

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Abstract

As a result of the diversity of preschool education environments day by day, it has become inevitable for teachers to make some sensitive arrangements to meet the needs of children based on their differences. For this reason, it is important to determine the awareness of teachers about anti-bias education.This study aims to investigate the psychometric properties of the scale called The Self-Awareness Scale toward Anti-Bias Education and to assess preschool teachers' self-awareness towards anti-bias education in Turkey. Before collecting data for first study, items were determined by benefiting from literature and getting opinions of field experts. 270 preschool teachers participated this study to test validity and reliability of the draft scale. Firstly, Exploratory Factor Analysis was applied and the KMO value of .840 and the Bartlett Test of Homogeneity (x^2= 794,814, p = 0.000) were found to be significant. The factor loadings of the items ranged from .75 to .48. The model fit indices were found as acceptable with Confirmatory Factor Analysis. As a result, 11 items were included in the created test scale. It was also decided that the scale would be in a 5-point Likert type. 120 preschool teachers participated to the second study and it was found that preschool teachers' self-awareness for anti-bias education was high. In addition, their professional experiences had an effect on their awareness. Teachers who have more professional experience had more positive self-awareness for anti-bias than teachers who have fewer professional experiences.

Keywords: anti-bias education, early childhood education, preschool education, self-awareness

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Introduction

Children are egocentric at the pre-functional stage and, therefore, not able to understand others' perspectives (Piaget, 1924; as cited in Kohler, 2008). This lack of understanding also causes children to not be able to focus on the multiple features of people in order to categorize them. It is thought that prejudices are mostly formed after age 5 (Aboud, 2003). However, additional research has shown that children become aware of diversities and differences among people at early ages and that they have some biases about them (Aboud, 2008; Bigler and Wright, 2014; Hirschfeld, 2008; Patterson and Bigler, 2006). According to Ramsey (1992), attitudes towards race and social context are shaped during the preschool years. In addition, Derman-Sparks and Edwards (2010) stated that children recognize the differences among gender and race from birth to age 3. The authors also emphasized that differences do not create bias in children; rather, children learn bias from the adults around them. Anti-bias education is an inclusive and integrated curriculum that aims to question and prevent these biases and misunderstandings (Derman-Sparks and Edwards, 2010).

Anti-bias education teaches children to care about differences and to respect all people. Besides, it not only helps children but also parents and teachers in building a positive self and group identity (Wolpert, 2002). Children are aware of adults' behaviors and understand which behaviors are accepted by adults. Therefore, children's interaction with teachers and adults is at the heart of anti-bias education (Derman-Sparks and Edwards, 2010). Research shows that practices based on anti-bias education help both teachers and children to realize their identity, develop cultural awareness, and work on other personal features; in addition, it allows children to show positive attitudes towards differences (Simangan, 2012; Polat and Özkabak-Yıldız, 2018; Üner, 2011).

The ever-changing formations of preschool classrooms push teachers to be more sensitive to the various needs of children. Therefore, it is emphasized that it is imperative to implement a culturally sensitive and inclusive curriculum in meeting the needs of younger learners (Gay, 2001; Hein, 2004). Early childhood teachers can improve adequate and appropriate support and care for all children if they see the differences and diversities as a way to teach respect and advocacy (Han and Thomas, 2010). On the contrary, if teachers are silent to diversities and differences, children may think that these issues are not important to discuss and that biases and inequalities are normal and acceptable. At the same time, this type of silence can trivialize the voices of marginalized groups and make minority students feel worthless (Vittrup, 2016). Anti-bias education enables teachers to question their existing teaching practices and planned experiences; it can also make them consider their teaching styles, their own and their student's cultural traits, race, ethnic differences, family features, and educational priorities and problems by being aware of their unbiased behaviors (Derman-Sparks and Ramsey, 2000). Therefore, teachers' careful self-reflection is key in anti-bias education (LeeKeenan and Nimmo, 2016). Similarly, Derman-Sparks and Edwards (2010) emphasized that the first thing teachers should do when considering anti-bias education is to realize the effects of their own personal, cultural, and occupational experiences on their views about social identities like race, gender, culture, socio-economic status, family structure, and different abilities/disabilities. Their experiences regarding these social identities are important in order to realize the beliefs and biases affecting what they choose to ignore or act on (Marshall, 2011). LeeKeenan and Allen (2017) noted that if adults are aware of their self-identities and how these influence their work, they can help children feel good about their own. Teachers should develop a strong understanding of their own biases, identity, and cultural beliefs to create learning environments in which children from both dominant and non-dominant groups feel confident (Barrera and Corso, 2003; Ladson-Billings, 1994; Sanchez, 1995). They should abandon racism, classism, and all other inequitable behaviors to develop best practices for children (Gayle-Evans and Michael, 2006) and realize their advocate roles about being unbiased (Derman-Sparks and Edwards, 2010). If teachers do not realize that other identities exist, they might wrongly assume that everyone has a similar history and background (LeeKeenan and Nimmo, 2021), and this could cause a neglect of different needs and abilities of children with diversities.

While it is very important to realize the effects of social identities on teachers' practices, LeeKeenan and Nimmo (2021) noted that most teachers do not even consider who they themselves are or how social identities shape their role as teachers and their relationships with children and families. As today, there has been no research conducted in Turkey measuring and assessing teachers' self-

awareness towards social identities among anti-bias education. Therefore, it is considered necessary and important to develop a measurement tool for early childhood teachers to assess their self-awareness towards anti-bias education. Therefore, this study, firstly, aims to investigate the psychometric properties of the scale called "The Self-Awareness Scale toward Anti-Bias Education" to assess preschool teachers' self-awareness towards anti-bias education in Turkey. Secondly, it is aimed to investigate whether preschool teachers' age, years of professional experiences, working area and their educational level affect their self-awareness towards anti-bias education.

Method

Participants

In line with the first aim of the research, the opinions of 271 preschool teachers working in 7 regions of Turkey were taken to establish a scale that determine their self-awareness towards anti-bias education. Participants were included in this study through the convenience sampling method. The demographic information of the participants is shown in Table 1.

Table 1.
Demographic information of the participants of Study 1

Factor	Category	n	%
Gender	Woman	258	95
	Male	13	5
Age	19-25	34	12
	26-30	86	32
	31-35	52	19
	36-40	64	24
	41-55	35	13
Years of professional experience	1-5	88	33
	6-10	78	29
	11-15	67	25
	16 and over	38	14
Working area	Marmara	80	29
	Central Anatolia	62	23
	Black Sea	37	14
	Aegean	27	10
	Mediterranean	24	9
	Eastern Anatolia	23	8
	S. Eastern Anatolia	18	7
Education level	Bachelor	214	79
	Graduate	36	13
	Associate	21	8

The majority of pre-school teachers participating in first study were female (95%). While the ages of the participants ranged from 19-55, teachers between the ages of 26-30 (32%) participated the most. In this study, which included participants working in 7 regions of Turkey, the highest numbers of participants come from the Marmara (29%) and Central Anatolian (23%) regions. The majority of the participants (79%) have a bachelor's degree.

For second aim, which is determined as investigating the effects of age, educational degree, region, and professional experiences on teachers' self-awareness towards anti-bias education. 114 preschool teachers participated to this study which were included through the convenience sampling method. The demographic information of these participants is shown in Table 2.

Table 2.
Demographic information of the participants of Study 2

Factor	Category	n	%
Gender	Woman	110	97
	Male	4	3
Age	20-25	13	11
	26-30	36	32
	31-35	23	20
	36-40	23	20
	41 and over	19	17
Years of professional experience	1-5	32	28
	6-10	28	25
	11-15	33	29
	16 and over	21	18
Working area	Marmara	23	20
	Central Anatolia	29	26
	Black Sea	21	18
	Aegean	11	10
	Mediterranean	14	12
	Eastern Anatolia	9	8
	S. Eastern Anatolia	7	6
Education level	Bachelor	97	85
	Graduate	17	15

The participants of second study are mostly female (97%) and mostly 26-30 aged (32%). Their years of professional experiences are ranged from 1 to 42, and teachers who have been working 1-5 years are in the majority (28%). There are teachers from all 7 regions of Turkey, but mostly teachers from Central Anatolia attained to the study (26%). Most of them also have a bachelor's degree (85%).

Developing the scale

To examine teachers' self-awareness towards anti-bias education, first of all, the literature was examined in depth. In the literature of the sources for anti-bias education, the checklists of Chen, Nimmo, and Fraser (2009), Rhomberg (2004), and the Anti-Defamation League (2012) were used; then, items from the scale were determined. Firstly, the item pool was formed with 23 items in Turkish. Subsequently, 3 preschool teachers were asked to investigate the intelligibility of the items. After suggested corrections, the draft scale form was presented to 6 experts who were linked to direct or indirect research related to the field of preschool education, and their expert opinions were later obtained. The experts expressed their opinions by marking one of 3 options: *"appropriate", "not suitable",* and *"must be corrected".* They were later given the option to write their own suggestions in the "suggestion" section. The opinions obtained from the experts were collected in a single form, and the content validity was later determined. While determining content validity, the method suggested by Veneziano and Hooper (1997), which takes the ratio of the number of experts who gave a positive response to the total number of experts, was used. Items with a content validity ratio above 0.80 were included in the scale, while those below were excluded from the scale. After content validity study was carried out, the decision was made to keep 12 items on the scale and to discard 11 of them.

Before conducting Study 1, a pilot study with a draft scale was conducted with 423 preschool teachers. Data obtained as a result of the pilot application were tested with Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA), and it was observed that there was 1 item that disrupted the scale structure as a result of CFA. It then was decided to collect the data again and repeat the analyses by removing the item that disrupted the scale structure. As a result, 11 items were included in the created test scale, and the decision was made to collect the necessary data. It was also decided that the scale would be in a 5-point Likert type, which included the following: "1-Totally disagree, 2-Disagree, 3-Undecided, 4-Agree, 5-Totally agree".

Ethical Issues

To collect all data, all required permissions were first obtained from the Hacettepe University Senate Ethics Committee. The date for ethical review is 23.02.2021 and the document number is E-35853172-300-00001497623. It was announced to all teachers that participation in the research was voluntary.

Data Collection

After the items of the scale were determined, an online scale form was prepared via Google Form to deliver to the preschool teachers for first study. This created scale form consists of 2 parts. In the first part, there are questions on the demographic background of the teachers such as gender, age, the region where they work, the physical place they work in, and their education level. In the second part, there are questions that determine the self-awareness of the teachers about anti-bias education. A trial scale form was directed to the teachers via online platforms (via e-mail or text message) from May to July, 2021.

After the developing scale, researchers collected new data from preschool teachers to investigate whether preschool teachers' age, years of professional experiences, working area and their educational level affects their self-awareness towards anti-bias education. Another online form was prepared via Google Form. This form also included two parts: Demographic Information Form and The Self-Awareness Scale towards Anti-Bias Education. The form was delivered to preschool teachers from October to December, 2021.

Analysis the data

This quantitative study applied Explatory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) to test reliability and validity of the scale. In addition, t-test and ANOVA test were used to examine the factors effect on preschool teachers' self awareness

In line with the responses from the 276 teachers who participated in first study through online platforms, validity and reliability studies of the Self-Awareness Scale towards Anti-Bias Education, which were created as equal interval scale, were conducted. Before the factor analysis was performed, the outliers were determined. To do this, firstly, Z-score of total score was obtained. 5 data were found between -6.05 and -3.08 after Z-score. After that, box-plot graphic was examined and it also showed that these 5 data were outliers. In this direction, data obtained from 5 teachers were excluded from the sample, and the data obtained from the 271 teachers were analyzed.

To determine the construct validity of the scale, first, EFA was conducted. After that, CFA were performed. EFA was used for developing a measuring tool while CFA was generally used for adaptation. However, CFA can also be used for confirming the EFA's results (Güngör, 2016). The reason of using CFA was to verify the results of the EFA in this study. At the same time, to determine the reliability of the scale, the Cronbach Alpha value was calculated for the whole scale.

After developing the scale, the second study was conducted. To investigate whether preschool teachers' age, years of professional experiences, working area and their educational level affects their self-awareness towards anti-bias education, independent sample t-test and one-way ANOVA were conducted. Before these, the normalities of variables and homogeneity of variances were tested.

Findings

Findings regarding validity

EFA and CFA were performed to determine the construct validity and item factor loads were obtained after submission of the expert opinions. First of all, the analysis was started with the Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett Homogeneity tests to determine whether the assumptions of factor analysis were met. As a result of the analysis, the KMO value of .840 and the Bartlett Test of Homogeneity (x^2 = 797,494, p = 0.000) were found to be significant. It was decided that the data set was suitable for EFA, and then EFA was applied. Principal axis factoring and direct oblimin rotation technique were applied in EFA to determine the construct validity of the scale. As a result of the first

EFA, it was found that the items with a factor load greater than 1 were grouped under 2 factors, and the explained variance rate of these 2 factors was 37,67%. Two factors had eigenvalues greater than one. The first eigenvalue was found 4.001 and the second one was found as 1.272. There was no adjoining item. The results of the first EFA was showed in Table 3.

Table 3.

First EFA results of the Self-Awareness Scale towards Anti-Bias Education

Order	Material	Factor 1	Factor 2
Item 1	M 8	.732	-.218
Item 2	M 7	.707	-.410
Item 3	M 6	.674	-.366
Item 4	M 10	.645	.088
Item 5	M 1	.541	.157
Item 6	M 5	.532	.261
Item 7	M11	.472	-.028
Item 8	M9	.451	.253
Item 9	M 2	.430	.319
Item 10	M 3	.413	.259
Item 11	M4	.412	.170

EFA was repeated by limiting the number of factors to 1 in line with the purpose of the study, considering the literature and also the factor loadings of Factor 2 was lower than .40. Table 4 shows the factor loadings of the items as a result of second EFA.

Table 4.

Item Factor Loadings of the Self-Awareness Scale towards Anti-Bias Education

Order	Material	Factor 1
Item 1	M 8	.728
Item 2	M 7	.668
Item 3	M 10	.655
Item 4	M 6	.646
Item 5	M 1	.544
Item 6	M 5	.529
Item 7	M11	.479
Item 8	M9	.450
Item 9	M2	.423
Item 10	M4	.415
Item 11	M3	.411

According to Table 4, the factor loadings of the scale items ranged from .73 to .41. The explained variance rate of the model obtained for the scale was found to be 30.45%

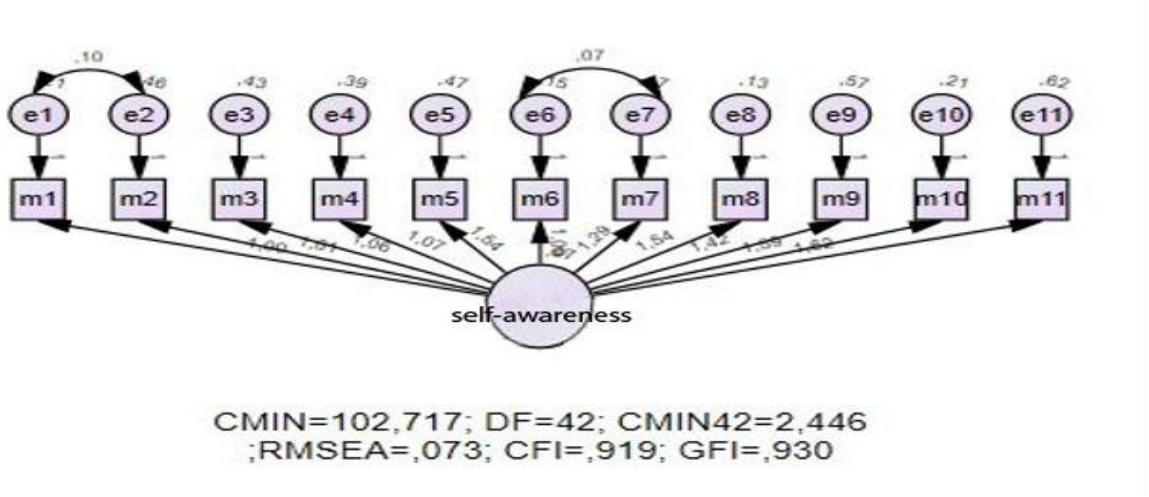

Figure 1. The model fit results from Confirmatory Factor Analysis

In Figure 1, item factor loads, modification indices, and model fit indices obtained as a result of the CFA performed to test the fit of the scale's construct validity are shown. To improve models with inadequate fit, researchers often examine the modification index for each parameter (i.e., each factor loading, factor interrelation, or correlated-error term) that has a fixed value of zero in the hypothesized model, in search of ways to improve model fit (Bryant, Yarnold, and Michelson, 1999). In this research, modification indices were also conducted to improve the model fit because CFI value was firstly found lower than .90. When the fit indices of the model were examined, it was determined that the fit was at an acceptable level ($\chi 2/df = 2.446$, RMSEA = .073, CFI = .919, GFI = .930). The items of the scale were shown at Appendix A.

Findings regarding reliability

To test the reliability of the Self-Awareness Scale towards Anti-Bias Education, Cronbach's alpha was calculated for internal consistency by computing the total score of Study 1's participants. The overall reliability coefficient of the scale was found to be .802. In addition to this, McDonald's Omega reliability analysis was conducted, and it was found to be .791. These values show that the scale is reliable.

After deciding the scale met the criteria of validity and reliability, Study 2 was conducted. Firstly, the reliability of the scale for Study 2 was calculated, and Cronbach's alpha value was found to be .874. Mcdonald's Omega value was also found as .867. Therefore, it was concluded that the scale could be used for Study 2.

Findings regarding factors affected teachers' self-awareness

To investigate whether preschool teachers' age, years of professional experiences, working area and their educational level affected their self-awareness towards anti-bias education, firstly, normality test for total score were examined and it was found that total score meets the criteria for normality ($p>0.05$). Then, teachers' mean score for self-awareness towards anti-bias education was examined.

Table 5.
Mean score of teachers on Self-Awareness Scale

	n	M	SD	Min	Max
Total	114	49.34	5.11	35	55

According to Table 5, mean score was 49.34. The highest possible score on the scale was 55. Therefore, it can be said that pre-school teachers' self-awareness towards anti-bias education was high. After that, normality tests for independent variables (age, educational degree, professional experiences, working area). The descriptive statistics results were shown at Table 6.

Table 6.
Descriptive statistics for score on Self-Awareness Scale

Factors	Groups	n	$\bar{x}$	μ	Sd	Skewness	Kurtosis	p
Educational degree	Bachelor	97	49.16	51.00	5,19	-.519	-779	.00
	Graduate	17	50.35	51.00	4,64	-.999	.716	.03
Age	20-25	13	4.07	46.00	6.41	-.235	-1.188	.47
	26-30	36	49.08	49.00	4.89	-.394	-.977	.01
	31-35	23	49.56	51.00	5.01	-.310	-1.401	.00
	36-40	23	50.08	51.00	5.19	-.738	-.517	.00
	41 and over	19	50.89	51.00	3.95	-.725	-.816	.01
Year of professional experience	1-5	32	47.5	48.00	5.57	-.293	-.783	.12
	6-10	28	48.78	49.02	5.42	-.542	-.929	.01
	11-15	33	50.75	51.00	4.63	-.585	-1.294	.00
	16 and over	21	50.66	51.00	3.85	-.549	-.921	.02
Working area	Marmara	23	50.47	52.00	4.57	-.993	.146	.01
	Central Anatolia	29	49.48	51.00	4.91	-.377	-1.392	.00
	Black Sea	21	47.61	47.00	6.13	-.341	-.866	.08
	Aegean	11	49.81	51.00	5.61	-.689	-.710	.06
	Mediterranean	14	47.85	47.5	4.95	-.139	-.334	.63
	Eastern Anatolia	9	51.22	51.00	2.94	.060	-1.322	.33
	S. Eastern Anatolia	7	50	52.00	5.88	-.734	-1.484	.04

According to Table 6, all factors' means and medians are close to each other. In addition, skewness and kurtosis values are between -1.5 and 1.5. These values show that distributions of all groups met the normality standards. In the Shapiro-Wilk test, p values were found to be less than 0.05; however, scores of mean and median were close to each other, and skewness and kurtosis values were between -1.5 and 1.5. In addition, ANOVA tests are resistant to violations of normality as long as there is no skewness caused by the outlier effect (Tabachnick & Fidell, 2013). After that, factors of which could affect teachers' self-awareness for anti-bias education were examined with t-test and ANOVA tests. Firstly, teachers' educational degrees were assessed. Welch's t-test was used because the number of sub-groups of degree factor was not close each other, and Welch's t-test could make more unbiased predictions. To do this, firstly, homogeneity of variance was controlled, and found that homogeneity of variance was met for educational degree ($p > 0.05$).

Table 7.
Welch's t-test results for score on Self-Awareness Scale in terms of educational degree

Factor	Groups	M	SD	F	η2
Degree	Bachelor	49.16	5.19	.777	.007
	Graduate	50.35	4.64		

Table 7 shows that there is no meaningful differences between teachers who have bachelor and graduate degree ($F=.777$, $p>0.05$).

To examine whether preschool teachers' age, years of professional experiences, and working area affected their self-awareness towards anti-bias education, ANOVA test were conducted. Firstly, normality of variances were observed. It was found that homogeneity of variances were met for age ($p<0.05$), years of professional ($p<0.05$), and working area ($p<0.05$) Therefore, it was determined to conduct one-way ANOVA. The ANOVA results were represented in Table 8.

Table 8.
ANOVA results for score on Self-Awareness Scale

Factors	Groups	M	SD	F	η2
Age	20-25	46.07	6.40	1.982	.06
	26-30	49.08	4.89		
	31-35	49.56	5.01		
	36-40	50.08	5.19		
	41 and over	50.89	3.95		
Year of professional experience	1-5	47.5	5.57	2.945*	.07
	6-10	48.78	5.43		
	11-15	50.75	4.63		
	16 and over	50.66	3.85		
Working area	Marmara	50.47	4.57	1.024	.05
	Central Anatolia	49.48	4.91		
	Black Sea	47.61	6.13		
	Aegean	49.81	5.61		
	Mediterranean	47.85	4.95		
	Eastern Anatolia	51.22	2.94		
	S. Eastern Anatolia	50.00	5.88		

*$p<0.05$

According to Table 8, there is statistically meaningful differences between teachers' years of professional experiences ($F=2.94$, $p<0.05$), while there were no meaningful differences between ages of teachers ($F=1.98$, $p>0.05$) and their working areas ($F=1.02$, $p>0.05$). The effect size of year of professional experiences were found as .074. This shows that year of professional experiences had moderate effect on self-awareness of teachers.

The differences between teachers' years of professional experiences was analyzed with Tukey HSD and the result was shown at Table 9.

Table 9.
Results of the Tukey HSD in terms of year of professional experience

(I) year of professional experience	(J) year of professional experience	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1-5	6-10	1.28	1.29	.75	4.56	2.08
	11-15	3.25*	1.24	.04	6.48	.02
	16 and over	3.16	1.4	.11	6.82	.49
6-10	11-15	1.97	1.28	.41	5.31	1.37
	16 and over	1.88	1.44	.56	5.64	1.87
11-15	16 and over	.09	1.39	1	3.72	3.54

*p < .05

Table 9 shows the meaningful differences between teachers' years of professional experiences. Accordingly, teachers who have 11-15 years of professional experiences has higher self-awareness than teachers who have 0-5 years of professional experiences.

Discussion, Conclusion and Suggestions

Recognizing teachers' awareness of their own social identities before applying practices about anti-bias education is seen as crucial (Derman-Sparks and Edwards, 2010; LeeKeenan and Nimmo, 2016). Learning environment, which cares for and teaches to stand up for all children, including children of nondominant groups, in the face of injustice, requires teachers to realize their own biases, identity and cultural beliefs (Barrera & Corso, 2003; Ladson-Billings, 1994; Sanchez, 1995). Therefore, developing a measurement tool that evaluates teachers' self-awareness towards anti-bias education and analyzing the factors related their self-awareness should be considered. In this study, firstly, the validity and reliability study of the Self-Awareness Scale towards Anti-Bias Education was developed as a Likert-type test to measure the self-awareness of pre-school teachers towards anti-bias education. EFA and CFA were used to test the construct validity of the scale, and Cronbach Alpha analysis was used to test its reliability. As a result, it was found that the validity and reliability of the scale were ensured.

To test the suitability of the sample size and data, first of all, KMO and Bartlett Sphericity tests were performed. As a result of the analysis, the KMO value of .84 and the Bartlett Sphericity test were found to be significant ($p < 0.001$), and it was decided that the data were suitable for performing EFA (Büyüköztürk, 2017). As a result of EFA, it was observed that 11 items loaded in 2 factors and that their factor loadings are above .30. After this, the relevant literature was worth considering, and the decision was made to use a single-factor scale. As Byrne (2012) showed, a determined factor structure with AFA was tested with CFA, and the suitability of the structure was confirmed. According to the CFA result, the CMIN/df value, which is one of the most basic measurements used to test the general suitability of the model, was found to be 2.446, which was evaluated as appropriate (Wheaton, Muthen, Alwin, and Summers, 1977). The value was observed as .73, which is an acceptable level (Browne and Cudeck, 1992). At the same time, the CFI value was found to be .91, and the GFI value was .93; it was concluded that these fit values were at an acceptable level (Baumgartner and Homburg, 1996). Finally, the Cronbach Alpha coefficient value was calculated to evaluate the status of the items in the scale to explain the same structure and form a whole; this was also initiated to determine the internal consistency, and this value was found to be .802. In scale studies, it is generally accepted that $\alpha = 70$ and above indicates that the scale is reliable (Landis and Koch, 1977; Robinson, Shaver, and Wrightsman, 1991).

Teachers' intrinsic motivation and self-perception towards diversity are more effective for their professional development and knowledge rather than getting education (Turnšek, 2013). Therefore, after validity and reliability studies, teachers' self-awareness level and factors which have effects on their self-awaress were considered important for this study. Accordingly, teachers' self-awareness level found as positive. These means teachers have an awareness of anti-bias education. In addition, only teachers' years of professional experience have a meaningful effect on teachers' self-awareness. Teachers who have more professional experience have more positive self-awareness for anti-bias than teachers who have less professional experience. However, teachers' age, education level, and working area did not have an effect on teachers' self-awareness. You (2000) found that preschool teachers' beliefs for anti-bias education was high and their professional experiences also influenced their beliefs. Kintner-Duff (2011) also found that teachers' personal and professional experiences affect teachers' beliefs, knowledge and practices. This shows that the year of teachers' work experience is important for their awareness of anti-bias education.

To conclude, both the EFA and CFA's results show that the Self-Awareness Scale towards Anti-Bias Education was appropriate for validity and reliability. In addition, its internal consistency was attained. Therefore, it can be concluded that this scale can be used to assess preschool teachers' self-awareness towards anti-bias education. While the lowest score taken from the scale was 11, the highest score was determined as 55. Using this scale in future research with different or larger groups will contribute to both the validity and reliability of the scale, as well as adding to the related literature.

Acknowledgment

Ethics statement: In this study, we declare that the rules stated in the "Higher Education Institutions Scientific Research and Publication Ethics Directive" are complied with and that we do not take any of the actions based on "Actions Against Scientific Research and Publication Ethics". At the same time, we declare that there is no conflict of interest between the authors, which all authors contribute to the study, and that all the responsibility belongs to the article authors in case of all ethical violations.

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Appendix A. The Self-Awareness Scale for Anti-Bias Education

1- Totally disagree 2- Disagree 3-Undecided 4-Agree 5-Totally agree

	Items
1.	Farklılıklara (etnik köken, kültür, sosyo ekonomik yapıları, dil, aile stilleri, cinsiyet, kalıp yargısal olmayan cinsiyet rolleri, yeterlilikler) dayalı önyargılar mücadele ederim [I fight prejudices based on differences (ethnicity, culture, socio-economic status, language, family style, gender, non-stereotypical gender roles, competencies)].
2.	Farklılıkları olan çocuklara (etnik köken, kültür, sosyo ekonomik yapıları, dil, aile stilleri, cinsiyet, kalıp yargısal olmayan cinsiyet rolleri, yeterlilikler) sınıfımda yer almasını kolaylaştıran bir tutum sergilerim [I exhibit an attitude that facilitates the participation of children with differences (ethnicity, culture, socio-economic structure, language, family styles, gender, non-stereotypical gender roles, competencies) in my class].
3.	Farklılıklara (etnik köken, kültür, sosyo ekonomik yapıları, dil, aile stilleri, cinsiyet, kalıp yargısal olmayan cinsiyet rolleri, yeterlilikler) dayalı ön yargıların farkına varırım [I become aware of prejudices based on differences (ethnicity, culture, socio-economic structures, language, family styles, gender, non-stereotypical gender roles, competencies)].
4.	Farklılıkları olan çocuklara (etnik köken, kültür, sosyo ekonomik yapıları, dil, aile stilleri, cinsiyet, kalıp yargısal olmayan cinsiyet rolleri, yeterlilikler) saygı gösterme konusunda model olurum [I model to respect children with differences (ethnicity, culture, socio-economic background, language, family styles, gender, non-stereotypical gender roles, competences)].
5.	Kendi kültürel kimliğimin farkındayım [I am aware of my own cultural identity].
6.	Birine karşı önyargılı yorumları duyduğumda onlarla kolaylıkla mücadele edebilirim [When I hear prejudiced comments against someone, I can easily fight them.]
7.	Kişisel değerlerimi başkalarına dayatmamak için her türlü çabayı gösteririm [I make every effort not to impose my personal values on others].
8.	Farklılıkları (etnik köken, kültür, sosyo ekonomik yapıları, dil, aile stilleri, cinsiyet, kalıp yargısal olmayan cinsiyet rolleri, yeterlilikler) olan çocuklarla çalışmada yararlı olacak kaynakları nerede bulacağımı bilirim [I know where to find resources that will be useful in working with children with differences (ethnicity, culture, socio-economic background, language, family styles, gender, non-stereotypical gender roles, competencies)].
9.	Farklılıkları güçlü yanlar olarak görürüm [I notice differences as strengths].
10.	Kendi kültürel kimliğim ile ilgili kendimi rahat hissederim [I feel comfortable about my own cultural identity].
11.	Var olan önyargılarımın farkındayım [I am aware of my existing prejudices].