IJPES
www.ijpes.com
International Journal of Psychology and Educational Studies
ISSN: 2148-9378

How Diagnostic Labels Affect Preservice Early Childhood Teachers' Responses to Inclusion of Children with Disabilities: A Vignette Study

Binnur YILDIRIM HACIİBRAHİMOĞLU[1], Hatice BAYRAKLI [2], Ayşegül USTAOĞLU[3]

[1] *Faculty of Education, Giresun University, Giresun, Türkiye* *0000-0002-6471-6054*

[2] *Faculty of Education, Eastern Mediterranean University, Famagusta, Turkish Republic of Northern Cyprus* *0000-0001-6917-4146*

[3] *Faculty of Education, Sinop University, Sinop, Türkiye* *0000-0003-2865-448X*

ARTICLE INFO

Article History
Received 14.09.2022
Received in revised form 18.12.2022
Accepted 05.01.2023
Article Type: Research Article

ABSTRACT

This study aims to examine the effect of diagnostic labels on the responses of preservice early childhood teachers to the inclusion of children with special needs in general education classes. 228 preservice early childhood teachers, who participated in the study, answered the Demographic Information Form and the Teachers' Comfort and Concern Scale (TCCQ). The questionnaire consists of two formats in which vignettes are presented with and without a diagnosis label. As a result of the t-test and the Mann Whitney-U test applied to the data obtained from the six-points scale questions of TCCQ, it was observed that the comfort levels of the preservice teachers and their classroom adaptation and the need for support did not differ according to the presence or absence of the diagnostic labels, the type of child's disability, the grade level and the undergraduate program of the preservice teachers. According to the results of the inductive analysis conducted to the open-ended questions in the TCCQ, the participants felt positive/comfortable, negative/concerned and responsible for being teachers of children with special needs. They wanted to learn about children's characteristics and previous educational life before they attended the early childhood classroom.

Keywords:
Diagnostic labels, inclusion, preservice early childhood teachers, teacher education, children with special needs

1. Introduction

Early childhood inclusion which makes positive contributions to children with disabilities in developmental domains (Frauzer-Cross, Traub, Hutter-Pishgahi & Shelton, 2004; Odom et al., 2004), and supports social-emotional and academic skills (Odom et al., 2004) is legally supported in Turkey as it is in the world (United Nations, 2006; UNESCO, 2008; The Ministry of National Education [MoNE], 2018). This, in turn, has led to an increase in the number of children who are included in early childhood in recent years (MoNE, 2015; MoNE, 2019). In parallel with this increase, various problems are encountered in early childhood inclusion practices. Lack of support services for teachers and children with disabilities in early childhood education (Akalın et al., 2014; Akdağ & Haser, 2017; Bat et al., 2017), overcrowding of classes (Akdağ & Haser, 2017) and lack of professional knowledge, skills, and experience of early childhood teachers related to children with disabilities (Akdağ & Haser, 2017; Batu et al., 2017; Kaya, 2005) are among the problems that are often expressed. In addition, early childhood teachers face various problems in preparing an individualized educational program, adapting the curriculum, coping with problem behaviours, and collaborating with families (Akalın et al., 2014; Akdağ & Haser, 2017; Batu et al., 2017). But despite all the difficulties associated with inclusion in Turkey, children with disabilities within early childhood inclusion are making progress in developmental domains

[1]Corresponding author's address: Giresun University, Faculty of Education, Giresun /Türkiye
e-mail: binnury@gmail.com
Citation: Yıldırım Hacıbrahimoğlu, B., Bayraklı, H., & Ustaoğlu, A. (2023). How diagnostic labels affect preservice early childhood teachers' responses to inclusion of children with disabilities: A vignette study. *International Journal of Psychology and Educational Studies*, *10*(1), 274-290. https://dx.doi.org/10.52380/ijpes.2023.10.1.1023

(Sucuoğlu, Bakkaloglu & Demir, 2020), social skills, and social acceptance (Bakkaloğlu, Sucuoğlu & Özbek, 2017) and achieving increased quality of home environments (Sucuoğlu, Bakkaloğlu & Demir, 2018).

The Importance of Teachers and Their Attitudes towards Inclusion

Teachers are among the most important elements of successful inclusion practices (Buysse, Skinner, & Grant 2001; Frauzer-Cross et al., 2004; Odom et al., 2004). Teachers' positive attitudes towards children with disabilities and inclusion significantly affect the success of inclusion (Avramidis & Norwich, 2002; Bricker, 2000; Huang & Diamond, 2009; MacKenzie, Cologon, & Fenech, 2016; Rakap, Cig, & Parlak-Rakap, 2017). Outcomes of inclusion are also improved when teachers increase their knowledge and skills about children with disabilities and have more positive attitudes (Bentley-Williams, Grima-Farrell, Long, & Laws, 2017; Bricker, 2000; Harvey & Pellcok, 2003; Odom et al., 2004). Teachers' negative attitudes are among the most important obstacles to successful inclusion (Akdağ & Haser, 2017; Buysse, Wesley, & Keyes, 1998).

A large body of research exploring factors that affect teachers' attitudes towards inclusion provides evidence for the impact of child-related and teacher-related factors. Studies examining teacher-related factors' influence (gender, educational level, professional experience, previous interaction with people with disabilities, etc.) on teachers' attitudes towards inclusion present contrasting findings. According to some studies, several teacher-related factors positively affect their attitudes towards inclusion. These factors are listed as being female, having higher levels of education and more professional experience, receiving extra training related to special education or inclusion, having more experience working with children with disabilities, or having previous interaction with individuals with disabilities (Avramidis & Norwich, 2002; Boer, Pijl, & Minnaert, 2011; Böddi, Serfőző, Lassú, & Kerekes, 2019; Dias & Cadime, 2016; Kraska & Boyle, 2014; Kwon, Hong, & Jeon, 2017; Rakap, Parlak-Rakap, & Aydin, 2016; Stoiber, Gettinger, & Goetz, 1998). However, there are also studies showing teachers with more professional experience or who have worked previously with children with disabilities show more negative attitudes towards inclusion (Avramidis & Norwich, 2002; Boer et al., 2011; Dias & Cadime, 2016). Moreover, a smaller number of studies claim teacher attitudes do not differ according to gender, educational level, or professional experience (Haq & Mundia, 2012; Kraska & Boyle, 2014; Dias & Cadime, 2016).

The Relationship between The Diagnostic Label and Teacher Attitudes towards Inclusion

Studies investigating the factors influencing teacher attitudes towards inclusion reveal the significant impact of child-related factors (e.g., type and level of the disability) on teacher attitudes which brought diagnostic labels into the attention of the researchers. A child with a disability must be diagnosed to benefit from special education services and to ensure that his/her needs are met (Anastasiou & Kauffman, 2011; Lauchlan & Boyle, 2007; Norwich, 1999). On the other hand, diagnosis leads to the labeling of the child, and decreases teachers' expectations about the child by affecting his/her attitudes (Ayers, Krueger & Jones, 2015; Bianco, 2005; Harvey & Pellock, 2007; Lalvani, 2015), causes bias about the child, excessive generalizations, peer bullying, exclusion of the child and low self-perception in the child (Lauclan & Boyle, 2007). However, by raising awareness about the child, it provides an understanding of the difficulties experienced by the child, increases the acceptance of the child, provides information about effective intervention options that can be applied to the child, and facilitates communication by creating a common language among experts working with the child (Lauchlan & Boyle, 2007).

Research on the relationship between the labeling of children with disabilities and teachers' attitudes towards inclusion shows that these attitudes vary depending on the type and level of disability of the child (Avramidis & Norwich, 2002; Boer et al., 2011; Crane-Mitchell & Hegde, 2007; Haq & Mundia, 2002; Rakap et al., 2016). A comprehensive literature review by Avramidis and Norwich (2002) shows that the more the level of disability increases, the few teachers are willing to have children with disabilities in their classes, and they are more moderate to have the presence of children with physical and sensory disabilities in general education classes rather than having children with learning disabilities and emotional, behavioral disorders. Inservice (Bryant, 2018; Crane-Mitchell & Hegde, 2007; Dias & Cadim, 2016) and preservice early childhood teachers (Akdağ & Haser, 2017; Rakap et al., 2016) have positive attitudes towards the inclusion of these children. However, both have negative approaches towards the presence of children with severe disabilities in general education classes (Rakap et al., 2017).

How Teachers React to The Inclusion of Children with Disabilities in The Presence of Diagnostic Labels

How the diagnostic label is perceived by teachers and how it causes teachers to react have also attracted the attention of researchers, in addition to the effects of the type and level of disability on teachers' attitudes towards inclusion (Ayers et al., 2015; Huang & Diamond, 2009). In the study conducted by Ayers, Krueger, and Jones (2015), general education teachers remembered more positive behaviours about the students compared to negative behaviours in the presence of ADHD diagnosis. For special education teachers, the absence of the diagnosis did not affect the information that teachers remembered about the child. Teachers also remembered more information about the child in the presence of the diagnosis.

Huang and Diamond (2009) examined whether there is a relationship between the information given about disability and the responses of early childhood teachers. Teachers felt more comfortable when the children with disabilities were in their classrooms in the absence of the diagnosis. They felt comfortable mostly when children with cerebral palsy were in their classrooms, and they needed less support and classroom adaptations. In the case of children with severe intellectual disabilities, they felt less comfortable and needed more support and classroom adaptations. Teachers with a higher education level and previously taught children with disabilities felt more comfortable with having them in their classrooms.

Legislation supporting early childhood inclusion and research on the elements of successful inclusion reveals the need for teachers to meet the needs of children with disabilities included in general education settings. Early childhood teachers can develop positive attitudes and perceptions when their knowledge of inclusion increases (Huang & Diamond, 2009; Rakap et al., 2017; Sucuoğlu et al., 2015); this, in turn, contributes to get positive results from inclusion (Sucuoğlu et al., 2015). The impact of diagnostic labels on the attitudes of inservice (Akdağ & Haser, 2017; Crane-Mitchell & Hegde, 2007; Huang & Diamond, 2009) and preservice early childhood teachers (Rakap et al., 2016; 2017) and inservice early childhood teachers' responses to the inclusion of children with disabilities (Huang & Diamond, 2009) has been a subject in the literature. However, there is a gap in the literature regarding the studies examining the effect of diagnostic labels on preservice early childhood teachers' reactions to children with disabilities. Considering that teachers' developing positive attitudes towards inclusion and children with disabilities during their undergraduate education is vital for the success of inclusion (Campbell, Gilmore, & Cuskelly, 2003; Rakap et al., 2017; Sharma, Forlin, & Loreman, 2008), understanding how diagnostic labels affect preservice teachers' responses to inclusion of children with disabilities is of great importance in terms of increasing the quality of undergraduate courses related to special education and inclusion, preventing preservice teachers from creating negative bias and low expectations about children with disabilities and developing positive attitudes. Based on the importance as mentioned earlier, this study examined how diagnostic labels affect preservice early childhood teachers' responses to the inclusion of children with disabilities. For this purpose, the following questions were asked:

- Is the Turkish version of "The Teachers' Comfort and Concerns Questionnaire (TCCQ)" valid and reliable?
- Do preservice early childhood teachers' comfort levels, classroom adaptation levels, and the need for support towards the inclusion of children with disabilities differ depending on the presence or absence of diagnostic labels and the type of disability?
- Do comfort, classroom adaptation levels and the need for support levels of preservice early childhood teachers who answer the "labeling" and "no labeling" forms show significant differences according to their grade level and the type of undergraduate program they are enrolled in?
- How do preservice early childhood teachers feel about being a teacher of children with disabilities?
- What information do preservice early childhood teachers want to learn about children with disabilities before they attend their classrooms?

2. Methodology

2.1.Research Model

Although this study is a quantitative research using the survey model, qualitative data was also gathered to support quantitative data. The aim of this study is to find out about the people who take part, such as what they think, what they like, what they are good at, how they feel about something, and so on (Büyüköztürk et al., 2014).

2.2. Research Sample

A total of 267 preservice early childhood teachers attending a state university department of early childhood education participated in the study. However, due to some participants filling the form incompletely and calculating the extreme values, the research was conducted with 228 preservice early childhood teachers, 43 male, and 185 female participants. 166 (72.8%) of the participants are senior students, and 62 (27.2%) are third-year students. One hundred fourteen of them are in daytime education, and 113 are in the evening education program. The average age of the preservice teachers is 23.22 years (range = 20-37 years). One hundred eighty-two participants (79.8%) did not meet children with disabilities in the practicum and school experience classes, while 46 of them (20.2%) met children with disabilities in the practicum classes. One hundred seven preservice teachers took special education and early childhood inclusion courses 86 took only one special education course, and 18 had one early childhood inclusion course. 42 (18.4%) preservice teachers had someone with a disability in their lives.

2.3. Data Collection Tools and Procedure

Demographic Information Form: An information form was developed by researchers to determine the demographic information of the participants.

Teachers' Comfort and Concerns Questionnaire (TCCQ): The opinions of the preservice early childhood teachers who participated in the study were examined with "The Teachers' Comfort and Concerns Questionnaire", originally developed by Huang and Diamond (2009). The questionnaire evaluates whether the presence of a diagnostic label in the information describing children is related to teachers' responses. The questionnaire consists of two formats in which vignettes with and without diagnosis labels are presented. There are four vignettes and two open-ended questions in both formats. In the "labeling" form, four vignettes are provided about children with ADHD, Down syndrome, cerebral palsy, and severe intellectual disability with the diagnostic labels. In the "no labeling" version, the same vignettes are presented without diagnostic labels. Each vignette contains information about the basic characteristics of the specified disability as well as the child's typically developing domains. The vignette of the child with ADHD describes that the child has attention problems, displays active and impulsive behaviours, but has typical intellectual, language and physical development, and completes a task well when divided into smaller parts. The child with Down syndrome is portrayed as having a slower intellectual development compared to his peers, having difficulty in receptive and expressive language, walking and running, and cooperating with others when verbal or physical guidance was provided repeatedly. The vignette of the child with cerebral palsy describes that the child has slow and uncontrolled movements, has difficulty in sitting straight and walking, uses a wheelchair, but has also age appropriate learning and language performance. The child with severe intellectual disability was illustrated as having difficulty speaking and understanding, demonstrating problem behaviours such as screaming, having an unsteady walk, and needing help to stand up or sit down, but enjoying participating with other children. In both forms, the two open-ended questions are the same. The first question relates to how they feel about being a teacher of children with disabilities. The other question is about the information they want to learn about the children with disabilities before they are enrolled in their classrooms.

Each vignette consists of seven sub-questions. The four sub-questions are designed as a six-point rating scale, the other sub-questions in order of importance. Six-point rating scale items are rated as "1: Strongly disagree/absolutely unnecessary, 6: Strongly agree/absolutely necessary". TCCQ is also composed of three sub-scales: *The Comfort Scale,* including four items, focuses on teachers' comfort level in meeting the needs of children with disabilities and typically developing children. Internal consistency reliability was found to be sufficient in all vignettes (Cronbach's α = 0.66 to 0.75). *The Classroom Adaptation Scale* consists of four items: adapting the curriculum, modifying the environment, dealing more with the child with a disability, and adjusting class size. *The Need for Support Scale* includes six items that evaluate teachers' needs in terms of communication with families, types of support, teacher training, and personal development. Since there was a significant relationship between the Classroom Adaptation Scale and The Need for Support Scale (r (145) = 0.51, p 0.001), the items from these two scales were combined to form the Adaptation/Support Scale (Cronbach's = 0.76-0.81).A negative relationship (r = −0.25 to −0.45) was found between the Comfort and Adaptation/Support scale (Huang & Diamond, 2009).

The adaptation process for the scale started after the researchers were granted permission to use it via email on March 27, 2019. To avoid conceptual errors in the translation of the instrument into Turkish, three experts in the field of early childhood and inclusion with expertise in English were consulted.The consultation was repeated for significant differences in expert translations, and the translation work was completed. The researchers applied the final version of the scale to eight preservice teachers. Following this piloting, the items on the original scale and their Turkish translation were found to have conceptual and linguistic equivalence. Afterward, permission were obtained from the ethics committee to implement the application.

2.4. Data Analysis

In data analysis, missing values were examined first, and an average value was assigned to missed values. Afterward, the extreme values were examined, and 12 respondents determined as extreme values were deleted from the data set. Confirmatory factor analysis (CFA) was used to check the scale's construct validity and verify the scale. These analyses were carried out in Mplus version 8.5 under the MLR estimator. Cronbach Alpha coefficients were 0.624 for the Comfort Scale and 0.907 for the Adaptation/Support Scale. It is seen that the scores obtained from the adaptation/support scale are highly reliable. It is seen that the scores obtained from the comfort scale are moderately reliable (Özdamar, 2004). Within the scope of the study, the normality of distributions in subgroups formed according to variables was examined using the Kolmogrov-Smirnov (KS) test for groups larger than 50 participants and Shapiro-Wilks (SW) test for groups having less than 50 participants before performing the difference analysis. Table 1 indicates the normality test results of the Comfort, the Adaptation/Support Scale, and variables (grade level and type of undergraduate level) according to diagnosis status.

Table 1. *The Normality Test Results of the Comfort, the Adaptation/Support Scale, and Variables according to Diagnostic Status*

Variable		The Comfort Scale		The Adaptation/Support scale	
		Labeling	No labeling	Labeling	No labeling
		KS=0.040 p=0.200	KS=0.053 p=0.200	KS=0.126 p=0.000	KS=0.107 p=0.003
Grade level	Third grade	SW=0.959 p=0.170	SW=0.954 p=0.337	SW=0.871 p=0,000	SW=0.871 p=0.000
	Fourth grade	KS=0.074 p=0.200	KS=0.089 p=0.087	KS=0.123 p=0.005	KS=0.123 p=0.005
Type of undergraduate program	Daytime education	KS=0.061 p=0.200	KS=0.103 p=0.200	KS=0.118 p=0.044	KS=0.097 p=0.200
	Evening education	KS=0.073 p=0.200	KS=0.057 p=0.200	KS=0.149 p=0.003	KS=0.167 p=0.001

As evident in Table 1 in participants who answered “labeling” and “no labeling” versions of the scales, the Comfort Scale scores were normally distributed. In contrast, the Adaptation/Support Scale scores were not normally distributed in “labeling” and “no labeling”. For the diagnosis situation, the Comfort Scale scores were normally distributed in all variables. Therefore, the t-test, a parametric test, was used for the analysis of the Comfort Scale.When the scores obtained from the Comfort Scale sub-dimensions were examined, cerebral palsy subscale scores were not normally distributed in “labeling” ($KS = 0.110$, $p = 0.001$) and “no labeling” ($KS = 0.103$, $p = 0.006$) groups.

Furthermore, in participants who answered the “labeling” version, Adaptation/Support scale scores were not normally distributed for the grade level and type of undergraduate level. In participants who answered the “no labeling” version, Adaptation/Support Scale scores were not normally distributed in evening education. Therefore, Mann–Whitney U test, a non-parametric test, was used in the Adaptation/Support Scale analysis.

The analysis of two open-ended questions in the scale was conducted by assigning codes to each participant. Researchers then created codes and themes. Extracted meanings, interpretations, and differences in opinions were discussed, and sections were reorganized accordingly. Afterward, inductive analysis was conducted on the qualitative data by the authors (Yıldırım & Şimşek, 2008).

2.5. Ethical

The authors declare no conflict of interest. In this study, all rules stated to be followed within the scope of the "Higher Education Institutions Scientific Research and Publication Ethics Directive" were followed. Ethical Review Board Name: XXX University Ethics Committee. Date of Ethics Evaluation Decision: 21.10.2020 Ethics Assessment Document Issue Number: 2020-E.23575

3. Findings

3.1. Quantitative Findings

Validity and reliability of Turkish adaptation of the TCCQ: CFA was applied to test the construct validity of TCCQ. The path diagram obtained for the Comfort Scale is presented in Figure 1. When Figure 1 is examined, it is observed that factor loads vary between 0.407-0.638.

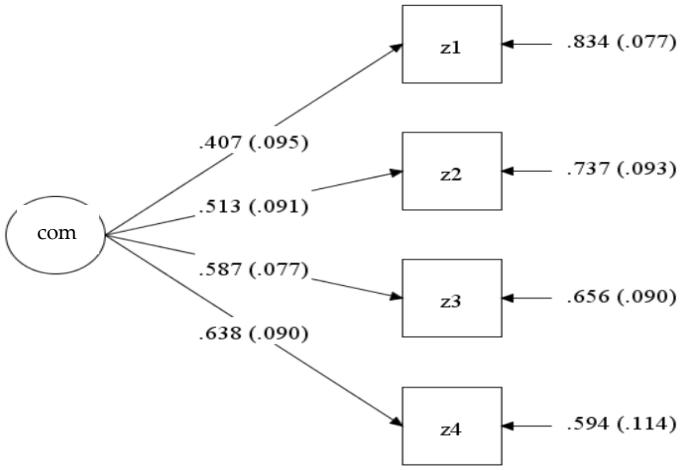

Figure 1. *Path Diagram (Standardised Load Values)*

The Adaptation/Support scale was examined in both cases, as in the original.The path diagram obtained for the one-dimensional structure is presented in Figure 2, and the path diagram obtained for the two-dimensional structure is presented in Figure 3.

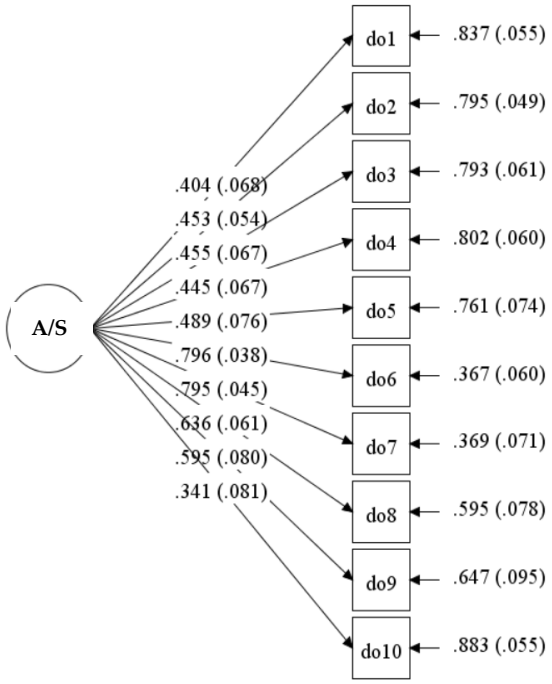

Figure 2. *Path Diagram (Standardised Load Values)*

When Figure 2 is examined, it is observed that factor loads vary between 0.341-0.796.

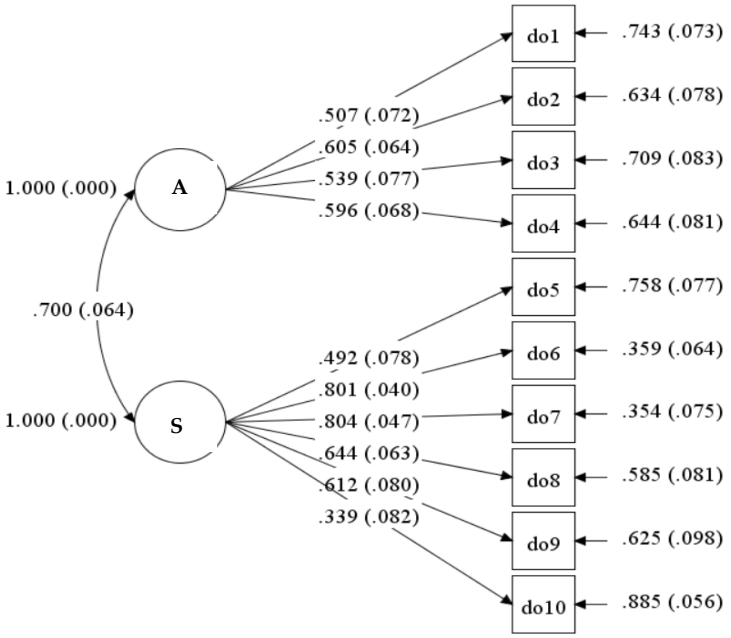

Figure 3. *Path Diagram (Standardised Load Values)*

Figure 3 demonstrates that the factor loads for the first factor vary between 0.507-0.605, and the factor loads for the second factor vary between 0.339-0.804. In brief, the results presented in Figures 1, 2, and 3 show that factor loadings are valid since they are above 0.30 (Klein, 1994; Stevens, 2002). Consequently, it is appropriate to include the sub-scales in the model as the items are suitable for that item factor structure.

Fit index values of the scales are presented in Table 2.

Table 2. *Fit Index Values*

Fit index	χ^2/sd	p	RMSEA	SRMR	TLI	CFI
Comfort	7.297/2=3.649	0.0260	0.102	0.040	0.756	0.919
AD/SUP one-dimensional	70.603/35=2.017	0.0003	0.063	0.057	0.884	0.910
AD/SUP two-dimensional	43.327/34=1,274	0.1312	0.033	0.040	0.969	0.976

One of the fit indices obtained by confirmatory factor analysis: χ^2 /sd ratio of ≤5 indicates a good fit, and ≤3 indicates perfect fit (Kline, 2005). RMSEA of ≤0.10 indicates acceptable fit (Kline, 2005), ≤0.08 indicates good fit (Sümer, 2000), and <0.05 indicates very good fit (Schumacker & Lomax, 2004). RMSEA value indicates an acceptable fit in the Comfort scale. RMSEA value is significantly affected by sample size (Şimşek, 2007; Taasoobshirazi & Wang, 2016). Similarly, the TLI value is sensitive to sample size; although other fit index values show good fit, the TLI can result in low values in small samples (Yaşlıoğlu, 2017). Accordingly, the small sample size in this study can lead to poor fit TLI values in the Comfort Scale. SRMR of ≤0.10 indicates a good fit (Kline, 2005). CFI≥0.90 indicates a good fit (Kline, 2005). TLI≥0.90 indicates good agreement (Brown, 2006). For these values, ≥0.85 is an indication of acceptable fit (Yılmaz & Çelik, 2009), and ≥0.95 is an indication of perfect fit (Tabachnick & Fidell, 2001).

When the obtained values are evaluated together, it can be seen that the original one-dimensional 4-item structure of the Comfort Scale can also be used in Turkish culture, although the TLI values are not at the desired level.The Adaptation/Support scale has been validated in Turkish culture in two different ways as in the original. The scale can be used by researchers in a one-dimensional structure of 10 items, if desired, and in a two-dimensional structure of 10 items, with 4 and 6 items, respectively.

The effect of the presence of diagnostic labels and type of the disability on preservice early childhood teachers' comfort levels, classroom adaptation levels, and the need for support towards the inclusion of children with disabilities: The first sub-problem of the study was the question "Do preservice early childhood teachers' comfort levels towards the inclusion of children with special needs differ statistically significantly according to the given information about special needs diagnosis labels and the types of disability?" The findings of this question are presented in Table 3.

Table 3. *T-test Results according to Diagnostic Labels of Comfort Scale and Sub-Dimensions*

	Diagnostic Status	N	$\bar{X}$	S	t	sd	p
Comfort levels	Labeling	117	80.464	7.737	0.621	226	0.535
	No labeling	111	79.816	8.018			
	Total	228					
ADHD	Labeling	117	19.778	2.625	1.269	226	0.206
	No labeling	111	19.316	2.872			
	Total	228					
Severe intellectual disability	Labeling	117	19.539	3.058	-0.550	226	0.583
	No labeling	111	19.750	2.733			
	Total	228					
Down syndrome	Labeling	117	20.550	3.014	1.410	226	0.160
	No labeling	111	20.030	2.518			
	Total	228					

Table 3 indicates that the comfort levels of preservice teachers towards the inclusion of children with disabilities do not show a significant difference according to the presence or absence of diagnostic labels (t (226) = 0.621, p> 0.05). Table 3 also demonstrates that the comfort levels of preservice teachers towards the inclusion of children with disabilities do not differ significantly depending on the presence or absence of diagnostic labels in ADHD (t (226)= 1.269, p>0.05), severe intellectual disability (t (226)= -0.550, p>0.05) and Down syndrome (t (226)= 1.410, p>0.05) sub-dimensions of the questionnaire.

Table 4. *Mann Whitney-U Test Results of the Classroom Adaptation and the Need of Support and Sub-Dimensions according to the Diagnostic Labels*

	Diagnostic Status	N	Rank average	Rank sum	U	p
Comfort level (Cerebral palsy)	Labeling	117	113.55	13285.50	6382.500	.823
	No labeling	111	115.50	12820.50		
	Total	228				
Adaptation/Support	Labeling	117	117.40	13735.50	6154.500	.496
	No labeling	111	111.45	12370.50		
	Total	228				
Cerebral palsy	Labeling	117	115.51	13515,00	6375.000	0.812
	No labeling	111	113.43	12591.00		
	Total	228				
ADHD	Labeling	117	117.82	13785.00	6105.000	0.434
	No labeling	111	111.00	12321.00		
	Total	228				
Severe intellectual disability	Labeling	117	118.15	13824.00	6066.000	0.388
	No labeling	111	110.65	12282.00		
	Total	228				
Down syndrome	Labeling	117	115.89	13559.50	6330.500	0.742
	No labeling	111	113.03	12546.50		
	Total	228				

According to the Mann Whitney-U test conducted to the Comfort Scale cerebral palsy sub-dimension, comfort levels of preservice teachers did not differ significantly based on the presence or absence of diagnostic label (U = 6382.500, p> 0.05) as seen in Table 4. Preservice teachers' classroom adaptation levels and support needs for the inclusion of children with disabilities do not differ significantly according to the presence or absence of diagnostic labels (U = 6154.500, p> 0.05).

Table 4 also reveals that the levels of classroom adaptation and support needs of the participants for the inclusion of children with disabilities did not differ significantly in ADHD (U = 6105.000, p> 0.05), cerebral palsy (U = 6375.000, p> 0.05), severe intellectual disability (U = 6066.000, p> 0.05) and Down Syndrome (U = 6330.500, p> 0.05) sub-dimensions according to the presence or absence of diagnostic labels.

The effect of the grade level and the type of undergraduate program on comfort levels, classroom adaptation levels, and support needs of preservice early childhood teachers who received the "labeling" and "no labeling" form: Another sub-problem of the study is to determine the statistically significant difference in the comfort

levels of preservice early childhood teachers who received the labeling and no labeling form according to their demographic characteristics.

Table 5. *T-test Results of the Comfort Levels of the Preservice Teachers Who Received the "Labeling" and "No Labeling" Version according to the Grade Level and Type of Undergraduate Program*

Diagnostic Status		Group	N	$\bar{X}$	S	t	sd	p
Labeling	Comfort levels	Third grade	38	81.474	8.280	0.979	115	0.330
		Fourth grade	79	79.978	7.467			
		Total	117					
Labeling	Comfort levels	Daytime education	58	80.774	8.248	0.308	114	0.758
		Evening education	58	80.330	7.200			
		Total	116					
No labeling	Comfort levels	Third grade	24	81.496	9.52555	1.018	31.403	0.317
		Fourth grade	87	79.353	7.54673			
		Total	111					
No labeling	Comfort levels	Daytime education	56	79.318	8.218	-0.659	109	0.511
		Evening education	55	80.323	7.852			
		Total	111					

The comfort levels of preservice teachers who received the "labeling" version of the questionnaire towards the inclusion of children with disabilities do not differ significantly based on their grade level (t (115) = 0.979, p> 0.05) and type of undergraduate program they were enrolled in (t (114) = 0.308, p> 0.05). Likewise, the participants who took the "no labeling" form did not show a significant difference according to their grade level (t (31,403) = 1.018, p> 0.05) and the type of undergraduate program they were enrolled in (t (109) = -0.659, p> 0.05) (Table 5).

Table 6. *Mann Whitney-U Test Results of Classroom Adaptation Levels and the Need for Support of Preservice Teachers Who Received the "Labeling" and "No Labeling" Version according to the Grade Level and Type of Undergraduate Program*

Diagnostic Status		Group	N	Rank average	Rank sum	U	p
Labeling	Class adaptation and support need	Third grade	38	61.34	2331,00	1412,000	0.604
		Fourth grade	79	57.87	4572,00		
		Total	117				
Labeling	Class adaptation and support need	Daytime education	58	54.48	3160.00	1449.000	0.198
		Evening education	58	62.52	3626.00		
		Total	116				
No labeling	Class adaptation and support need	Third grade	24	62.10	1490.50	897.500	0.294
		Fourth grade	87	54.32	4725.50		
		Total	111				
No labeling	Class adaptation and support need	Daytime education	56	51.77	2899,00	1303.000	0.162
		Evening education	55	60.31	3317.00		
		Total	111				

As evident in Table 6, preservice early childhood teachers' classroom adaptation levels and support needs for the inclusion of children with disabilities did not differ significantly according to their grade level (U=1412,000, p>0.05) and the type of undergraduate program they were enrolled in (U = 1449.000, p> 0.05) in the "labeling" version. Similarly, preservice teachers' classroom adaptation levels and support needs for the inclusion of children with disabilities did not show a significant difference according to their grade level (U = 897.500, p> 0.05) and the type of undergraduate program they were enrolled in (U = 1303.000, p> 0.05) in the "no labeling" version.

3.2. Qualitative Findings

How preservice early childhood teachers feel about being a teacher of children with disabilities: The answers to this question were grouped under three themes: feeling positive/comfortable, negative/concerned, and responsible for being teachers of children with disabilities. Their responses to "positive/concerned" emphasised feelings of happiness/specialness, professional adequacy/improvement, and satisfaction.. For

example, one preservice teacher said, "*I feel more special as I think being a teacher of a child with a disability will improve me more. Because in order to be a teacher of a child with a disability, you need to be a special teacher.*" Likewise, another stated, *"First of all, I feel that I am a special and chosen person. It would make me feel happy and proud to be the guide and teacher of someone who needs me more than others".*

Preservice early childhood teachers expressed the feeling of concern, insecurity, and inadequacy within the negative/concerned theme, as can be traced in the following statements: "*I have more responsibilities than teaching, will I be able to do so? I'm worried because of this concern. Can I respond patiently, appropriately, and to a reasonable extent to the child?", "I think it is necessary to pay more attention to a child with a disability." So the class size needs to be adjusted accordingly. That seems a little impossible. Therefore, I would feel a little different. I think I cannot teach him/her anything, and I will not be able to fulfill his/her interests and desires".* Some preservice teachers also linked this feeling of inadequacy to the undergraduate education they received: *"I would feel worried because I did not get a very good education. Also, I would feel sorry since I could not help him/her enough ".*

Some of the participants expressed that they would feel both comfortable and concerned if there was a child with a disability in their class: *"I would be worried more than usual at first. I would think I cannot be efficient to a child with a disability. Or I would be worried about paying too much attention to that child and spending less time on others. But I don't think I will have any trouble after getting used to it. In fact, the more I see that I am useful, the happier I will be".* This reveals that positive and negative feelings towards the inclusion of children with disabilities can be experienced simultaneously.

According to the third theme having children with disabilities in the classroom will increase teachers' responsibilities, as can be seen in the following statements: *"I would feel more responsible for the child with disabilities than other students. I would do my best to help him develop socially, affectively, and cognitively, but I would also be afraid of doing something wrong,"* and *"I would feel myself having a much greater responsibility than a normal teacher. Although this feeling of responsibility on me would make me a little nervous, I would get sufficient education and work well to meet the needs of this child."*

What information preservice early childhood teachers want to learn about the children with disabilities before they attend their classrooms: Preservice teachers' responses to the second question reveal that they wanted to learn about the characteristics of children with disabilities before they start in their classroom. They requested to be provided with information about the child's diagnosis, medical history, interests, behaviour problems, and family: "*I would like to have a detailed portfolio. How has the diagnostic process developed? Are there any similar individuals in the family? How does the family approach this situation? Do they receive external support? If so, by whom? What are the aspects that negatively affect social life about disability?"* or "*What he likes, what he does not like…medical history, family situation, the history of the child. Because these are essential questions to help the child."*

4. Discussion

Undergraduate years have great importance for teachers' to develop positive attitudes towards the inclusion of children with disabilities, which contributes to the success of inclusion (Campbell et al., 2003; Rakap et al., 2017). Accordingly, understanding how diagnostic labels affect preservice teachers' responses to the inclusion of children with disabilities is essential to increase the quality of undergraduate early childhood education programs. Based on this importance, this study investigated the impact of information about diagnostic labels on the responses of preservice teachers to the inclusion of children with disabilities in terms of their comfort and classroom adaptation levels and their support needs. The study also focused on how preservice teachers feel about being a teacher of children with disabilities and the information they want to learn about the child before he/she attends their classes.

First, as the fit statistics obtained from the confirmatory factor analysis were acceptable, the scale was observed to have construct validity. According to the reliability analysis, the scale provided reliable results. Based on these results, the Turkish version of the TCCQ was proved as a valid and reliable measurement tool for early childhood pre-service teachers. The results obtained from the validity and reliability analyses support those obtained in the original study of the scale (Huang & Diamond, 2009). Quantitative findings of the study showed that the comfort and classroom adaptation levels and support needs of preservice early childhood teachers regarding having children with disabilities in their classrooms did not differ according to the presence or absence of diagnostic labels, type of child's disability, their grade level and type of the undergraduate

program. Unlike our non-significant results, Huang and Diamond (2009) found that early childhood teachers who responded to vignettes in which diagnostic labels were not given felt more comfortable when children with disabilities were in their classrooms. According to the literature, diagnostic labels cause teachers to have a bias against children with disabilities, make misevaluations and lower their expectations about children with disabilities (Ayers et al., 2015; Bianco, 2005; Gilmore et al., 2003; Harvey & Pellock, 2007; Lalvani, 2015; Lauclan & Boyle, 2007; Norwich, 1999). These disadvantages associated with diagnostic labels also cause teachers not to feel comfortable if children with disabilities are present in their classrooms (Huang & Diamond, 2009). In this study, the lack of difference between the comfort levels of preservice teachers according to the presence or absence of diagnostic labels may be due to the unique nature of the early childhood education undergraduate program. Because of the program's greater emphasis on child development compared to other teaching programs (Gilmore et al., 2003) and less focus on academic achievement (Huang & Diamond, 2009), preservice teachers in this study may have paid more attention to children's individual differences and their strengths and weaknesses rather than diagnostic labels.

Our finding supports the findings of Huang and Diamond's (2009) study that there is no difference regarding the needs for support and classroom adaptation levels may result from participants' feelings about teaching children with disabilities. Preservice teachers may experience feelings of concern, fear, or inadequacy because they do not have enough knowledge about how to make classroom adaptations to meet the children's needs, and inclusive classrooms are not provided with the necessary support in Turkey. These feelings are also apparent in their responses to open-ended questions: *"I think I would be afraid of inadequacy in this process." "… I think I don't have enough knowledge and equipment. For this reason, I am afraid of not being able to benefit the child."*

On contrary to our non-significant results in terms of the type of child's disability, there are studies showing inservice and preservice early childhood teachers are more positive about the inclusion of certain types of disabilities (e.g., physical disabilities) (Huang & Diamond, 2009; Rakap et al., 2016). And they are more negative about the inclusion of children with severe intellectual disabilities (Huang & Diamond, 2009; Rakap et al., 2016), behavioural disorders (Rakap et al., 2016), or autism (Stoiber et al., 1998). In Huang and Diamond's (2009) study, early childhood teachers felt most comfortable when a child with motor disabilities was in their classroom, and they needed fewer classroom adaptations and support, and they explained that the opposite was the case with intellectual disabilities. In this study, the reason why preservice early childhood teachers' comfort, classroom adaptation levels, and support needs do not differ in terms of the type of disability might be that they focus on the individual differences of children with disabilities discussed in vignettes rather than the type of disability. They see classroom adaptations and support needs necessary for all disabilities. Although quantitative findings show there was not any significant difference in preservice teachers' responses regarding the type of disability, qualitative data indicated that they feel more concerned or inadequate in the case of severe or intellectual disabilities, as can be tracked in the participants' statements: *"I believe I can teach children with mild levels of disability. But moderate and severe disabilities can strain me in classroom practices."*; *"When there are children with intellectual disabilities, I could feel more worried and inadequate"*. Such responses can be considered as reflections of the idea that diagnostic labels lead to certain biases and that some types/levels of disability will need further adaptation and support in the classroom (Eiserman, Shisler, & Healey, 1995; Gilmore et al., 2003).

This study also showed non-significant results regarding preservice teachers' responses in terms of their grade level and the type of undergraduate program they were enrolled in. Similar to this study, Dias and Cadime (2016) found that early childhood teachers' attitudes towards inclusion do not differ according to their education level and professional experience. According to some studies, early childhood teachers who have a high level of education (Kraska & Boyle, 2014; Rakap et al., 2016) or who have previously worked with children with disabilities (Boer et al., 2011; Kwon et al., 2017) feel more comfortable about having children with disabilities in their classes because of their increasing competencies (Huang & Diamond, 2009). However, there are also studies suggesting that early childhood teachers with experience working with children with disabilities approach inclusion more negatively due to their previous experiences (Dias & Cadime, 2016; Hastings & Oakford, 2003; Tsakiridou & Polyzopoulou, 2014). Considering the curriculum followed and special education courses taken by all the participants are the same, and the majority of preservice teachers have not yet encountered children with disabilities in classroom environments yet, the finding that there is no difference in terms of the grade level and type of undergraduate program can be attributed to the fact that

their level of knowledge and experience is similar regardless of being in the third or fourth year of the program and being enrolled in daytime or evening education.

Last of all, non-significant results of the quantitative part of the study might also be due to the descriptions of the children made in the labeling and no labeling forms of vignettes. Both forms of the vignettes provide the same information about the children apart from diagnostic labels given in labeling cases. In other words, the descriptions of the no-labeling cases are so close to labeling that this can explain the non-significant results. Furthermore, qualitative data regarding what preservice teachers want to know beforehand about children with disabilities might also explain non-significant results of quantitative findings because the type of information, including child's diagnosis, medical information, interests, behaviour problems, and family they need was similar in all participants. This similarity between two groups of participants, who answered labeling and no labeling forms, might result in non-significant findings.

Qualitative data showed that preservice teachers have a variety of feelings about being a teacher of children with disabilities. Feeling concerned, insecure, and inadequate was dominant in their responses. They also reported more negative feelings in the case of having children with severe disabilities or children with intellectual disabilities in their classroom. The aforementioned feelings might be an indicator of feeling uncomfortable in the presence of a child with a disability in the classroom, although quantitative data have not determined any significant difference. Given the fact that presumptions about certain types/levels of disability require further adaptation and support in the classroom (Ayers et al., 2015; Eiserman et al., 1995; Gilmore et al., 2003), reporting negative feelings is not a surprise. This is closely related to their knowledge and experience regarding children with disabilities. Besides, our qualitative data also showed that preservice teachers want to learn more about the child's diagnosis, medical history, interests, behaviour problems, and family. This finding might also explain non-significant quantitative results because the type of information, including child's diagnosis, medical information, interests, behaviour problems, and family, they reported was similar in all participants. By increasing their knowledge about the child, they might feel more comfortable regarding the child's existence in the classroom and make adaptations accordingly

5. Recommendations for Future Research and Implementations

The first limitation of this research is related to the research group. The study collected data from day and evening education students who attended the third and fourth grades of a public university's early childhood education undergraduate program in Turkey. Data can be collected from more students in all grade levels enrolled in early childhood programs of different universities, and comparisons can be made on the basis of grade level and courses taken related to special education. In addition, after the preservice teachers graduate and start teaching, follow-up studies can be conducted to examine whether there is a change in their responses and professional experience. The second limitation of the study is that the data collection tool used is a questionnaire based on participants' self-report. In order to eliminate this limitation, qualitative data collection methods such as interviews, focus group interviews, and qualitative observations can also be used to diversify data collection methods and obtain more in-depth information. The third limitation of the study is linked to the hypothetical nature of the vignettes. Consequently, considering preservice teachers' responses to the questionnaire may not correspond with their responses to real life situations, observations in real inclusive classrooms can be conducted to confirm the data.

Understanding how diagnostic labels affect preservice early childhood teachers' perception of children with disabilities is crucial to create effective educational environments (Ayers et al., 2015). Therefore, this study contributes to the relevant literature since it is the first study to examine the responses of preservice early childhood teachers about having children with disabilities in general education classes regarding comfort, classroom adaptation, and support needs. The research shows preservice early childhood teachers positively approached the inclusion of children with disabilities in early childhood settings; however, it once again reveals that they see themselves as inadequate in meeting the learning needs of those children (Akalın et al., 2014; Akdağ & Haser, 2017; Crane-Mitchell & Hedge, 2007). Taking only theory-based courses, and not being provided with experience regarding children with disabilities in practicum classes or successful early childhood inclusion practices can lead to feeling inadequate in teaching children with disabilities, as one of the participants reported: *"I think the education given is not enough. The courses we take at the university are always*

theoretical. We cannot learn enough because we cannot implement it. Therefore, if I were a teacher for children with disabilities, I would feel inadequate and worried."

Increasing teachers' knowledge/skills for the inclusion of children with disabilities and developing more positive attitudes increase the benefit children with disabilities get from inclusion (Bentley-Williams et al., 2017; Harvey & Pellcok, 2003; Odom et al., 2004). Teachers' being equipped with qualifications to meet the needs of children with disabilities, which is one of the most important elements of successful inclusion (Frauzer-Cross et al., 2004; Odom et al., 2004), is only possible with effective teacher training programs. At this point, some suggestions can be made regarding early childhood education programs to increase the proficiency of preservice early childhood teachers regarding inclusion. First, opportunities for preservice early childhood teachers to participate in integrated programs of early childhood education and early childhood special education programs within education faculties can be provided (Kwon et al., 2017; Leatherman & Niemeyer, 2005; Proctor & Niemar, 2001). Second, the content of special education and inclusion courses can be improved by additional practicum experiences (Böddi et al., 2019; Campbell et al., 2003; Rakap et al., 2017), and preservice teachers can be provided with opportunities to implement strategies for children with disabilities in early childhood inclusion settings (Crane-Mitchell & Hedge, 2007; Proctor & Niemar, 2001; Rakap et al., 2017). The third suggestion is to give information about adaptations and modifications that be implemented in inclusive classrooms to the content of each lesson in the early childhood education programs to meet the needs of children with disabilities and increase their participation in classroom activities (Sharma et al., 2008). Finally, evidence-based practices in early childhood inclusion environments (for example, naturalistic instruction, embedded teaching, etc.) can be provided to learn through various coaching approaches (Rakap, 2017; Shepley et al., 2018; Snyder et al., 2018).

5. References

Akalın, S., Demir, Ş., Sucuoğlu, B., Bakkaloğlu, H., & İşcen, F. (2014). The needs of inclusive early childhood teachers about inclusive practices. *Eurasian Journal of Educational Research, 54*, 39-60.

Akdağ, Z., & Haser, Ç. (2017) Beginning early childhood education teachers' struggle with inclusion in Turkey. *Asia Pacific Journal of Education, 37*(2), 219-231. doi: 10.1080/02188791.2016.1273197

Anastasiou, D., & Kauffman, J. M. (2011). A social constructionist approach to disability: Implications for special special childhood inclusional education. *Exceptional Children, 77*(3), 367-384. doi: 10.1177/001440291107700307

Ayers, J. M., Krueger, L. E., & Jones, B.A. (2015). Effets of early childhood teachers of labeling and teacher certification type on recall and conflict resolution. The Journal of Educational Research, *108*(6), 435-448. doi: 10.1080/00220671.2014.909767

Bakkaloğlu, H., Sucuoğlu, B., & Özbek, A. B. (2017, November). *Okul öncesi dönemde kaynaştırma uygulamalarına katılan özel gereksinimli çocukların sosyal kabul, sosyal beceri ve problem davranışlarının boylamsal incelemesi [Longitudinal examination of social acceptance, social skills, and problem behaviors of children with special childhood inclusional needs involved in early childhood inclusion practices*] Paper presented at the 27th National Special childhood inclusional Education Congress, Samsun, Turkey. Abstract retrieved from https://uoek2018.ogu.edu.tr/Storage/uoek2018/Uploads/27_kongre_bildiri_kitab%C4%B1.pdf

Batu, E. S., Odluyurt, S., Alagözoğlu, E., Çattık, M., & Şahin, S. (2017). Okul öncesi öğretmenlerinin kaynaştırmaya ilişkin görüşlerinin belirlenmesi *[Determining the opinions of early childhood teachers regarding inclusion*]. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi [Ankara University Faculty of Educational Science Special Education Journal], 18*(3), 401-420. doi: 10.21565/ozelegitimdergisi.123456

Bentley-Williams, R., Grima-Farrell, C., Long, J., & Laws, C. (2017). Collaborative partnership: Developing pre-service teachers as inclusive practitioners to support students with disabilities. *International Journal of Disability, Development and Education, 64*(3), 270-282. doi: 10.1080/1034912X.2016.1199851

Bianco, M. (2005). The effects of disability labels on special childhood and general education teachers' referrals for gifted programs. *Learning Disability Quarterly, 28* (4), 285-293. doi: 10.2307/4126967

Böddi, Z., Serfőző, M., Lassú, Z. F., & Kerekes, V. (2019). Integration-related experience and preparedness from

the aspect of Hungarian early childhood teacher candidates. *International Journal of Early Childhood Special Childhood Inclusional Education, 11*(1), 80-91. doi: 10.20489/intjecse.587251

Boer, A., Pijl, S. J., & Minnaert, A. (2011). Regular primary school teachers' attitudes towards inclusive education: A review of the literature. *International Journal of Inclusive Education*, 15 (3), 331–353. doi: 10.1080/13603110903030089

Bricker, D. (2000). Inclusion: How the scene has changed. *Topics in Early Childhood Special Childhood Inclusional Education, 20,* 14-19. doi: 10.1177/027112140002000103

Brown, T. A. (2006). *Confirmatory factor analysis: For applied research.* Guilford Press.

Bryant, J. P. (2018). A phenomenological study of early childhood teachers' experiences and perspectives on inclusion practices. *Cogent Education, 5*, 1-12. doi: 10.1080/2331186X.2018.1549005

Buysse, V. Skinner, D., & Grant, S. (2001). Toward a definition of quality inclusion: Perspectives of practitioners. *Journal of Early Intervention, 24,* 146-161. doi: 10.1177/105381510102400208

Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö.E., Karadeniz, Ş. & Demirel, F. (2014). *Bilimsel araştırma yöntemleri (17. Baskı).* Pegem.

Campbell, J., Gilmore, L., & Cuskelly, M. (2003).Changing student teachers' attitudes towards disability and inclusion. *Journal of Intellectual and Developmental Disability*, *28*, 369-79. doi: 10.1080/13668250310001616407

Coogle, C. G., Ottley, J. R., Storie, S., Rahn, N. L., & Kurowski-Burt, A. (2020). Performance-based feedback to enhance preservice teachers' practice and early childhood children's expressive communication. *Journal of Teacher Education, 71*(2), 188-202. doi: 10.1177/0022487118803583

Crane-Mitchell, L., & Hegde, A. V. (2007). Beliefs and practices of in-service early childhood teachers in inclusive settings: Implications for personnel preparation. *Journal of Early Childhood Teacher Education*, *28*, 353–366. doi: 10.1080/10901020701686617

Dias, P. C., & Cadime, I. (2016). Effects of personel and professional factors on teachers' attitudes towards inclusion in early childhood. *European Journal of Special Childhood Inclusional Needs Education, 31*(1), 111-123. doi: 10.1080/08856257.2015.1108040

Eiserman, W. D., Shisler, L., & Healey, S. (1995). A community assessment of early childhood providers' attitudes toward inclusion. *Journal of Early Intervention, 19,* 149-167.

Frauzer-Cross, A., Traub, E. K., Hutter-Pishgahi, L., & Shelton, G. (2004). Elements of successful inclusion for children with significant disabilities. *Topics in Early Childhood Education, 24* (3), 169-183. doi: 10.1177/02711214040240030401

Gilmore, L., Campbell, J., & Cuskelly, M. (2003). Developmental expectations, personality stereotypes, and attitudes towards inclusive education: Community and teacher views of Down syndrome. *International Journal of Disability, Development and Education, 50,* 65–76. doi: 10.1080/1034912032000053340

Hanline, M. F. (2010). Preservice teachers' perceptions of field experiences in inclusive early childhood settings: Implications for personnel preparation. *Teacher Education and Special Childhood Inclusional Education 33*(4) 335–351. doi: 10.1177/0888406409360144

Haq, F. S., & Mundia, L. (2012). Comparison of Brunei preservice student teachers' attitudes to inclusive education and specific disabilities: Implications for teacher education. *The Journal of Educational Research, 105* (5), 366-374, doi: 10.1080/00220671.2011.627399.

Hastings, R. P., & Oakford, S. (2003). Student teachers' attitudes towards the inclusion of children with special childhood inclusional needs. *Educational Psychology,* 23, 87-94.

Harvey, M. W., & Pellock, C. (2003). Influences of student education labels, behaviors, and learning characteristics as perceived by Pennsylvania's secondary career and technical educators. *The Journal for Vocational Special Childhood Inclusional Needs Education*, *25*(3), 30-41.

Huang, H., & Diamond, K. E. (2009). Early childhood teachers' ideas about including children with disabilities in programmes designed for typically developing children. International *Journal of Disability, Development and Education, 56*(2), 169-182. doi: 10.1080/10349120902868632

Kaya, İ. (2005). *Anasınıfı öğretmenlerinin kaynaştırma (entegrasyon) eğitimi uygulamalarında yeterlilik düzeylerinin değerlendirilmesi [An evaluation of the teachers' competencies about the applications of mainstream education in early childhood]* [Unpublished master thesis]. Selçuk University, Konya.

Kline, P. (1994). *An easy guide to factor analysis.* Routledge.

Kline, R.B. (2005). *Principles and practice of structural equation modelling*. Guilford.

Kraska, J., & Boyle, C. (2014). Attitudes of early childhood and primary school pre-service teachers towards inclusive education. *Asia-Pacific Journal of Teacher Education*, *42*(3), 228-246. doi: 10.1080/1359866X.2014.926307

Kwon, K., A. Hong, S. Y., & Jeon, H. J. (2017). Classroom readiness for successful inclusion: Teacher factors and early childhood children's experience with and attitudes toward peers with disabilities. *Journal of Research in Childhood Education, 31*(3), 360-378. doi: 10.1080/02568543.2017.1309480

Lalvani, P. (2015). Disability, stigma and otherness: Perspectives of parents and teachers. *International Journal of Disability, Development and Education, 62*(4), 379-393. doi:10.1080/1034912X.2015.1029877

Lauchlan, F., & Boyle, C. (2007). Is the use of labels in special childhood inclusional education helpful? *Support for Learning*, *22*(1), 36-42. doi: 10.1111/j.1467-9604.2007.00443.x

Leatherman, J. M., & Niemeyer, J. A. (2005) Teachers' attitudes toward ınclusion: factors influencing classroom practice. *Journal of Early Childhood Teacher Education, 26*(1), 23-36. doi: 10.1080/10901020590918979

Mackenzie, M.,Cologon, K., & Fenech, M. (2016). 'Embracing everybody': Approaching the inclusive early childhood education of a child labelled with autism from a social relational understanding of disability. *Australasian Journal of Early Childhood, 41*(2), 4-12. doi: 10.1177/183693911604100202

Milli Eğitim Bakanlığı [Ministry of National Education of Turkey- MoNE]. (2015). *2014-2015 Milli eğitim istatistikleri örgün eğitim [2014-2015 National education statistics formal education].* Milli Eğitim Basımevi [National Education Press].

Milli Eğitim Bakanlığı [Ministry of National Education of Turkey- MoNE] (2018). *Özel eğitim hizmetleri yönetmeliği [Regulation of special education services]*. Milli Eğitim Basımevi [National Education Press].

Milli Eğitim Bakanlığı [Ministry of National Education of Turkey- MoNE]. (2019). *2018-2019 Milli eğitim istatistikleri örgün eğitim [2018-2019 National education statistics formal education].* Milli Eğitim Basımevi [National Education Press].

Norwich, B. (1999). The connotation of special childhood inclusional education labels for professionals in the field. *British Journal of Special Childhood Inclusional Education Volume, 26*(4), 179-183. doi:10.1111/1467-8527.00135

Odom, S. L., Vitztum, J., Wolery, R., Lieber, J., Sandall, S., Hanson, M. J., & Horn, E. (2004). Early childhood inclusion in the United States: A review of research from an ecological systems perspective. *Journal of Research in Special Childhood Inclusional Educational Needs, 4*(1), 17-49. doi: 10.1111/J.1471-3802.2004.00016.x

Özdamar, K. (2004). *Paket programlar ile istatistiksel veri analizi* (Çok değişkenli analizler). [Statistical data analysis through packet programs (Multivariable analyses)]. Kaan.

Proctor, R., & Niemeyer, J. A. (2001). Preservice teacher beliefs about inclusion: Implications for early intervention educators. *Journal of Early Intervention*, *24*(1), 55-66.

Rakap, S. (2017). Impact of coaching on preservice teachers' use of embedded instruction in inclusive early childhood classrooms. *Journal of Teacher Education, 68*(2), 125-139. doi: 10.1177/0022487116685753

Rakap, S., Cig, O., & Parlak-Rakap, A. (2017). Preparing early childhood teacher candidates for inclusion:

Impact of two special childhood inclusional education courses on their perspectives. *Journal of Research in Special Childhood Inclusional Educational Needs*, 17(2), 98-109. doi: 10.1111/1471-3802.12116

Rakap, S., Parlak-Rakap, A., & Aydin, B. (2016). Investigation and comparison of Turkish and American early childhood teacher candidates' attitudes towards inclusion of young children with disabilities, *International Journal of Inclusive Education, 20*(11), 1223-1237, doi: 10.1080/13603116.2016.1159254

Schumacker, R.E & Lomax, R.G. (2004). *A beginner's guide to structural equation modeling.* Lawrence Erlbaum.

Sharma, U., Forlin, C., & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability & Society, 23* (7), 773-785. doi: 10.1080/09687590802469271

Shepley, C., Lane, J. D., Grisham-Brown, J., Spriggs, A. D., & Winstead, O. (2018). Effects of training package to increase teachers' fidelity of naturalistic instructional procedures in ınclusive early childhood classrooms. *Teacher Education and Special Childhood Inclusional Education, 41*(4) 321-339. doi: 10.1177/0888406417727043

Snyder, P., Hemmeter, M. L., McLean, M., Sandall, S., McLaughlin, T., & Algina, J. (2018). Effects of professional development on early childhood teachers' use of embedded instruction practices. *Exceptional Children, 84*(2) 213-232.doi: 10.1177/0014402917735512

Stevens, J. P. (2002). *Applied multivariate statistics for the social science*s. Lawrance Erlbaum Association.

Stoiber, K. C., M. Gettinger, & Goetz, D. (1998). Exploring factors influencing parents' and early childhood practitioners' beliefs about inclusion. *Early Childhood Research Quarterly 13*(1), 107-124. doi: 10.1016/S0885-2006(99)80028-3

Sucuoğlu, B., Bakkaloğlu, H., & Demir, Ş. (2018). Beneficial effects of inclusive preschool on the home environments of young children with and without disabilities. *Early Child Development and Care, 190* (10), 1497-1511. doi: 10.1080/03004430.2018.1539842.

Sucuoğlu, N. M., Bakkaloğlu, H., Akalin, S., Demir, Ş., & İşcen-Karasu, F. (2015). The effects of the preschool inclusion program on teacher outcomes in Turkey. *Journal of Early Childhood Teacher Education, 36*(4), 324-341, doi: 10.1080/10901027.2015.1105328

Sucuoglu, N. B., Bakkaloglu, H., & Demir, E. (2020). The effects of inclusive preschool on the development of children with disabilities: A longitudinal study. *International Journal of Early Childhood Special Education, 12*(1), 215-231. doi: 10.9756/INT-JECSE/V12I1.201006

Sümer, N., (2000). Yapısal eşitlik modelleri: Temel kavramlar ve örnek uygulamalar [Structural equation models: Basic concepts and examples]. *Türk Psikoloji Yazıları [Turkish Psychology Articles]* , 3 (6),49-74. https://www.psikolog.org.tr/tr/yayinlar/dergiler/1031828/tpy13019961200000000m000225.pdf

Şimşek, Ö. F. (2007). *Yapısal eşitlik modellemesine giriş: Temel ilkeler ve LISREL uygulamaları* [Introduction to structural equation modeling: Basic principles and LISREL applications]. Ekinoks.

United Nations (2006). *Convention on the rights of persons with disabilities.* Retrieved from https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-24-education.html

Taasoobshirazi, G. & Wang, S. (2016). The performance of the SRMR, RMSEA, CFI and TLI: An examination of sample size, path size and degrees of freedom. *Journal of Applied Quantitative Methods, 11*(3), 31-40. Retrieved from http://www.jaqm.ro/issues/volume-11,issue-3/pdfs/2_GI_SH_.pdf

Tabachnick, B. G. & Fidell, L.S. (2001). *Using multivariate statistics (5th Ed.)*. Allyn & Bacon.

Tsakiridou, H., & Polyzopoulou, K. (2014). Greek teachers' attitudes toward the inclusion of students with special childhood inclusional educational needs. *American Journal of Educational Research,* 2 (4), 208-218.

UNESCO (2008). *Inclusive education: The way of the future* (Final report). Paris. Retrieved from http://www.ibe.unesco.org/fileadmin/user_upload/Policy_Dialogue/48th_ICE/ICE_FINAL_REPORT_eng.pdf

Yaşlıoğlu, M. M. (2017). Sosyal bilimlerde faktör analizi ve geçerlilik: Keşfedici ve doğrulayıcı faktör analizlerinin kullanılması [Factor analysis and validity in social sciences: Application of exploratory and confirmatory factor analyses)]. *İstanbul Üniversitesi İşletme Fakültesi Dergisi [Istanbul University Journal of the School of Business]*, 46, 74-85. https://dergipark.org.tr/tr/pub/iuisletme/issue/32177/357061

Yıldırım, A., & Şimşek H. (2008). *Sosyal bilimlerde nitel araştırma yöntemleri* (7. Basım) [Qualitative research methods in social sciences (7th Edition)]. Seçkin.

Yılmaz, V. & Çelik, H. E. (2009). *LISREL ile yapısal eşitlik modellemesi-1* [Structural equation models with LISREL-1]. Pegem.