



Available online at globets.org/journal
International Journal of Education, Technology and Science
3(3) (2023) 901–922

IJETS
International Journal of
Education Technology and
Science

WOMEN CAN'T DO REPAIR AND MEN CAN'T IRON! GENDER STEREOTYPES OF PRESCHOOL TEACHERS AND CHILDREN

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Received: 19.05.2023

Revised version received: 21.08.2023

Accepted: 23.08.2023

Abstract

Gender stereotypes start at an early age, and it takes a certain process for stereotypes to bring about behavioral changes in individuals who are new members of society. Education is effective in children's acquisition of gender stereotypes. This study, which was conducted to investigate the relationship between the gender stereotypes of preschool teachers and the gender stereotypes of children in their classrooms, was conducted with 50 preschool teachers and 438 children. It was found that teachers' gender stereotypes were low, while children's gender stereotypes were high. It was found that there was no significant difference between the seniority of the teachers, their class size, the ages of the children in their classes, the genders of the children, and their gender stereotypes. It was found that children from lower socioeconomic levels and children aged 60-72 months had more gender stereotypes. There was no significant relationship between the teacher's and children's gender stereotypes. In order to reduce children's gender stereotypes, it is recommended that everyone who interacts with children should use a language free of gender stereotypes and act beyond these stereotypes.

Keywords: Gender stereotypes; preschool teacher; children, preschool

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1. Introduction

Education is effective in individuals' acquisition of gender identities. Early childhood education programs are important in children's development (Tayler, 2005) and educational environments and education bring about various negativities and inequalities. One of these negativities is that teachers carry their gender stereotypes into the classroom environment. Gender stereotypes are defined as overly rigid beliefs that expect women to behave in a way that includes the characteristics of the female gender and men to behave in a way that includes the characteristics of the male gender (Howe, 2012). Gender stereotypes start at an early age, and it takes a certain process for stereotypes to bring about behavioral changes in individuals who are new members of society (Damarlı, 2006).

Teachers, who plan and carry out educational activities and leave permanent marks on students with their behaviors and discourses, are at an important starting point for promoting gender equality in schools (Gunderson et al., 2012; Heyder et al., 2020, Tantekin Erden, 2016). Children who spend most of their time with preschool teachers now replace their parents' model with the teacher. The adopted stereotypes affect the teacher's reactions to children, language and style, curriculum, teaching materials, and how he treats children (Duffy et al., 2001). Thus, gender stereotypes are reinforced and reproduced through education (Onurluer, 2019). Teachers shape male and female students' thoughts, behaviors, attitudes, and personality traits through their behaviors, discourses, and expectations (Acker, 1994; Barrie, 1993; Clark & Paechter, 2007; Tiedemann, 2002). When they enter the classroom, teachers consciously or unconsciously carry their own beliefs about gender roles with them. Teachers reinforce behaviors that align with their gender role expectations and react negatively to inappropriate behaviors (Filiz Ünser, 2019).

Teachers' perceptions of gender, their attitudes, the language they use, their reactions to students, and the games they use send explicit or implicit messages to students in the classroom. Teachers play an important role in gender bias in the classroom. Teachers control how things work in the classroom, what goes on, and how things are done. Research shows that teachers treat boys and girls differently, give them different responsibilities and interact with them differently (Onurluer, 2019; Watson et al., 2017). They believe that boys' less satisfactory reading achievement compared to girls is due to biased attitudes and behaviors associated with teachers' differentiated expectations of boys and girls. Teachers give more time to boys to talk and characterize boys as more assertive and active, while girls are considered passive and, in the background, (Sadker & Sadker, 1994).

Studies are showing that preschool teachers have gender stereotypes regarding children's play preferences and reflect this to the children in their classrooms (Blaise, 2005; Blakemore & Centers, 2005; Chapman, 2016; Lynch, 2015; Reimers et al., 2018). Teachers react more positively to children who prefer games that conform to traditional gender roles. In the study of Reimers et al. (2018), it was observed that teachers reacted more positively to boys taking

part in games that require high activity than girls. Teachers' gender stereotypes may cause children to have gender-based toy preferences. Gender-based toy preferences and games lead to the development of gender-based skills as girls and boys assume social roles (Li & Wong, 2016).

One of the comparisons made in the context of gender in education is based on areas of achievement. Teachers accept that boys succeed in mathematics and science while girls thrive in language and verbal courses (Ganter, 2010; Hyde, 2005). There is also a belief that boys have lower reading performance (Muntoni et al., 2018; Retelsdorf et al., 2015; Wolter et al., 2015) and that girls are more prone to language (Nürnbergger et al., 2016). This belief leads students to think stereotypically about whether they will succeed. In this context, the view that math and science fields are suitable for boys is accepted by female students (Steinmayr et al., 2019). Tiedemann (2002) found that primary school teachers thought equally successful girls were less capable than equally successful boys. Preschool teachers' biased classroom practices toward children of different genders may lead children to have incorrect assumptions about their abilities and perform worse due to a lack of confidence or interest (Li, 2023).

Teachers' gender stereotypes about children's achievements also affect their future career choices. Although limited studies examine the direct relationship between teachers' gender-based practices and preschool children's career choices, there are studies suggesting that gender stereotypes are strongly reflected in children's job expectations. Gottfredson & Brown (2002) found that preschool children identify themselves with their teachers, and this affects their career choices. In this period, the child may shape their professional knowledge by acting according to the stereotypes of the teacher they identify as a role model. Care et al. (2007) found in a study of 84 preschool children that even 4-year-old girls believed women's work was less valuable and desirable than men's.

Teachers' gender stereotypes also affect the personality traits expected from children. As a result of gender stereotypes, boys are labeled by teachers as more mischievous and active, exhibiting more problematic behaviors and fighting with their friends, while girls are described as calm, quiet, and emotional (Morojele, 2011; Shen et al., 2009). In Aina & Cameron's (2011) study, teachers with gender stereotypes stated that girls should be more patient and compassionate, while boys did not welcome crying for a lost toy. Mustofa et al. (2021) pointed out that teachers believe boys are more logical while girls act more with their emotions. He also found that teachers with gender stereotypes stated that science and technology were more suitable for boys even in kindergarten and had lower expectations from girls about science and technology. Li (2023) examined research on gender stereotypes in preschool education and found that negative gender stereotypes transmitted by teachers to children limit their potential. He stated that this might have an impact on children's academic development and future career choices by causing a decrease in their self-confidence. He stated that teachers' gender attitudes significantly impacted the quality of students' learning and made some suggestions to prevent gender stereotypes from entering the classroom. He

suggested that teachers should include children's literature that does not contain gender stereotypes, abundant and varied toys in the classroom, respect children's preferences for the type of activity, avoid gender-based colors or types of toys, and avoid gender-based expressions in their communication with children.

1.1. Importance of Research

This research is important in terms of revealing the relationship between teachers' gender stereotypes and the gender stereotypes of children in their classrooms. By knowing the variables according to which gender stereotypes of preschool teachers differ, it contributes to taking necessary measures and conducting studies on the subject. In addition, this study is thought to increase teachers' awareness of gender stereotypes.

When the literature is examined, it is seen that there are studies on the subjects such as; teachers' gender stereotypes, beliefs, and attitudes (Chen & Rao, 2011; Frawley, 2005; ; Filiz Ünser, 2019; Meland & Kaltvedt, 2019; Varin & Adriany, 2017; Wingrave, 2018),) teachers' influence on children's toy selection, (Chapman, 2016; Mweru, 2012); teachers' views on gender-based play activities and dramatic play, (Logue & Harwey, 2009; Lynch, 2015), teachers' classroom discipline philosophies regarding girls and boys (Ergena & Wolfgang, 2004; Robinson, 1992), the effect of the training program applied to teachers (Akpakwu & Bua, 2014; Kollmayer et al., 2020; Leavers & Verboven, 2000). At the same time, there are also studies examining the social stereotypes of preschool children according to various variables (Ata Doğan et al., 2018; Halim et al., 2017; Li, 2022; Skočajić et al., 2019; Xu, 2020). However, studies examining the relationship between teachers' gender stereotypes and children's gender stereotypes (Bigler, 1995; Cahill & Adams, 1997; Hilliard & Liben, 2010) are limited. This study is thought to contribute to the literature by filling this gap.

The main purpose of this study is to determine the relationship between teachers' gender stereotypes and the gender stereotypes of children in their classrooms. In line with this main purpose, answers to the following questions are sought:

1. What are the gender stereotypes of preschool teachers and children?
2. Do children's gender stereotypes vary according to their gender, age, and socioeconomic level of their families?
3. Do teachers' gender stereotypes vary according to their professional seniority, class size, and age group of children in their classes?
4. Is there a relationship between teachers' gender stereotypes and children's gender stereotypes?

2. Method

This study, which was conducted to determine the relationship between preschool teachers' gender stereotypes and gender stereotypes of children in their class, is a relational survey model (Karasar, 2005).

2.1. Population and Sample

The population of this study consists of teachers working in preschools in the Kepez, Muratpaşa, and Konyaaltı districts of Antalya province in the 2022-2023 academic year and the children attending these schools. The study sample consisted of 438 children attending eight independent kindergartens affiliated with the Ministry of National Education in these districts and 50 preschool teachers. All of the teachers were undergraduate graduates, middle socio-economic level, married and female. Personal information about the children is shown in Table 1, and personal information about the teachers is shown in Table 2.

Table 1. Socio-demographic information of teachers (n=50)

Variables		n	%
Seniority	0-15 years	23	46
	15 years and above	27	54
Class Size	10-20 children	33	66
	21-30 children	17	34
Teacher Age	31-35 years old	10	20
	36-40 years old	19	38
	41 years old and above	21	42

According to Table 1, 46% of the teachers have a seniority of 0-15 years, and 54% have a seniority of 15 years or more. 66% of the teachers had 10-20 children in their classes, while 34% had 21-30 children. 20% of the teachers were 31-35 years old, 38% were 36-40 years old, and 42% were 41 years old or above.

Table 2. Socio-demographic information of children (n=438)

Variables		N	%
Gender	Girl	242	55,3
	Boy	196	44,7
Age	48-60 months	164	37,4
	61-72 months	274	62,6
Socioeconomic level of the family	Middle socioeconomic level	285	65,1
	Lower socioeconomic level	153	34,9

Table 2 shows that 55.3% of the children were girls and 44.7% were boys. 37.4% of the children were 48-60 months old, and 62.6% were 61-72 months old. The families of 65.1% of the children had middle socioeconomic status, while 34.9% had lower socioeconomic status.

2.2. Data Collection Tools

The data of the study were collected with the "Demographic Information Form" used to determine the personal information of children and teachers and the "Gender Stereotypes Measurement Tool".

Demographic Information Form

The "Demographic Information Form" was prepared by the researchers. The children form included questions about children's age, gender, and socio-economic status of the family while, the teacher form included questions about age, professional seniority, number, and age group of children in the class.

Gender Stereotypes Measurement Tool

The scale was developed by Şıvgın (2013) to reveal the gender stereotypes of 48-72-month-old children and teachers. It consists of 43 items and four sub-dimensions (Tasks - Jobs, Occupations, Toys, Games). In the "Instrument for Measuring Gender Stereotypes," each item has three responses. These responses are "Female," "Male," and "Female/Male" for the "Tasks/Jobs" and "Occupations" sub-dimensions. For the "Toys" and "Games" sub-dimensions, they are in the forms of "Female," "Male," and "Female/Male." In the scale, the child is expected to think about who or whom the items are made by and to choose one of the cards. As a result of the child's answers to the gender cards shown, total points are obtained by giving "1" point for "Female/Male" or "Girl/Male" and "0" points for "female," "male," "girl," "boy." While a high score indicates androgyny, a low score indicates having gender stereotypes. According to the reliability calculations during the development phase of the scale, Cronbach Alpha was found to be .85. Cronbach Alpha was .69 in the tasks-jobs dimensions; .53 in the toys dimension; .51 in the games dimension; and .62 in the professions dimension. The validity score of the scale was calculated as .82 out of 43 items (Şıvgın, 2013). In this research, Cronbach Alpha was found to be .931 for teachers and, .894 for children.

2.3. Data Collection Process

After obtaining the necessary permissions for the research, the administrators and teachers in the schools where the research would be conducted were interviewed and informed about the study, and plans were made. There are 76 preschool teachers in total in these schools. The "Informative Consent Form" was given to the teachers. And the teachers who filled out the form were included in the study. All teachers included in the study had 1544 children in their classrooms. "Informative Consent Forms" were sent to the families of these children. 438 families filled out the form and consented their children to participate in the study. Afterward, the children whose parents gave their consent were interviewed individually and informed about the study, and their consent was obtained. Eleven children did not want to participate in the study. Thus, the study was completed with 50 preschool teacher and 438 children. The "Gender Stereotypes Measurement Tool," used to determine children's gender stereotypes in

the study, was applied to each child individually by a single researcher. In order not to distract the children, a quiet room away from stimuli was designated in each school. After introducing himself, the researcher again obtained the child's consent and started the application. Three different cards were used for each dimension.

In the first two dimensions, one card had a picture of a male, one a female, and the other both a male and a female. Pictures of girls, boys, and boys and girls were used in the last two dimensions. The researcher read each item and asked the child to select the appropriate answer from the cards and show it to the researcher. For example, the researcher asked the question, "Is ironing for men or women or both men and women?" and asked the child to select the appropriate card. The researcher filled in the answer for each item in the "Gender Stereotypes Measurement Tool." The application took approximately 4-11 minutes for each child. Since the measurement tool applied to teacher and children was the same, care was taken to ensure that teacher did not influence their children. For this purpose, the "Gender Stereotypes Measurement Tool" was given to the teachers after the interviews with the children were completed.

2.4. Data Analysis

SPSS 23.0 package program was used to analyze the data. Statistics such as percentage and frequency are given in tables. Skewness and kurtosis values for the scores obtained from the scales were evaluated in the range of -1.5 and +1.5 (Tabachnick & Fidell, 2018). Nonparametric tests were used since the data were not within this range Mann-Whitney U was used to determine the differences depending on children's gender, age, socio-economic status of the family, professional seniority of teachers, number and age group of children in the class. Spearman correlation analysis was calculated to determine the relationship between teachers and children's gender stereotypes.

2.5. Ethical Issues

For this research, the ethical approval was obtained from the Social Sciences and Humanities Scientific Research and Publication Ethics Committee of Akdeniz University (Date: 03.04.2023, Number: 2023-180).

ERIC, the Ethical Research Involving Children (Graham et al., 2013), was taken as a guide during the design and implementation of the study. The study was explained to school administrators and teachers after obtaining ethics committee permission from the institution with which one of the researchers was affiliated. It was decided to conduct the study in schools that volunteered to participate in the study. Informative Consent Forms were sent to the families of all children in the classrooms of teachers who volunteered to participate in the study. Children whose parents were permitted to fill out the consent form were interviewed individually and informed about the study, and their consent was obtained. It was clearly

stated to the children that they could end the interview if they did not want to continue at any stage after participating in the study, that they could not answer any questions they did not want to answer, and that there were no right or wrong answers to the questions before starting the interview. Nine children did not want to participate at the beginning of the study. The names of the children, the teachers and the schools where the study was conducted were not included in the study.

3. Results

The results of the Spearman correlation analysis and descriptive statistics of the variables related to teachers' gender stereotypes, tasks-jobs, professions, toys, and games are shown in Table 3.

Table 3. Spearman correlation analysis results and descriptive statistics between teachers' gender stereotypes and sub-dimensions

Variables	Min- Max	Mean	Gender	Tasks- job	Professio ns	Toys	Games
Gender	12-43	39,04±6,05	1,000	,598**	,949**	,800**	,614**
Tasks-jobs	6-9	8,66±0,77		1,000	,496**	,377**	,395**
Professions	3-17	14,64±3,49			1,000	,672**	,563**
Toys	0-10	9,14±1,84				1,000	,443**
Games	0-7	6,60±1,14					1,000

(**p<0.01)

Table 3 shows that the mean scores of the teachers were as follows: gender stereotypes=39,04±6,05; tasks-jobs=8,66±0,77; professions=14,64±3,49; toys=9,14±1,84 and games=6,60±1,14. It was determined that there was a statistically significant and positive relationship between gender stereotypes and sub-dimensions ($p<0.01$). Teachers' high mean scores in all dimensions indicate that they have few gender stereotypes. The evaluation of teachers' socio-demographic characteristics according to gender stereotypes is presented in Table 4.

Table 4. Evaluation of teachers' gender stereotypes

Variables	n	Gender		Tasks-job		Professions		Toys		Games	
		MeanRank	(Mean)	MeanRank	(Mean)	MeanRank	(Mean)	MeanRank	(Mean)	MeanRank	(Mean)
Seniority**											
0-15 years	23	25,02	(0,90)	25,15	(0,96)	24,85	(0,83)	25,39	(0,90)	24,80	(0,91)
15 years and above	27	25,91	(0,93)	25,80	(0,96)	26,06	(0,88)	25,59	(0,92)	26,09	(0,96)
Z value		Z: -0,229		Z: -0,223		Z: -0,315		Z: -0,060		Z: -0,447	
P value		P: 0,819		P: 0,823		P: 0,752		P: 0,952		P: 0,655	
Class size**											
10-20 Children	33	27,08	(0,93)	26,53	(0,96)	26,68	(0,88)	26,29	(0,91)	26,82	(0,95)
21-30 Children	17	22,44	(0,89)	23,50	(0,95)	23,21	(0,81)	23,97	(0,90)	22,94	(0,92)
Z value		Z: -1,139		Z: -0,998		Z: -0,863		Z: -0,658		Z: -1,277	
P value		P: 0,255		P: 0,318		P: 0,388		P: 0,511		P: 0,201	
Class age**											
36-60 months	23	24,28	(0,90)	24,70	(0,94)	24,65	(0,83)	24,39	(0,89)	25,04	(0,92)
61 months and over	27	26,54	(0,93)	26,19	(0,97)	26,22	(0,88)	26,44	(0,93)	25,89	(0,95)
Z value		Z: -0,583		Z: -0,516		Z: -0,410		Z: -0,613		Z: -0,293	
P value		P: 0,560		P: 0,606		P: 0,682		P: 0,540		P: 0,769	

*p<0,05 **Mann-Whitney U

Table 4 shows that there is no significant difference between teachers' seniority, class size, age of children in their classes, and gender stereotypes, tasks-jobs, professions, toys, and games.

Spearman correlation analysis results and descriptive statistics between variables related to children's gender stereotypes, tasks-jobs, professions, toys, and games are presented in Table 5.

Table 5. Spearman correlation analysis results and descriptive statistics between gender and its sub-dimensions in children

Variables	Min-Max	Mean	Gender	Tasks-job	Professions	Toys	Games
Gender	0-40	8,85±7,09	1,000	,547**	,713**	,759**	,847**
Tasks-jobs	0-9	1,21±1,48		1,000	,329**	,255**	,291**
Professions	0-17	3,03±3,55			1,000	,499**	,420**
Toys	0-10	1,76±1,98				1,000	,561**
Games	0-8	2,83±2,11					1,000

(**p<0.01)

Table 5 shows that the mean scores of the children were as follows: gender stereotypes=8.85±7.09; tasks-jobs=1.21±1.48; professions=3.03±3.55; toys=1.76±1.98 and games=2.83±2.11. A statistically significant and positive relationship exists between gender stereotypes and sub-dimensions in children (p<0.01). The low mean scores of children in all dimensions indicate that gender stereotypes are high.

The evaluation of children's socio-demographic characteristics according to gender stereotypes is presented in Table 6.

Table 6. Evaluation of gender stereotypes towards children

Variables	n	Gender		Tasks-job		Professions		Toys		Games	
		Mean Rank	(Mean)	Mean Rank	(Mean)	Mean Rank	(Mean)	Mean Rank	(Mean)	Mean Rank	(Mean)
Gender											
Girl	242	220,45	(0,22)	217,02	(0,13)	219,75	(0,17)	222,25	(0,18)	222,45	(0,40)
Boy	196	218,32	(0,22)	222,56	(0,13)	219,19	(0,18)	216,10	(0,18)	215,85	(0,38)
Z value		Z: -,175		Z: -,479		Z: -,046		Z: -,521		Z: -,549	
P value		P: 0,861		P: 0,632		P: 0,963		P: 0,603		P: 0,583	
Age											
48-60 months	164	226,10	(0,23)	239,96	(0,15)	227,45	(0,19)	218,99	(0,18)	215,53	(0,38)
61-72 months	274	215,55	(0,21)	207,26	(0,12)	214,74	(0,17)	219,80	(0,18)	221,88	(0,39)
Z value		Z: -,845		Z: -,2752		Z: -,1034		Z: -,067		Z: -,513	
P value		P: 0,398		P: 0,006*		P: 0,301		P: 0,947		P: 0,608	
School/socio											
Middle socioeconomic level	285	238,35	(0,24)	238,34	(0,15)	234,11	(0,20)	233,31	(0,20)	230,59	(0,41)
Lower socioeconomic level	153	184,39	(0,17)	184,41	(0,09)	192,28	(0,13)	193,78	(0,13)	198,84	(0,34)
Z value		Z: -4,254		Z: -4,470		Z: -3,353		Z: -3,206		Z: -2,530	
P value		P: 0,000*		P: 0,000*		P: 0,001*		P: 0,001*		P: 0,011*	

*p<0.05 **Mann-Whitney U test was applied.

In Table 6, no significant difference was found between children's gender and gender stereotypes, tasks-jobs, professions, toys, and games. No significant difference existed between children's ages and gender stereotypes, professions, toys, and games (p>0.05). There was a significant difference between children's ages and tasks-jobs (p:0,006). The tasks-works sub-dimension of 48-60-month-old children was significantly higher. There was a significant difference between children's socioeconomic level and gender stereotypes (p:0,000), tasks-jobs (p:0,000), professions (p:0,001), toys (p:0,00), and games (p:0,011). The mean scores obtained for gender stereotypes, tasks-jobs, professions, toys, and games of children with middle socioeconomic status were significantly higher.

Spearman correlation analysis results between teacher's and children's gender stereotypes and sub-dimensions are presented in Table 7.

Table 7. Spearman correlation analysis results between teachers' and children's gender stereotypes and sub-dimensions

Variables		Social (Teacher)	Tasks-Jobs (Teacher)	Professions (Teacher)	Toys (Teacher)	Games (Teacher)
Social (Child)	r	-,160	-,036	-,114	-,154	-,223
	p	,268	,801	,430	,285	,120

Table 7 shows that there is no significant relationship between teachers' gender stereotypes and children's gender stereotypes.

4. Discussion, Conclusions and Suggestions

At the end of this study, which was conducted to determine the relationship between preschool teachers' gender stereotypes and the gender stereotypes of the children in their classrooms, it was found that teachers' gender stereotypes were low. It was seen that there are studies in the literature that support this finding. Farago et al., 2022 found that preschool teachers had egalitarian gender perceptions similar to the findings of this study. Similar results were found in studies conducted with preschool teachers (Erden, 2004; McCabe, 2022; Öztürk, 2022; Temiz & Cin, 2017) and preschool pre-service teachers (Almutawa, 2005) and teachers (Caldarella et al., 2009).

In some studies, contrary to the findings of this study, it is seen that teachers have gender stereotypes. Warin & Adriany (2017) concluded that teachers differentiate between boys and girls and have different expectations from children. For example, in leisure time activities, it was found that they directed them by making them use pink tickets for girls and blue tickets for boys. In Wingrave's (2018) study, teachers similarly reported that they believe certain gender-specific attitudes and learning areas exist. They stated that girls exhibit more passive behaviors while boys are more physically active and show better motor development. There are similar studies that teachers have gender stereotypes (Akpakwu, 2003; Calderalla et al., 2009; Chen & Rao, 2011; Erden & Wolfgang, 2004; Gansen, 2019; Kolmayer et al., 2018; Lynch, 2015; Morissette et al., 2018; Silman et al., 2019; Streitmatter, 1994; Renzetti & Curran, 2003; Torun, 2002).

Since all of the teachers in this study were women, it is thought that gender stereotypes are low. Tatar & Emmanuel (2001) found that female teachers had more egalitarian gender perceptions than male teachers.

Muasya & Kazungu (2018) conducted a study with 15 preschool teachers in Kenya and found that teachers were sensitive to gender stereotypes and were careful to include girls and boys in all activities regardless of gender. However, they stated that children are affected by stereotypes originating from their families.

It was found that there was no significant difference between teachers' seniority, class size, age of children in their classes, and gender stereotypes. It is thought that teachers' gender stereotypes may be affected by teachers' gender, socioeconomic levels, and family structures rather than class size, the age of children in their classes, seniority, and age. In this study, it is thought that the fact that all teachers were female, married, had bachelor's degrees, and had a middle socioeconomic level enabled them to have similar gender stereotypes.

Similar to the findings of this study, Yıldız (2019) found that there was no significant relationship between gender stereotypes according to the number of children in preschool

teachers' classes. In his study, Torun (2002) mentioned that some teachers reported that there was excessive noise in their classrooms because the number of boys in their classrooms was higher than the number of girls. They stated that teachers had to pay special attention to boys in order to cope with this situation in the classroom due to the high number of boys. In Öztürk's (2022) study, it was found that the perceptions of teachers about gender did not differ significantly according to their gender, educational level, and the fact that they had taken any course on gender before, but they differed significantly according to their professional seniority. Similarly, Tantekin (2002) found that teachers' professional seniority had no relationship with their gender roles and discipline attitudes.

Emilson (2016) conducted a study with preschool teachers and found that some teachers believe that children's gender stereotypes are formed by being influenced by the stereotypes of their families. He emphasized that in order to break down gender stereotypes in children, parents, the language used, and the child's environment should be free of judgments.

In this study, it was found that children had more gender stereotypes. Some studies conducted with children in early childhood support this finding. In the study conducted by Gonzalez et al. (2022) with 3-5-year-old children, Ata Doğan et al. (2018) with 5-year-old children, and Xu (2020) with 2-6-year-old children, it was observed that children had gender stereotypes. At the same time, it was observed that children preferred toys specific to their own gender (Freeman, 2007; Raag & Rackliff, 1998). Emeksiz & Bay's (2022) study determined that children did not have gender stereotypes in in-game rules and role/character preferences; however, they had stereotypes in toy/material preferences.

In this study, it is thought that one of the reasons why children have gender stereotypes is that most of the preschool teachers are women. Research on the concept of gender equality emphasizes the importance of educating young children by both female and male teachers (Temiz & Cin, 2017). It has been found that children who receive education in schools where female and male teachers work together have less gender stereotypes (Vendrell, Capdevila, Dalmau, Geis, & Ciller, 2014). Researchers agree that having more male teachers in preschool education can help children counter gender stereotypes, reduce genderism, and promote gender equality in general (Farquhar et al., 2006; Marsiglio, 2009, Sumsion, 2000, Yang, 2013). For this reason, it is thought that men and women working as preschool teachers will prevent the formation of children's stereotypes. Another reason children may have gender stereotypes may be that their parents have gender stereotypes. Studies in the literature (Fridman et al., 2007; Kaçar, 2019; Sinno & Killen, 2009) found a relationship between parents' gender perceptions and children's gender stereotypes.

In this study, no significant difference was found between children's gender and gender stereotypes in the dimensions of gender stereotypes, tasks-jobs, professions, toys, and games. While there are studies that find that girls prefer games and activities which develop language skills and manual skills (Lynch, 2015), boys prefer technical and electronic equipment and

physical activities (Endendijk et al., 2014), there are also studies that argue that there is no genderization in games (Boyle et al., 2003; Özkan, 2009).

It was found that there was no significant difference between children's ages and gender stereotypes, professions, toys, and games. However, there was a significant difference between children's ages and stereotypes in the tasks-jobs dimension. It was observed that children aged 48-60 months had less gender stereotypes in the tasks-jobs sub-dimension compared to children aged 61-72 months. Similar to the findings of this study, Skočajić et al. (2019) concluded that older children have higher levels of gender stereotypes than other children. Trautner et al. (2005), in a longitudinal study with children aged 5-10 years, found that beliefs about gender differences were most rigid when children were between 5 and 7 years old. However, according to Leavell et al. (2012), activities and games change according to the child's age but not according to the gender of the child.

As a result of this study, it was found that there was no significant relationship between preschool teachers' gender stereotypes and children's gender stereotypes. Teachers are essential in shaping children's gender-based judgments, classroom experiences, perceptions, and beliefs (Kowalski, 2007). Related research shows that teachers' gender-based judgments and classroom practices affect children's gender stereotypes (Bigler, 1995; Cahill & Adams, 1997; Chapman, 2016; Hilliard & Liben, 2010; Meland & Kaltvedt, 2019; Robinson, 1992; Lynch, 2015). Brooker & Ha (2005) found that although preschool children are likely to maintain their gender beliefs in their home environments, they are open to reconstructing their judgments when exposed to non-sexist educational programs at school. Although there was no relationship between teachers' gender stereotypes and teachers' stereotypes in this study, it is thought that practices in the educational environment are important in breaking down children's gender stereotypes. Chapman (2016) examined how children's gender stereotypes and preschool teachers' gender perceptions affect children's play and found that teachers' gender perceptions affect children's play. When the studies in the literature were examined, it was seen that qualitative studies in which children and teachers were observed were predominant. Contrary to the findings of this study, there was a relationship between teachers' gender stereotypes and children's gender stereotypes. In this study, it is thought that teachers may have responded to the statements in the measurement tool as expected rather than their own opinions.

4.1. Limitations

This study has several limitations. The first of these limitations is that all teachers participating in the study were female. Other study limitations include that all preschool teachers were married, had bachelor's degrees, and were at a middle socioeconomic level. The study is limited to the responses of 50 teachers and 348 children to the "Gender Stereotypes Measurement Tool."

4.2. Suggestions

Similar studies involving male preschool teachers and comparing the gender stereotypes of male and female preschool teachers can be conducted.

Studies can be conducted to examine the relationship between the social stereotypes of classroom teachers and primary school children.

Studies can be conducted to examine the relationship between the gender stereotypes of single teachers, associate degree graduates, teachers working in different types of schools and living in other cultures, and the gender stereotypes of children in their classrooms.

Gender stereotypes of children in different age groups can be examined.

Studies can be conducted to examine the gender stereotypes of children who do not attend preschools according to various variables.

Studies can be conducted in which gender stereotypes of children and teachers are examined in a mixed design, including techniques such as observation and interviews.

In order to reduce children's gender stereotypes, it is recommended that everyone who interacts with children should use a language free of gender stereotypes and act beyond these stereotypes.

It is recommended to make arrangements to increase the number of male preschool teachers and male practitioners in preschools

It is recommended to include toys, educational materials, and practices that do not have gender stereotypes in educational environments.

Declaration of Conflicting Interests and Ethics

The authors declare no conflict of interest.

Acknowledgements

- This study has been funded by TUBITAK within the scope of 2209-A University Students Research Projects Support Program.
- It is also an extended version of the study presented as an oral presentation at the 1st International Symposium on Bitlis in the Context of History, Culture, Language and Art on May 3-5, 2023.
- We would like to thank Yaren GÜNDÜZ, Fatmanur SÖNMEZ and Beyzanur AYDIN, associate degree students of Child Development for their contributions to the study.

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