#### A study of the relationship between the student-teacher interaction and social skills in the context of gender

## Nihal AKALIN<sup>1</sup>, Seçil YILDIZ<sup>2</sup>

<sup>1</sup>Ömer Halis Demir University, Zübeyde Hanım Vocational School of Health Services, Niğde, Turkiye <sup>2</sup>Nevsehir Haci Bektas Veli University, Faculty of Education, Nevsehir, Turkiye

Araştırma Makalesi/Research Article		<b>DOI:</b> 10.70736/ijoess.561
Gönderi Tarihi/ Received:	Kabul Tarih/ Accepted:	Online Yayın Tarihi/ Published:
25.02.2025	02.06.2025	15.06.2025

#### Abstract

The purpose of this study is to examine the effect of teacher-child relationship on children's social skill levels in the preschool period in terms of gender. The study used the relational screening model, one of the quantitative research methods. The study sample was determined using the maximum variation sampling method, one of the non-random sampling methods. The participants of the study consisted of 368 children studying in official preschool education institutions in Nevsehir province of Türkiye and 75 preschool teachers working in the same province. The study data were collected with the Teacher-Child Relationship Scale, Social Skills Development System Rating Scale (SBGS-DÖ). The results of the Pearson Correlation Coefficient calculation, the Independent Samples T-test results and the two-model hierarchical regression results were included in the analysis of the research data. As a result of the study; it was revealed that girls tend to have closer and warmer relationships with their teachers than boys, their social skill levels are higher than boys, and at the same time, the teacher-child relationship creates significant differences in terms of gender while predicting social skills. As a result of the research, various recommendations were made.

Keywords: Pre-school, Teacher, Teacher student relationship, Gender

# Okul öncesi dönemde öğretmen çocuk ilişkinin çocukların sosyal beceri düzeylerine etkisinin cinsiyet bağlamında incelenmesi

#### Öz

Bu çalışmanın amacı, okul öncesi dönemde öğretmen-çocuk ilişkisinin çocukların sosyal beceri düzeylerine etkisinin cinsiyet bağlamında incelenmesidir. Çalışmanın araştırma yöntemi olarak nicel araştırma yöntemlerinden "ilişkisel tarama modeli" kullanılmıştır. Örneklemin belirlenmesinde tesadüfi olmayan örnekleme yöntemlerinden "maksimum çeşitlilik örnekleme yöntemi" kullanılmıştır. Çalışmanın katılımcıları, Türkiye'nin Nevşehir ilinde resmi okul öncesi eğitim kurumlarında öğrenim gören 368 çocuk ve aynı ilde görev yapan 75 okul öncesi öğretmeninden oluşmaktadır. Çalışma verileri; Öğretmen Çocuk İlişki Ölçeği, Sosyal Beceri Geliştirme Sistemi Derecelendirme Ölçeği (SBGS-DÖ) ile toplanmıştır. Araştırma verilerinin analizinde Pearson Korelasyon Katsayısı hesaplama sonucuna, Bağımsız Örneklemler T-testi sonucuna ve iki modelli hiyerarşik regresyon sonuçlarına yer verilmiştir. Çalışma sonucunda; kız çocuklarının öğretmenleri ile erkek çocuklarından daha fazla yakın ve sıcak ilişki kurma eğilimi içinde oldukları, sosyal beceri düzeylerinin erkek çocuklardan daha yüksek olduğu, aynı zamanda da öğretmen-çocuk ilişkisinin sosyal beceriyi yordarken cinsiyet bağlamında anlamlı farklılıklar yarattığı ortaya konmuştur. Araştırma sonucunda çeşitli önerilerde bulunulmuştur.

Anahtar Kelimeler: Okul öncesi, Öğretmen, Öğrenci, Öğretmen öğrenci ilişkisi, Cinsiyet

Sorumlu Yazar/ Corresponded Author: Seçil YILDIZ, E-posta/ e-mail: secilyildiz@nevsehir.edu.tr

## **INTRODUCTION**

The early years of an individual's life are a critical period for laying the foundations of thinking, behaviour and social-emotional well-being, as well as an important process for his/her integral development (Meb, 2013). Researchers emphasise that in the early years, children develop language, cognitive, social, emotional and regulatory skills and competencies that predict their future functions in many areas (Woolfolk & Perry, 2012; Trawick-Smith, 2014). These skills, which are acquired during the pre-school years, are linked to the child's development and are especially rewarded with the competence of children in social skills.

Social skills include a wide range of skills such as adoption of the child in a friendly environment, good learning motivation, self-confidence and awareness of group responsibility, obeying the rules, communicating effectively and fulfilling the responsibilities (Aksoy, 2021). In other words, social skills are the behavioural patterns that an individual exhibits in order to achieve a social task (Gresham, 2016), as well as being the ways that the individual uses to meet his/her social needs, which are the basis of interpersonal relationships and lead to the goal (Özbey & Aktemur Gürler, 2019). With the early acquisition of these behaviour patterns, it will be possible for children to establish healthy relationships with other people around them and to achieve life satisfaction (Lynch & Simpson, 2010; Ikesako & Miyamoto, 2015). Recent studies increasingly acknowledge the critical role that social-emotional skills play in early childhood development. Social skills, which include emotional regulation, social competence, and interpersonal communication, form the foundation for academic success, mental health, and overall well-being (Hosokawa et al., 2024). In the literature, there are studies showing that children's future success and life satisfaction depend on the development of social skills and social emotional competences (Halle & Darling Churchill, 2016; Kirk & Jay, 2017). Children who are competent in the field of social skills are children who can communicate effectively, solve interpersonal problems, show social competence, are academically successful and establish quality relationships with other individuals (Bierman et al., 2004; Webster-Stratton & Reid, 2004) and have self-confidence (Saft & Pianta, 2001). On the other hand, it has been emphasised that children who are not competent in social skills have a higher risk of facing negative situations in the coming years such as problematic social relationships, noncompliance with rules, unsatisfactory peer relationships, personality and behavioural problems (McClelland & Morrison, 2003), social isolation and being rejected (Cillessen & Bellmore, 2006; Aguiar et al., 2019).

There are many factors that are effective in children's acquisition of social skills. Before starting pre-school education, family and siblings, and when starting school, teachers and peers are among the factors affecting the acquisition of social skills (Bugental & Grusec, 2006; Handel et al., 2007) and perhaps the most important of these factors is the Student-Teacher relationship.

The Student-Teacher relationship has a regulatory role in children's social and emotional development (Greenberg et al., 1993) and early competences in different domains are closely related to the quality of the Student-Teacher relationship. The literature provides evidence that a strong and supportive Student-Teacher relationship is a foundation for the healthy development of all students (Birch & Ladd, 1998) and a positive factor for children's selfdevelopment (Heller et al., 2012). During the pre-school period, it was reported that children who experienced conflict with their teachers had lower levels of social competence 2 years later compared to their peers who did not (Pianta et al., 1995). Again, during this period, "secure and developed" Student-Teacher relationships were associated with fewer problems in future social life, while problematic Student-Teacher relationships were associated with a lack of competence for children (Pianta & Nimetz, 1991). In addition, studies reveal that children who have problems in their relationships with their teachers exhibit fewer cooperative behaviours at school, have problems in expressing themselves, in fulfilling their responsibilities, in empathising and like school less (Jerome et al., 2009; Portilla et al., 2014). Again, in the literature, there are research results revealing the level of Student-Teacher relationship in terms of gender. While teachers have more positive, warm and affectionate relationships with their daughters, they have high conflict level relationships with their sons (Koepke & Hapkins, 2008; Koles et al., 2009). This situation is related to the expectations of the society from children during their raising process. In this process, girls grow up more moderate, persevering and docile, while boys grow up more rebellious, unruly and free (Walker et al., 2001). Roorda et al. (2024), in their study examining how teacher and student gender affect the levels of closeness and conflict in teacher-student relationships in secondary education, reported that male students experience higher levels of conflict with their teachers. They emphasized that this situation negatively impacts the social and emotional development of these students.

The gender factor appears as a determinant of social skills in the social structure. Each society attributes behaviour patterns based on gender roles to girls and boys in the socialisation process, even if sociocultural and socioeconomic conditions vary (Yağan Güder & Güler Yıldız, 2016). Children first learn the definitions of boys and girls in the family, and schools and

teachers support this process by creating environments that internalise the concept of gender (Driscoll & Nagel, 2008). Teachers are one of the most important elements of an individual's life starting from the early years. Teachers are an important factor in the individual's recognition of himself/herself and his/her environment, and in the formation of his/her thoughts and personality. Teachers' way of addressing, discipline management, distribution of tasks in the classroom, expectation of success (Ünal et al., 2017), attitudes and behaviours in the classroom, and the way they display their personality traits are effective in shaping children's gender perception (Öztürk & Doğan, 2023). Teachers need to be aware that their own attitudes and behaviors can influence students' perceptions and may contribute to the reinforcement of gender stereotypes. Therefore, the importance of continuous professional development programs that aim to raise teachers' awareness on gender equality and diversity, and equip them with the necessary knowledge and skills to effectively manage gender dynamics within their classrooms, is increasing day by day (Guerrero & Puerta, 2023; Pautu et al., 2025).

In the literature, several studies have examined the relationship between teacher-child interaction and social skills in the context of gender, including those conducted by Silver et al. (2005), Palermo et al. (2007), Buyse et al. (2008) and Jerome et al. (2009). The quality of teacher-student relationships in the educational process has been shown to significantly impact children's academic success and future social adaptation, as demonstrated by meta-analytical studies conducted by Roorda et al. (2017). Teachers may unconsciously reflect societal gender norms in the classroom atmosphere. This can lead to the development of different behavioral expectations for students and contribute to gender-based discrimination. However, ensuring gender equality in education and reducing gender-based inequalities is crucial for students' academic performance and self-efficacy (Hançerli, 2023). Female students are often described with adjectives such as "quiet, calm, respectful, and orderly," whereas male students are labeled as "brave, careless, aggressive, energetic, and combative" (Baç, 1997). Such gender-based perceptions can play a decisive role in the development of students' social skills. Furthermore, teachers' knowledge of social skills is essential for supporting students' acquisition of social behaviors. This knowledge helps students develop their social skills and adaptation abilities, positively influencing their ability to establish healthier social interactions (Güner Yıldız, 2017). The teacher-child relationship is directly linked to children's future social adaptation and academic success. This relationship should not be exclusively in favor of female students but should be balanced and inclusive of male students as well. Maintaining a fair and equitable teacher-student relationship is critical for fostering children's self-esteem, enabling them to

develop successful social relationships, creating a positive classroom environment, and sustaining their engagement with school. Therefore, examining the impact of teacher-child relationships on social skill development from a gender perspective is of great importance, and this study is expected to contribute to the literature in this regard.

This study aims to evaluate the relationship between teacher-child interaction and social skills in the context of gender. In this regard, the following research questions have been explored:

1. Do the social skill levels of children attending pre-school education differ according to the gender of the children?

2. Do pre-school children's relationships with their teachers differ according to their gender?

3. What is the effect of Student-Teacher relationship on children's social skill levels?

4. Does the prediction of social skills by Student-Teacher relationship differ according to gender?

# METHOD

## **Research model**

In this study, which aims to examine the effect of Student-Teacher relationship on social skill level in the preschool period in the context of gender, the relational screening model, one of the quantitative research methods, was used. In the relational screening model, the existence and/or degree of change between two or more variables is tried to be determined (Karasar, 2005). The predicted variable of the study (dependent variable) is the social skill level of children, while the predictor variables (independent variables) are gender and the level of Student-Teacher relationship.

# Research group (population-sample)

The population of the study consists of pre-school teachers and children working in the province of Nevsehir during the academic year 2022-2023. Maximum variation sampling method was used to determine the sample. This method contributes to the examination of different situations that are similar within themselves in relation to the problem analyzed in the universe (Büyüköztürk et al., 2010). In this regard, schools in regions with different socio-economic conditions in Nevsehir province were selected to ensure maximum diversity. The

study included 75 preschool teachers and 368 children who agreed to participate voluntarily. Of the children participating in the study, 50.3% (185) were girls and 49.7% (183) were boys.

### Data collection tools

In this study, the "Teacher-Student Relationship Scale" developed by Pianta (2001) and adapted into Turkish by Zorbaz et al. (2016) and the "Social Skills Improvement System-Rating Scale" developed by Gresham and Elliott (1990) and adapted into Turkish by Tutkun and Dinçer (2019) were used as data collection tools.

The Student-Teacher Relationship Scale: It was adapted by Zorbaz et al. (2016) to determine the student-teacher relationship. The grading options used in the scale are in fivepoint Likert format with options ranging from (1) Not at all appropriate to (5) Absolutely appropriate. The scale consists of 23 items and two dimensions. These dimensions are closeness and conflict. With the 'Confirmatory Factor Analysis' (CFA) conducted for the construct validity of the scale, the chi-square was calculated as " $(\gamma 2)$ " = 655.17sd = 211 [ $\gamma 2$ /sd = 3.10; p < 0.001] and fit indices were calculated as ["RMSEA" = 0.076, "GFI" = 0.87, "AGFI" = 0.82, "NFI" = 0.93, "NNFI" = 0.94, "CFI" = 0.95]. A " $\chi^2$ /sd" ratio lower than 3 indicates an excellent fit, while a ratio lower than 5 indicates a moderate fit. A "RMSEA" less than 5 is considered as an excellent fit, a "RMSEA" less than 0.8 is considered as a good fit; "GFI, AGFI, NFI, NNFI and CFI" values above 0.95 are considered as an excellent fit and values above 0.90 are considered as a good fit (Schumacher & Lombax, 2004). The" Cronbach's Alpha" value for the closeness "sub-dimension" of the Student-Teacher relationship scale was 0.83 and the "Cronbach's Alpha" value for the conflict "sub-dimension" was 0.86. For this study, the "Cronbach's Alpha" value for the closeness "sub-dimension" was 0.672 and the "Cronbach's Alpha" value for the conflict "sub-dimension" was 0.882. These results show that the conflict dimension of the scale is highly reliable and the closeness dimension is reliable.

Social Skills Improvement System Rating Scale (SSIS-RS): A validity and reliability study was conducted by Tutkun and Dinçer (2019) to determine children's social skills levels. The rating options used in the scale are in the form of a 4-point Likert scale with the options "never" if the child never does a behaviour, "rarely" if the child sometimes does it, "often" if the child mostly does it, and "always" if the child almost always does it. The pre-school period (3-5 years) teacher form of SSIS-RS consists of 76 items and 2 scales, namely the Social Skills Scale (SSS) and the Behavioural Problems Scale (BPS). The first scale is the "Social Skills Scale" comprising of 46 items and 7 "sub-dimensions". The "sub-dimensions" are

communication, cooperation, self-expression, responsibility, empathy, participation and selfcontrol. Within the scope of the study, 46 items and "sub-dimensions" of the scale expressing social skills were used. The "Cronbach's Alpha" value for the Communication Sub-dimension of the Social Skills Scale was 0.77, the "Cronbach's Alpha" value for the Cooperation Subdimension was 0.82, the "Cronbach's Alpha" value for the Self-expression "Sub-dimension" was 0.70, the "Cronbach's Alpha" value for the Responsibility "Sub-dimension" was 0.71, the "Cronbach's Alpha" value for the Empathy "Sub-dimension" was 0.79, the "Cronbach's Alpha" value for the Participation "Sub-dimension" was 0.80 and the "Cronbach's Alpha" value for the Self-control "Sub-dimension" was 0.86. For this study, the "Cronbach's Alpha" coefficients were calculated as 0.686, 0.849, 0.703, 0.754, 0.884, 0.742, 0.607 for communication, cooperation, self-expression, responsibility, empathy, participation and self-These results show that the cooperation and empathy the "subcontrol respectively. dimensions" of the scale are sufficient in terms of reliability values, the communication, selfexpression, empathy, responsibility, participation, self-control" sub-dimensions" are reliable. A "Cronbach's Alpha" coefficient of less than 0.40 indicates that it is not reliable, 0.40-0.59 indicates a low level of reliability, 0.60-0.79 indicates a very reliable level, and 0.80-1.00 indicates a high level of reliability (Özdamar, 2002; Tavşanel, 2002).

# Data analysis

The data of the research was collected from 368 children and their teachers in the lower and upper socioeconomic groups studying in kindergartens within the independent kindergartens and primary schools affiliated to the Ministry of National Education in the city center of Nevsehir in Türkiye in the 2022-2023 academic year. The IBM SPSS Statistics 22 programme was used for data analysis. First of all, the data were checked against errors that may occur during keyboard entry. The normality test was used for the statistical method to be used in the analysis of the data. According to the "skewness and kurtosis values", the suitability of the data to normal distribution was analysed. As a result of the study; the skewness value was calculated as -0.765 and the kurtosis value was calculated as 0.583 in the closeness dimension of the student-teacher relationship scale; the skewness value was calculated as 0.752 and the kurtosis value was calculated as 0.016 in the conflict dimension. The Skewness Value for the Total Value of the Social Skills Scale was calculated as -0.586 while the Kurtosis Value was calculated as 0.275. It is accepted that the ideal statistical value range of skewness and kurtosis values for normal distribution is -1 to +1 (Field, 2005; Büyüköztürk et al., 2010). According to the results of the analyses, it was determined that the data showed normal distribution.

Arithmetic mean (X) and standard deviation (S) calculations were used in defining the variables. The relationship between the variables was determined by calculating the Pearson Correlation Coefficient. The Independent Samples T-test was used to determine whether there were gender differences in the variables. In order to determine the extent to which the teacher-child relationship predicts children's social skill levels and gender differences in this prediction, a two-model hierarchical regression analysis was conducted. The statistical significance level was calculated as 0.05 in inferential analyses.

In order to conduct parametric analyses, multicollinearity should not exist. The presence of multicollinearity was tested by examining the Tolerance and the VIF (Variance Inflation Factor) values. It is recommended that tolerance values should be less than 0.20 and VIF values should be less than 2.5 (Allison, 1999; Field, 2005). It was determined that tolerance values were higher than 0.20 and VIF values were lower than 10 for all variables. The fact that the tolerance and VIF values were within acceptable limits showed that there was no multicollinearity. Moreover, in order to examine whether there is a multicollinearity problem among the predictor variables, the correlation values between the predictor variables were examined. For this, the correlation values between predictor variables should be lower than - 0.8 and +0.8 in absolute value (Liu et al., 2020). It was determined that the correlation values were less than 0.6. This result shows that there is no multicollinearity among the data. After it was seen that the aforementioned assumptions were met, a correlation analysis was carried out with the data set in order to examine the relationships between the variables. Then, a two-step hierarchical regression analysis was performed in line with the purpose of the research.

This research is carried out with the permission obtained with the 12 numbered decision of the Nigde Omer Halisdemir University with the decision number 2022/12-45.

# FINDINGS

In this section, the results of the analyses related to the sub-questions of the research are given. The results of the t-test conducted to examine the differences in the student-teacher relationship according to the gender of the children are given in Table 1.

		SS	Sd	ι	Г
185	3.95	0.46	366	4.32	0.000
183	3.72	.55			
185	3.69	0.64	366	2.02	0.04
183	3.84	0.71			
	183 185	183      3.72        185      3.69        183      3.84	183      3.72      .55        185      3.69      0.64	183      3.72      .55        185      3.69      0.64      366	183      3.72      .55        185      3.69      0.64      366      2.02

Tablo 1. T-test results for the comparison of the dimensions of the Student-Teacher Relationship Scale according to their gender

D: Dimension, p < 0.05

According to Table 1, the closeness dimension of the Student-Teacher relationship scale shows a significant difference according to gender, t(366)=4.32, p=0.000. Girls' closeness relations with their teachers are more positive than boys'. The conflict dimension of the Student-Teacher relationship showed a significant difference according to gender, t(366)=2.02, p<0.05. Boys' conflictual relationships with their teachers were higher than girls'.

The results of the T-test conducted to examine the differences in social skill level according to children's gender are given in Table 2.

Ν	Ā	SS	sd	t	Р
185	2.27	0.50	366	4.38	0.000
183	2.01	0.60			
185	2.26	0.47	366	4.58	0.000
183	2.0	0.61			
185	2.08	0.55	366	2.80	0.005
183	1.91	0.57			
185	2.27	0.51	366	4.51	0.000
183	1.99	0.67			
185	2.14	0.56	366	4.10	0.000
183	1.88	0.65			
185	2.33	0.51	366	4.39	0.000
183	2.07	0.59			
185	1.96	0.60	366	3.77	0.000
183	1.71	0.67			
185	2.18	0.47	366	4.54	0.000
183	1.94	0.56			
	185 183 185 183 185 183 185 183 185 183 185 183 185 183 185 183 185	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Table 2. T-test results for the comparison of dimensions of social skill level according to gender

D: Dimension, p<0.05

According to Table 2, the communication, cooperation, self-expression, responsibility empathy, participation, self-control, dimensions of the social skills scale shows a significant difference according to gender. Results showed that there was a significant difference between the two groups in all "sub-dimensions" and total scores of the social skills scale and that the mean scores of girls in all "sub-dimensions" and total scores were higher than boys.

	1	2	3	4	5	6	7	8	9	10	11
1.Communication	1	0.869**	0.761**	0.881**	0.808**	0.876**	0.689**	0.932**	0.507**	-0,402**	-0.404
2.Cooperation		1	0.708**	0.895**	0.798**	0.811**	0.704**	0.913**	0.493**	-0.437**	-0.087
3.Self-expression			1	0.745**	0.741**	0.805**	0.617**	0.855**	0.515**	-0.223**	0.131*
4.Responsibility				1	0.798**	0.839**	0.741**	0.934**	0.504**	-0.425**	-0.068
5.Empathy					1	0.808**	0.732**	0.902**	0.513**	-0.385**	-0.024
6.Participation						1	0.701**	0.927**	0.481**	-0.379**	-0.040
7.Self-control							1	0.832**	0.360**	-0.392**	0.132*
8. Total social skills								1	0.534**	-0.419**	0.043
9. Closeness									1	-0.271**	0.408
10. Conflict										1	0.768**
11.Total Relationship											1
*** 0.01 ** 0.01	-										

Table 3. Student-Teacher relationship and the relationship between children's social skill levels

\*\*p<0.01; \*p<0.05

When Table 3 is analysed, various correlations were found between Student-Teacher relationship and children's social skill levels. In terms of absolute value of correlation coefficients, 0.70-1.00 is considered as a high-level relationship, 0.69-0.30 as a medium level relationship and 0.29-0.00 as a low-level relationship (Büyüköztürk, 2002). There is a high level positive relationship between Cooperation and Communication (r=0.86), Communication and Self-expression (r=0.76), Communication and Responsibility (r=0.88), Communication and Participation (r=0.87), Communication and the Total Social Skills (r=0.93), Cooperation and Responsibility (r=0.89), Cooperation and Empathy (r=0.79), Cooperation and Participation (r=0.81), Cooperation (r=0.79), Participation and the Total Social Skills (r=0.81), Self-control (r=0.79), Participation and Cooperation (r=0.81), Self-control and Cooperation (r=0.70).

Table 4 shows the hierarchical regression analysis performed to determine the predictors of children's social skill levels variable.

Predictos	Sub-dimensions						
	Communi- cation	Coopera- tion	Self- expression	Responsi- bility	Empathy	Participation	Self- Control
Madal 1	F=19.24	F=21.01	F=7.84	F=20.33	F=16.83	F=19.31	F=14.23
Model 1	R=0.224	R=0.233	R=0.145	R=0.229	R=0.210	R=0.224	R=0.193
	$R^2 = 0.050$	$R^2 = 0.054$	$R^2 = 0.021$	$R^2 = 0.053$	$R^2 = 0.044$	$R^2 = 0.050$	$R^2 = 0.037$
β	0.224	0.233	0.145	0.229	0.210	0.224	0.193
Gender t	4.387	4.585	2.801	4.510	4.103	4.395	3.773
р	0.000	0.000	0.005	0.000	0.000	0.000	0.000
	F=63.32	F=85.04	F=45.70	F=66.85	F=61.53	F=54.61	F=37.01
Model 2	R=0.586	R=0.596	R=0.573	R=0.596	R=0.580	R=0.557	R=0.483
	R <sup>2</sup> =0.343	R <sup>2</sup> =0.355	$R^2 = 0.274$	R <sup>2</sup> =0.355	$R^2 = 0.337$	R <sup>2</sup> =0.310	R <sup>2</sup> =0.234
β	0.119	0.115	0.029	0.110	0.089	0.111	0.105
Gender t	2.388	2.670	0.627	2.543	2.032	2.491	2.230
р	0.017	0.008	0.531	0.011	0.043	0.013	0.026
β	0.445	0.381	0.485	0.394	0.423	0.386	0.253
Closeness	9.064	8.535	10.238	8.896	9.347	8.358	5.192
t p	0.000	0.000	0.000	0.000	0.000	0.000	0.000
β	-0.233	-0.322	-0.088	-0.306	-0.261	-0.263	-0.312
Conflict t	-6.341	-7.354	-1.899	-6.987	-5.881	-5.811	-6.546
p	0.000	0.000	0.058	0.000	0.000	0.000	0.000

Table 4. Hierarchical regression between children's social skill levels and the predictor variables

As seen in Table 4, the regression analysis was formed within the scope of two models. In Model 1, it was determined that gender ( $\beta$ =0.224) significantly predicted the "communication", (R=0.22, R<sup>2</sup>=0.050, (F(1.366)=19.24, p=0.000). "Cooperation", (R=0.23, R<sup>2</sup>=0.054, (F(1,366)=21.01, p=0.000) "Self-expression", (R=0.14, R<sup>2</sup>=0.053, (F(1,366)=7.84, p=0.005) "Empathy", (R=0.21, R<sup>2</sup>=0.044, (F(1,366)=16.83, p=0.000) "Participation", (R=0.22, R<sup>2</sup>=0.050, (F(1,366)=19.31, p=0.000) "Self-control", (R=0.19, R<sup>2</sup>=0.037, (F(1,366)=14.23, p=0.000) significantly predicted these dimensions. When the closeness and conflict dimensions of the teacher-child relationship are included in the second model, it is seen that they make a significant contribution to the model.

#### **DISCUSSION AND CONCLUSION**

The findings of the study show that girls have a tendency to establish close and warm Student-Teacher relationships more than boys. In this context, the finding is consistent with the results of previous studies (Silver et al., 2005; Mohamed, 2018). Similarly, Partee et al. (2023) reported in their study that girls tend to establish closer relationships with their teachers. Likewise, Roorda and Jak (2024), in their research conducted with secondary school students, found that female students develop warmer relationships with their teachers compared to male students. In addition, Kang et al. (2025) emphasized that girls are more likely to form closer relationships with their teachers, thereby supporting the findings of our study. According to another finding of the study, girls' social skill levels were found to be higher than boys in all "sub-dimensions" and in the overall scale. This result may be related to the upbringing styles of children and their family relationships. In the literature, there are studies in which researchers concluded that girls are better than boys in using social skill patterns (Jamyang-Tshening, 2004) and that there are significant differences in favour of girls in the social interaction dimension (Yaşar Ekici 2015). Similarly, Gregoriadis and Tsigilis (2008) reported that boys scored lower than girls in terms of social competencies, Battistich and Solomon (1991) observed that girls' social behaviour scores increased with age in their longitudinal study starting from kindergarten and lasting 7 years. Studies have also shown that girls have higher social skill levels than boys (Bierhoff, 2002; Romano et al., 2005; Knafo & Plomin, 2006). In this context, it can be said that girls and boys in our society tend to be raised in line with traditional gender roles.

Researchers agree that the Student-Teacher relationship quality is an important determinant of children's well-being in terms of social skills both in early childhood and in the future (Palermo et al., 2007; Mohamed, 2018). During the pre-school period, children who have positive, warm and sincere relationships with their teachers exhibit positive adult and peer relationships in terms of social skills (Myers & Pianta, 2008). Altıntaş (2019) stated that a positive and warm Student-Teacher relationship in the classroom increases children's interpersonal skills, self-expression, coping with peer pressure, and listening skills. Blotsky-Shearer et al. (2020) found that quality Student-Teacher interaction supports children's social competence, similarly, Curby et al. (2009), Curby et al. (2013) associated supportive Student-Teacher relationship with high social competence in early childhood. There are other studies supporting this finding in the literature (Wubbels, 2005; Wubbels & Brekelmans, 2005; Poulou, 2015). Children who have negative, conflictual or dependent relationships with their teachers have lower social competence (Palermo et al., 2007; Mohamed, 2018; Altıntaş, 2019). Wu et al. (2018) stated that children with social competence tend to have positive relationships with their teachers. This may be due to preschool teachers' warm, sincere and affectionate attitudes in the classroom, creating a classroom atmosphere in which children can behave comfortably, being sensitive to children's requests and establishing a special bond with children.

The next finding of the study shows that there is a positive and moderate relationship between the Student-Teacher relationship and the Communication "Sub-dimension" of Social Skills. While children who are in close relationships with their teachers learn effective communication channels with their peers and other adults and gain positive social competencies, they may not have to use inappropriate methods to solve problem behaviours that arise as a result of conflictual relationships (Myers & Pianta, 2008). Altintaş (2019) underlined that as the conflict-based relationship between teacher and child increases, children's social skills scores decrease, while social skills scores increase as closeness and warm relationships increase. Similarly, Buyse et al. (2008) stated that children who exhibit problematic behaviours in terms of social skills in the classroom are children who are in conflictual and non-close relationships with their teachers. The reason for this finding of the research may be related to the teacher's high level of communication skills, his/her continuous improvement in this field, his/her use of different communication techniques, and thus children's trust in the teacher.

According to the findings of the study, the prediction of social skills by the Student-Teacher relationship shows a significant difference according to Gender. Mohamed (2018) reported similar results in his study and stated that girls' closeness with their teachers predicted social skills better than boys. Similarly, Silver et al. (2005), Rudasill and Rimm-Kaufman (2009) stated that pre-school teachers establish closer relationships with girls than boys. This may be due to the fact that children are raised with gender roles in mind and that families raise boys with more permissive and tolerant behaviours.

The study found that gender differences in teacher-child relationships within the classroom directly influence children's social skill development. It was determined that female students tend to establish warmer and more intimate relationships with their teachers, whereas male students experience more conflict with their teachers. This finding suggests that teachers may unconsciously reinforce gender roles in classroom interactions, which can significantly impact children's social skill development.

#### Recommendations

Since children's social skill levels are affected by the Student-Teacher interaction, studies can be conducted to increase the quality of Student-Teacher relationship and interaction. In order to increase interaction with children, activities such as home visits, theatre, cinema, excursions can be planned and implemented where teachers and children will interact in social environments.

Longitudinal studies can be used to track the long-term effects of social skill development and teacher-child relationships.

Experimental research can be conducted to test the relationship between social skill development and teacher-child interactions.

In undergraduate teacher training programmes, there may be more focus on courses that will increase the social competence levels of teachers.

In-service trainings for the development of teachers' social competence and classroom management skills can be organised and implemented in cooperation with the Ministry of National Education and universities.

#### REFERENCES

- Aguiar, A. L., Aguiar, C., Cadima, J., Correia, N., & Fialho, M. (2019). Classroom quality and children's social skills and problem behaviours: Dosage and disability status as moderators. *Early Childhood Research Quarterly*, 49, 81-92. <u>https://doi.org/10.1016/j.ecresq.2019.05.005</u>
- Aksoy, P. (2021). A multidimensional assessment of social skills during the pre-school period according to the meetings with pre-school teachers. *Trakya Journal of Education 11*(1), 386-411. <u>https://doi.org/10.24315/tred.749188</u>
- Allison, P. D. (1999). Multiple regression: A primer. Pine Forge Press.
- Altıntaş, H. (2019). An analyse of the relationship between teachers' perception of their relationship with children and children's social skills. (Master's Thesis, Akdeniz University).
- Baç, G. (1997). A Study on gender-bias in teachers' behaviors, attitudes, perceptions, and expectations toward their students (Master's thesis, Middle East Technical University).
- Battistich, V., & Solomon, D. (1991). A Longitudinal study of children's social adjustment during elementary school. *Society for Research in Child Development*, 1-25.
- Bierhoff, H. W. (2002). Prosocial behaviour. Hove, UK: Psychology Press.
- Bierman, K. L., Coie, J. D., Dodge, K. A., Foster, E. M., Greenberg, M. T., Lochman, J. E., ... et al. (2004). The effects of the fast-track program on serious problem outcomes at the end of elementary school. *Journal of Clinical Child and Adolescent Psychology*, 650 661. <u>https://doi.org/10.1207/s15374424jccp3304\_1</u>
- Birch, S. H., & Ladd, G. W. (1998). Children's interpersonal behaviours and the student-teacher relationship. *Developmental Psychology*, 34, 934-946.
- Blotsky-Skearer, R. J., Farnandez, V. A., Bichay-Awadalla, K. J., Bailey, J., Futterer, J., & Qi, C. H. (2020).
  Student-Teacher interaction quality moderates social risks associated with problem behaviour in preschool classroom contexts. *Journal of Applied Developmental Psychology*, 67, 10110.
  <u>https://doi.org/10.1016/j.appdev.2019.101103</u>
- Bugental, D. B., & Grusec, J. E. (2006). Socialization processes. In N. Eisenberg, W. Damon., & R. M. Lerner (Eds.)., *Handbook of child psychology: Social, emotional, and personality development* (pp. 366–428). Hoboken, NJ: John Wiley.

- Buyse, E., Verschueren, K., Doumen, S., Van Damme, J., & Maes, F. (2008). Classroom problem behaviour and teacher relationships in kindergarten: The moderating role of classroom climate. *Journal of School Psychology*, 46 (4), 367-391.
- Büyüköztürk, Ş. (2002). Data analysis handbook for social sciences (16th. ed.). Pegem Publishing.
- Büyüköztürk, Ş., Cokluk, O., & Koklu, N. (2010). Statistics for Social Sciences. Pegem Academy.
- Cillessen, A. H. N., & Bellmore, A. D. (2006). Social skills and interpersonal perception in early and middle childhood. In Smith, P. K., & Hart, C. H. (Eds.). *Blackwell handbook of childhood social development* (pp. 353-374). Oxford: Blackwell Publishing.
- Curby, T. W., Brock, L. L., &Hamre, B. K. (2013). Teachers' Emotional Support Consistency Predicts Children's Achievement Gains and Social skills. *Early Education and Development*, 24, 292-309.
- Curby, T., Rimm-Kaufmann, S., & Ponitz, C. (2009). Teacher-child interactions and children's achievement trajectories across kindergarten and first grade. *Journal of Educational Psychology*, 101(4), 912–925. <u>https://doi.org/10.1037/a0016647</u>
- Demirtaş Zorbaz, S., Arif, Ö. Z. E. R., Gençtanırım Kurt, D., & Ergene, T. (2016). Adaptation of the studentteacher relationship scale (STRS). *Journal of Measurement and Evaluation in Education and Psychology*, 7(2), 407-418.
- Driscoll, A., & Nagel, N. G. (2008). Early childhood education, birth-8 (4th Ed.). Boston: Pearson Education Inc.
- Field, A. (2005). Discovering statistics using SPSS. London: Sage Publications.
- Greenberg, M. T., Speltz, M. L., & Deklyen, M. (1993). The role of attachment in the early development of disruptive behaviour problems. *Development and Psychopathology*, 5, 191-213.
- Gregoriadis, A., & Tsigilis, N. (2008). Applicability of the student-teacher relationship scale (STRS) in the Greek educational setting. *Journal of Psychoeducational Assessment*, 26, 108-120.
- Gresham, F. M. (2016). Social skills assessment and intervention for children and youth. *Cambridge Journal of Education*, 46(3), 319-332. <u>http://dx.doi.org/10.1080/0305764X.2016.1195788</u>
- Gresham, F. M., & Elliott, S. N. (1990). Social skills rating system. Minneapolis, MN: Pearson Assessments.
- Guerrero, M. A., & Puerta, L. (2023). Advancing gender equality in schools through inclusive physical education and teaching training: A systematic review. *Societies 13* (64). <u>https://doi.org/10.3390/soc13030064</u>
- Halle, T. G., & Darling-Churchill, K. E. (2016). Review of measures of social and emotional development. *Journal of Applied Developmental Psychology*, 45, 8–18. <u>http://dx.doi.org/10.1016/j.appdev.2016.02.003</u>
- Hançerli, C. (2019). Teacher expectations in the context of gender (Master's thesis, Dokuz Eylül University).
- Handel, G., Cahill, S. E., & Elkin, F. (2007). *Children and society: The sociology of children and childhood socialisation*. New York: Oxford.

- Heller, S. S., Rice, J., Boothe, A., Sidell, M., Vaughn, K., Keyes, A., ... et al. (2012). Social-emotional development, school readiness, teacher-child interactions, and classroom environment. *Early Education* and Development, 23(6), 919–944. https://doi.org/10.1080/10409289.2011.626387
- Hosokawa, R., matsumoto, Y., Nishida, C., funato, K., &Mitani, A. (2024). Enhancing social-emotional skills in early childhood: intervention study on the effectiveness of social and emotional learning. BMC Psychology, 12(761), 1-19. <u>https://doi.org/10.1186/s40359-024-02280-w</u>
- Ikesako, H., & Miyamoto, K. (2015). Fostering social and emotional skills through families, schools and communities: Summary of international evidence and implication for Japan's educational practices and research. Paris: OECD Publishing
- Jamyang-Tshering K. (2004). Social competence in preschoolers: An evaluation of the psychometric properties of the preschool Social Skills Rating System (SSRS). Doctorate Dissertation, Pace University.
- Jerome, E., Hamre, B., & Pianta, R. (2009). Teacher–child relationships from kindergarten to sixth grade: Early childhood predictors of teacher-perceived conflict and closeness. *Social Development*, *18*(4), 915–945. http://dx.doi.org/10.1111/j.1467-9507.2008.00508.x
- Kang, D., Lee, S., Şhi, Q., Jia, Y., & Mitchell, R. (2025). Longitudinal associations between teacher-student relationships and school engagement in early elementary school years: Gender differences. *Applied Developmental Science*, 1(16). https://doi.org/10.1080/10888691.2025.2458624
- Kirk, G., & Jay, J. (2018). Supporting kindergarten children's social and emotional development: examining the synergetic role of environments, play, and relationships. *Journal of Research in Childhood Education*, 32(4), 472–485. <u>https://doi.org/10.1080/02568543.2018.149567</u>
- Knafo, A. & Plomin, R. (2006). Prosocial behaviour from early to middle childhood: Genetic and environmental influences on stability and change. *Developmental Psychology*, *42*(5), 771-786.
- Koepke, M. and Harkins, D. A. (2008). Conflict in the classroom: gender differences in the teacher-child relationship. *Early Education and Development*, *19* (6), 843-864.
- Koles, B., Connor, E., & Mccartney, K. (2009). Teacher–child relationships in prekindergarten: Influences of child and teacher characteristics. *Journal Of Early Childhood Teacher Education*, 30, 3–21.
- Liu, Y. Mu, Y., Chen, K., Li, Y. & Gou, J. (2020). Daily activity feature selection in smart homes based on pearson correlation coefficient. *Neural Processing Letters*, *51*, 1771-1787.
- Lynch, S. A., & Simpson, C. G. (2010). Social skills: Laying the foundation for success. *Dimensions of Early Childhood*, 38(2), 3-12.
- McClelland, M. M., & Morrison, F. J. (2003). The emergence of learning-related social skills in pre-school children. *Early Childhood Research Quarterly*, *3*, 206-224. <u>https://doi.org/10.1016/S0885-2006(03)00026-7</u>

Ministry of National Education (MEB). (2013). Pre-school education programme. Vize Publishing, Ankara.

- Mohamed, A. H. H. (2018). Gender as a moderator of the association between teacher–child relationship and social skills in pre-school. *Early Child Development and Care, 188*(12), 1711-1725. https://doi.org/10.1080/03004430.2016.1278371
- Myers, S. S., & Pianta, R. C. (2008). Developmental commentary: Individual and contextual influences on studentteacher relationships and children's early problem behaviours. *Journal of Clinical Child & Adolescent Psychology*, 37(3), 600-608.
- Özbey, S., & Aktemur Gürler, S. (2019). An examination of the relationship between motivation levels, and their social skills and problem behaviours of children attending pre-school education institutions. *International Journal of Turkish Literature Culture Education*, 8(1), 587-602.
- Özdamar K., (2002). Statistical data analysis with package programmes. Eskişehir: Kaan Bookstore.
- Öztürk, Ö., & Doğan, H. (2023). Comparison of Preschool Teachers' and Parents' Gender Perceptions. *Journal of Basic Education Research*, *3* (Special Edition), 1-15. <u>https://doi.org/10.55008/te-ad.1286509</u>
- Palermo, F., Hanish, L. D., Martin, C. L., Fabes, R. A., & Reiser, M. (2007). Preschoolers' academic readiness: What role does the teacher–child relationship play? *Early Childhood Research Quarterly*, 22(4), 407–422. <u>https://doi.org/10.1016/j.ecresg.2007.04.002</u>
- Partee, A., Alamos, P., Williford, A. P., & Downer, J. (2023). Preschool children's observed interactions with teachers: Implications for understanding teacher-child relationships. *School Mental Health.*, 14(4), 967– 983. <u>https://doi.org/10.1007/s12310-022-09517-2</u>
- Pautu, A., Petracovschi, S., & Domokos, M. (2025). The impact of gender stereotypes on physical education lessons: A pilot study regarding the qualitative analysis of teachers' perceptions. *Frontiers in Psychology*. 16(1575686). <u>https://doi.org/10.3389/fpsyg.2025.1575686</u>
- Pianta, R. (2001). *Student-teacher relationship scale: Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Pianta, R. C., & Nimetz, S. (1991). Relationships between teachers and children: Associations with behaviour at home and in the classroom. *Journal of Applied Developmental Psychology*, *12*, 379-393.
- Pianta, R.C., Steinberg, M.S., & Rollins, K.B. (1995). The first two years of school: Teacher– child relationships and deflections in children's classroom adjustment. *Development and Psychopathology*, 7, 295–312.
- Portilla, X., Ballard, P., Adler, N., Boyce, W. T., & Obradovic, J. (2014). An integrative view of school functioning: Transactions between self-regulation, school engagement, and teacher-child relationship quality. *Child Development*, 85(5), 1915–1931.
- Poulou, M. (2015). Teacher-student relationships, social and emotional skills, and emotional and behavioural difficulties. *International Journal of Educational Psychology*, *4* (1), 84-108.
- Romano, E., Tremblay, R. E., Boulerice, B., & Swisher, R. (2005). Multi-level correlates of childhood physical aggression and prosocial behaviour. *Journal of Abnormal Child Psychology*, *33*(5), 565-578.

- Roorda, D. L., Jak, S. (2024). Gender match in secondary education: The role of student gender and teacher gender in student-teacher relationships. *Journal of School Psychology* 107, 1-18. <u>https://doi.org/10.1016/j.jsp.2024.101363</u>
- Roorda, D. L., Jak, S., Zee, M., Oort, F. J., & Koomen, H. M. Y. (2017). Affective teacher-student relationships and students' engagement and achievement: A meta-analytic update and test of the mediating role of engagement. *School Psychology Review*, 46, 239–261. <u>https://doi.org/10.17105/SPR-2017-0035.V46-3</u>
- Rudasill, K. M., & Rimm-Kaufman, S. E. (2009). Teacher-child relationship quality: The roles of child temperament and teacher-child interactions. *Early Childhood Research Quarterly*, 24(2), 107-120. <u>https://doi.org/10.1016/j.ecresg.2008.12.003</u>
- Saft, E. W., & Pianta, R. C. (2001). Teachers' perceptions of their relationships with students: Effects of child age, gender, and ethnicity of teachers and children. *School Psychology Quarterly*, 16(2), 125–141. <u>https://doi.org/10.1521/scpq.16.2.125.18698</u>
- Schumacher, R., & Lomax, R. (2004). A *beginner's guide to structural equation modelling*. London: Lawrence Erlbaum Associates, Publishers
- Silver, R.B., Measelle, J., Essex, M., & Armstrong, J.M. (2005). Trajectories of classroom externalizing behaviour: Contributions of child characteristics, family characteristics, and the teacher–child relationship during the school transition. *Journal of School Psychology*, 43, 39-60. <u>https://doi.org/10.1016/j.jsp.2004.11.003</u>
- Tavşanel, E. (2002). Data analysis by measuring attitudes. Atlas Publishing, Ankara.
- Trawick-Smith, J. (2014). Early childhood development (6th Edition). Boston, MA: Pearson.
- Tutkun, C., & Dinçer, Ç. (2019). Social skills improvement system-rating scale (3-5 years pre-school version) teacher form: Validity and reliability study. *Journal of Bayburt Education Faculty*, *14* (28), 301-323.
- Ünal, F., Tarhan, S., & Çürükvelioğlu Köksal, E. (2017). The role of gender, class, department and gender formation in predicting gender perception. *Bartın University Journal of Faculty of Education*, 6(1), 227-236. <u>https://doi.org/10.14686/buefad.287496</u>
- Walker, S., Berthelsen, A., &Irving, K. (2001). Temperament and peer acceptance in early childhood: Sex and social status differences. *Child Study Journal*, 31(3), 177-192.
- Webster-Stratton, C., & Reid, J. (2004). Strengthening social and emotional competence in young children-The foundation for early school readiness and success: Incredible years classroom social skills and problem-solving curriculum. *Infants & Young Children*, 17(2), 96-113. <u>https://doi.org/10.1097/00001163-200404000-00002</u>
- Woolfolk, A., & Perry, NE. (2012). Child and adolescent development. Boston, MA: Pearson.
- Wu, Z., Hu, B. Y., Fan, X., Zhang, X., & Zhang, J. (2018). The associations between social skills and teacherchild relationships: A longitudinal study among Chinese preschool children. *Children and Youth Services Review*, 88, 582-590

- Wubbels, T. (2005). Student perceptions of teacher-student relationships in class. International Journal of Educational Research, 43(1-2), 1-5.
- Wubbels, T., & Brekelmans, M. (2005). Two decades of research on teacher-student relationships in class. International Journal of Educational Research, 43(1-2), 6-24
- Yağan Güder, S., & Güler Yıldız, T. (2016). The role of family on pre-school children's gender perceptions. Hacettepe University Journal of Faculty of Education, 1-23. <u>https://doi.org/10.16986/HUJE.2016016429</u>
- Yaşar Ekici, F. (2015). Analysed the relationship between family characteristics and social skills of children attending pre-school education. *The Black Sea Journal of Social Sciences*, 1-33.
- Yıldız, N. G. (2017). Relationship between teachers' knowledge levels in teaching social skills and students' social skills *İlköğretim Online*, *16*(3), 1275-1286.

KATKI ORANI CONTRIBUTION RATE	AÇIKLAMA EXPLANATION	KATKIDA BULUNANLAR CONTRIBUTORS				
Fikir ve Kavramsal Örgü	Araştırma hipotezini veya fikrini oluşturmak	Nihal AKALIN				
Idea or Notion	Form the research hypothesis or idea					
Tasarım	Yöntem ve araştırma desenini tasarlamak	Secil YILDIZ				
Design	To design the method and research design.	Seçii TIEDIZ				
Literatür Tarama	Çalışma için gerekli literatürü taramak	Nihal AKALIN				
Literature Review	Review the literature required for the study	Millai AKALIN				
Veri Toplama ve İşleme	Verileri toplamak, düzenlemek ve raporlaştırmak	Secil YILDIZ				
Data Collecting and Processing	Collecting, organizing and reporting data	Seçii YILDIZ				
Tartışma ve Yorum	Elde edilen bulguların değerlendirilmesi	Nihal AKALIN				
Discussion and Commentary Evaluation of the obtained finding Ninal AKALIN						
Destek ve Teşekkür Beyanı/ Statement of Support and Acknowledgment						
Bu çalışmanın yazım sürecinde katkı ve/veya destek alınmamıştır.						
No contribution and/or support was received during the writing process of this study.						
Catisma Bayani/ Statement of Conflict						

Çatışma Beyanı/ Statement of Conflict

Araştırmacıların araştırma ile ilgili diğer kişi ve kurumlarla herhangi bir kişisel ve finansal çıkar çatışması yoktur.

Researchers do not have any personal or financial conflicts of interest with other people and institutions related to the research.

#### Etik Kurul Beyanı/ Statement of Ethics Committee

Bu araştırma Niğde Ömer Halis Demir Üniversitesi Etik Kurulu'nun 31.10.2022 tarih ve 2022/12-45 sayılı kararı ile gerçekleştirilmiştir.

*This research was conducted with the decision of Niğde Ömer Halis Demir University Ethics Committee dated 31.10.2022 and numbered 2022/12-45.* 



This study is licensed under a <u>Creative Commons Attribution-NonCommercial 4.0 International License (CC BY 4.0).</u>