

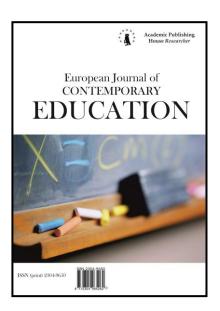
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## **UDC 37**

# The Correlates of Turkish Preschool Preservice Teachers' Social Competence, Empathy and Communication Skills

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# **Abstract**

The purpose of the current study was to examine the associations between Turkish preschool pre-service teacher's personal and educational characteristics, and their social competence, empathy, and communication skills. A total of 385 state university Turkish pre-service teachers (age range 18 to 32 years) from the early childhood education field completed a Demographic Information Form on personal and educational characteristics, the Social Skills Inventory (SSI) Scale measuring their social competence, The Scales of Empathic Tendency for measuring empathy skills, and a Communication Skills Evaluation Scale measuring communication skills. Bivariate Pearson-correlations, independent t tests, and one-way ANOVAs were used to test study hypotheses. Results indicated that women scored higher on empathy and communication skills, and having more friends was related to higher social competence and empathy. Pre-service teachers who were members of a social club scored higher on communication skills than their peers. Additional associations among variables, limitations, and future directions are discussed.

**Keywords:** pre-service teacher, social relationship, teacher training, college students, educational characteristics.

#### 1. Introduction

A large body of research has been conducted investigating pre-service teachers and in-service teachers' social skills related to different factors in Turkish and international contexts (e.g., Bakx,

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van der Sanden, Sijtsma, Croon, & Vermetten, 2006; Ergül, Baydık, & Demir, 2013; Ozerbas, Bulut, & Usta, 2007; Zwaans, ten Dama, & Volman, 2006). Considering importance of pre-service teachers' development of social skills for their concurrent and future personal and professional life, in the current study we aimed to explore the associations between Turkish preschool pre-service teachers' personal and educational characteristics, social competence, empathy, and communication skills. In addition, by conducting this research, we aimed to contribute to the literature base by conducting discrete analyses of personal and educational characteristics on preservice teachers' social competence, empathy, and communication skills.

# Pre-service Teacher Training in Turkey

Preschool teacher training programs consist of a four-year college degree in Turkey. High school graduates are eligible for admittance to these programs if they earn the required score on a university entrance exam (OSS). The preschool teacher training programs have daytime and nighttime training tracks. The classes in the program are based on child development, anatomy and psychology, music, play, drama activities for children, and class management. Besides theoretical classes, a teaching practicum is required during the last three semesters of the program. After graduating from the program, teacher candidates take a public personnel selection examination (KPSS) to be assigned as a preschool teacher by the Ministry of Education (MEB) according to a match of the candidate's KPSS score and the MEB-standardized rubric for teacher promotion (The Council of Higher Education [YOK], 2007; Yuksel. 2012).

#### 2. Literature review

Competence in social skills is an important behavioral element in starting and sustaining positive and effective interpersonal relationships (Westwood, 1993). Social skills are defined as the ability to behave in accordance with the requirements of the social context in which the interpersonal relationship occurs (Alber, Heward, 1996; Bakx et al., 2006). The components of social skills are: social competence, being flexible within a context, being target-oriented, and possessing intra- and inter- personal characteristics (Bakx et al., 2006; Schlundt & McFall, 1985). Social competence, empathy, and communication skills are part of the social development of preservice teachers (Ergül et al, 2013; Zwaans, ten Dama, &Volman, 2006). Social skills may help teachers to interact with their students and parents. From this perspective, pre-service teachers' social development has an important role in their personal and professional development.

Social Competence, empathy, and communication skills

Social competence is defined as an ability to integrate feelings and thinking, and to express behaviors in alignment with personal goals within a given context and culture (Kostelnik, Whiren, Soderman, & Gregory, 2005). Achieving social competence includes the development of social-cognitive and emotional regulation skills (Eisenberg et al., 2006). These capabilities give an individual ability to adapt to and behave appropriately in situations that require a sensitive response and certain expected behaviors within the situations (Eisenberg et al., 2006; Sebanc, 2003). Researchers have found associations between social competence in parenting, temperament, peer group influences, interpersonal interactions, and cognitive abilities (Lindsey & Colwell, 2013; Schlundt & McFall, 1985; Wright, Rosenberg, Egbert, Ploeger, Bernard, & King, 2013).

A decent body of research in Turkey has shown relationships between social competence among both pre-service and in-service teachers' personal characteristics and educational characteristics (e.g., Akbulut & Sağlam, 2010; Celikten, Sanal, &Yeni, 2005; Yuksel, 1997). For example, in an empirical study with Turkish college students, Yuksel (1997) found that training about social competence development helped college students to develop positive social competence regarding emotional sensitivity with their peers and social interactions with others in their social environment. In this respect, Bakx et al., 2006 found a similar association between college students' personal characteristics and self-perceived communicative competence and learning conceptions. Accordingly, pre-service teachers' personal characteristics such as gender, age, and socioeconomic status may be related to their social competence.

Researchers have also found an association between pre-service teachers' communication skills and their personal characteristics (Korkut, 1996; Ozerbas et al., 2007; Wright et al., 2013). For example, Ozerbas et al. (2007) investigated the association between Turkish pre-service teachers'

communication skills and socioeconomic status, gender, and year in college. The authors found that socioeconomic status was not significantly associated with pre-service teachers' communication skills, whereas gender and year in college were significantly correlated with communication skills. These findings suggest that personal characteristics of pre-service teachers are associated with their communication skills. Teacher's communication skills may be important for them to build positive relationships with the students in their classrooms (Pianta, 1999; Sumi, 2011).

In addition to social competence and communication skills, researchers have also investigated how pre-service and in-service teachers' personal and other characteristics are related to their empathic skills (e.g., Hojat et al., 2002; Ozcan, Oflaz, & Sutcu Cicek, 2010). Empathy is defined as the ability to recognize other people's emotional states and to develop a response according to the emotional state and need (Reynolds, Scott, & Jessiman, 1999). Ozcan and colleagues (2010) investigated how Turkish nursing college students' empathic skills were related to their communication skills and personal characteristics. They found that higher communication skills were related to empathic skills, and empathic skills appeared to be higher when college students were at their senior year at college than earlier years in the college. Although several studies have indicated associations between several personal characteristics, social skills, empathy, and communication skills of Turkish college students (Oz, 1998; Ozcan et al., 2010; Ozerbas et al., 2007), there has been lack of research investigating a large group of personal and educational characteristics together. Therefore, the purpose of the current study was to extend previous research by examining the associations between Turkish preschool pre-service teachers' personal and educational characteristics and social competence, empathy, and communication skills. Personal characteristics included age, gender, number of friends, socio-economic status, while educational characteristics included year in the college, membership in a social club, and schooling type(daytime-nighttime). We focused on the investigation of both personal and educational characteristics by framing them as correlates of pre-service teachers' social competence, empathy, and communication skills, based on previous research examining the similar nature of these characteristics (e.g., Oz, 1998; Ozerbas et al., 2007).

Based on previous research, there are important associations between pre-service teachers' personal and educational characteristics with social competence, empathy, and communication skills. Due to differences in university students' SES and friendship structure, it is expected that students may have different levels of social competence, empathy, and communication skills depending upon these personal characteristics. Investigating the relationships between educational and personal characteristics such as schooling type and social competence may help both researchers and university authorities provide beneficial guidelines for pre-service teachers' personal and professional development.

The following research questions and hypotheses were addressed in the current study:

RQ1: Does the social competence of pre-service preschool teachers differ depending on their personal and educational characteristics?

RQ2: Does the empathy of pre-service preschool teachers differ depending on their personal and educational characteristics?

RQ3: Do the communication skills of pre-service preschool teachers differ depending on their personal and educational characteristics??

Considering these three research questions, we hypothesized that female pre-service teachers would score higher than male pre-service teachers on social competence, empathy, and communication skills. In addition, pre-service teachers with more friends would score higher on social competence, empathy, and communication skills, as they would engage in social interactions more frequently than their counterpart peers; low SES pre-service teachers would score higher on empathy and on social competence and communication skills; freshmen pre-service teachers would score lower on social competence, empathy, and communication skills than pre-service teachers in later years of college (Ozcan et al., 2012).

# 3. Methods

*Overview:* This was a cross-sectional study investigating the associations between Turkish Pre-service Preschool Teachers' personal and educational characteristics, and their social competence, empathy, and communication skills.

**Participants:** A total of 384, freshman (N = 86), sophomore (N = 108), junior (N = 142), and senior (N = 49) pre-service preschool teachers (331 females), from one state university in the city of Edirne, Turkey. Participants' ages ranged from 18 to 32 years.

#### **Measures:**

**Demographic Information Form:** Participants completed a questionnaire to obtain information about their demographics such as gender, age, marital status, number of friends, schooling type, and social club membership. Number of friends were categorized as 1-2, 3-4, 5-6, 7-8, and 9+. Participants self-reported the number of friends they had based on their own judgement, as well as the other demographic variables. Schooling type refers to when participants attended class, either in the daytime (8 am- 5 pm) or nighttime (5 pm- 11 pm).

**Social Competence:** Participants completed the Social Skills Inventory (SSI; Riggio, 1986). The SSI is a 90-item Likert-type self-report inventory, consisting of six subscales, with 15 items on each subscale. The Turkish validation of SSI was conducted by Yüksel (1998) who obtained an internal consistency coefficient of .92 and a test-retest reliability coefficient of .94, indicating acceptable reliability for the scale. The inventory is used to calculate an individual's level of global social skills. Higher scores refer to higher levels of social skills. A respondent chooses from 5-likert type options (1= exactly like me 5= absolutely not like me) in response to 90 statements (e.g., I enjoy being social). Test-retest reliability has been reported as .94 (Riggio, 1986). This scale has been widely used with Turkish university students, given acceptable face and construct validity (Yuksel, 1998).

**Empathy Skills:** Participants completed The Empathic Tendency Scale (ETS; Dokmen, 1988). The ETS is a 20-item questionnaire measuring the potential of an individual in their empathic relationships with their social environment in their daily life. Participants use 5-point Likert type scale (1= totally disagree, 5= totally agree). An example item is: "I do care about others' problems as much as mine." Total scores for empathetic skills range from 20 to 100, with higher scores indicate higher empathic skills. For validation of the ETS, Dokmen (1988) tested face and construct validity by examining its structure with empathy-related theories and found it covered a spectrum of empathic tendencies of college students. For predictive validity, Dokmen (1988) found correlation of .68 between the ETS and the "understanding emotions" subscale of the Edwards Personal Preference Schedule. Internal consistency was .88 for the current study, consistent with the original study ( $\alpha$ = .81) by Dokmen (1988).

Communication Skills: Participants completed the Communication Skills Evaluation Scale (CSAS; Korkut, 1996). The CSAS is a 5-point Likert type measure with 25 items assessing one's perceived level of communication skills (5=always, 1=never). An example item is: "I listen to others without any bias towards them". Korkut (1996) validated the measure with Turkish college students and found that it discriminated female students and male students on their communication skills (t= 3.00, p< .05), favoring females. Korkut (1996) also found a correlation of .80 between the CSAS total score and empathic tendency, indicating predictive valdity. The test-retest reliability coefficient was .76, and Cronbach's alpha was .80 (Korkut, 1996). Cronbach's alpha in the current study was .89. The current internal consistency values, along with the descriptive values of scales are presented in Table 1.

**Data Collection Procedures:** After obtaining permission from the ethics committee of the University, informed consent forms were distributed to pre-service students. Scales were then distributed to participants for whom consents were obtained. Participants completed scales during their class once instruction ended. All scales were completed during the fall semester of 2012.

*Data Analyses:* Researchers and research assistants entered data into SPSS. Descriptive statistics, t-tests, and ANOVA tests were conducted for the purpose of the study. Significance criteria was *p* value of .05 (one-tailed for correlations) for all analyses.

# 4. Results

# **Preliminary Results**

Descriptive statistics of the study variables are presented in Table 1. Results from bivariate correlations showed that pre-service teachers' social competence was correlated with gender (r(383) = -.09, p < .05), favoring girls, number of friends (r(383) = .16, p < .01), and membership in a social club (r(383) = -.16, p < .01).

**Table 1.** Demographic information and descriptive statistics of variables

Variable	n (%)	Mean	SD	Range	α
Gender					_
Boy	54(14)				
Girl	331(86)				_
Age					
18-22	332(86)				
23-27	50(13)				
27-32	3(.8)				
SES					
Low	29(7.5)				
Middle	343(89.1)				
High	13(3.4)				
<b>Number of Friends</b>					
1-2	12(3.1)				
3-4	38(9.9)				
5-6	29(7.5)				
7-8	30(7.8)				
9 and more	276(71.7)				
School Time					
<b>Daytime</b>	226(58.7)				
Nighttime	159(41.3)				
Social Club					
Membership					
Member	61(15.8)				
Non-member	323(83.9)				
Social Competence		281.57	25.60	203-360	.71
Empathy		73.25	8.96	45-93	.70
Communication		106.50	10.82	42-125	.89
Note. There was no m	issing data				

Empathy skills were correlated with gender (r (383) = -19, p< .01), favoring girls, number of friends (r (383) = .17, p< .01), and year in college (r (383) = .11, p< .05). Communication skills were correlated with gender (r (383) = -.20, p< .01), favoring girls, SES (r (383) = -.11, p< .05), number of friends (r (383) = .08, p< .05), and membership in a social club (r (383) = -.12, p< .01). (See Table 2 for complete results). As shown, correlations values fall in low and medium range. However, they may still provide practical significance as they help us to understand bivariate associations between pre-service teachers' social skills and their personal and education characteristics.

**Table 2.** Correlations among Variables (N= 385)

Variable	1	2	3	4	5	6	7	8	9	10
1. Social Competence	-									

2. Empathy	.49**	-								
3. Communication Skills	.42**	.48**	-							
4. Gender	09*	19**	20**	-						
5. Age	01	01	02	.06	-					
6. SES	03	01	11*	11*	.01	-				
7. Number of Friends	.16**	.17**	.08*	.11*	09*	10*	-			
8. School Time	.09*	03	.03	.07	11*	07	.09*	-		
9. Social Club	16**	.04	12**	.09*	.05	.01	14**	.11*	-	
10. Year in university degree	.01	.11*	03	01	.21**	.07	.01	- .17**	.01	-

*Note.* \*p<.05 (one-tailed). \*\* p<.01 (one-tailed)

Differences of personal and educational correlates on social competence, empathy, and communication skills

To examine study hypotheses, one-way ANOVA and independent t-test analyses were employed to test the independent variables (gender, age, SES, number of friends, schooling type, membership to social club, and year in college) on preservice teachers' social competence, empathy, and communication skills.

Results from one-way Analysis of Variance (ANOVA) suggested that pre-service teachers' social competence (F (4, 380) = 4.14, p < .01) and empathy skills (F (4, 380) = 5.32, p < .001) differed depending upon their number of friends. Tukey HSD Post Hoc analysis were conducted for all possible pairwise contrasts considering the statistically significant omnibus ANOVA test. The Post Hoc analysis revealed that pre-service teachers with 9 or more friends (M=284.77, SD= 25.65) had higher scores on social competence than pre-service teachers with 5-6 number of friends (M=270.21, SD= 27.98). In addition, pre-service teachers with 9 or more friends (M=34.87, SD=4.33) had higher scores than their peers with 5-6 friends (M=31.86, SD= 4.29) and 3-4 friends (M=32.71, SD=5.24) on their empathic skills.

Results from one-way ANOVAs also suggested that pre-service teachers' communication skills differed across their SES levels (F (2, 3820 = 3.11, p < .04). The Post Hoc analysis revealed that pre-service teachers with low SES (M= 108.62, SD= 8.17) reported higher levels of communication skills than their peers with higher levels of SES peers (M=99.77, SD= 21.52).

Results from the Independent t-tests revealed that female pre-service teachers (M= 73.96, SD= 8.99) scored higher than male pre-service teachers (M= 68.93, SD= 9.98) on empathy skills t (382) = 3.89, p = .000, d=.53 Additionally, female pre-service teachers (M= 107.4, SD= 10.22) scored higher than male pre-service teachers (M= 101.02, SD= 12.76) in communication skills t (382) = 4.09, p = .000, d= .55. The pre-service teachers who were members of a social club (M= 291.16, SD= 25.32) scored higher than pre-service teachers who were not members of a social club (M= 279.76, SD= 25.33) in social competence t (382) = 3.22, p = .001, d= .45. Additionally, participants who were members of a social club (M= 109.21, SD= 9.16) scored higher than non-members (M= 106.05, SD= 11.01) on their communication skills t (382) = 2.10, p = .03. d= .41. (See Table 3 for complete results).

 ${\bf Table~3.~Differences~amongindependent variables~on~dependent~variables~(N=384)}$ 

S	ď	000.	9.		.03	S	ď	.04	င့်	.73	.05
ion Skill	ţ	4.09	15.		2.10	ion Skill	F	3.11	1.03	42	2.85
Communication Skills	SD	12.76 10.22	10.98	10.61	9.16	Communication Skills	SD	8.17 10.37 21.53	8.28 15.19 8.48 9.61 10.53	11.48 11.31 10.37 9.94	10.83 10.44 8.66
Cor	M	101.02	106.27	106.84	109.21	Con	M	108.62 106.58 99.77	105.92 104.84 103.76 105.43 107.16	106.4 107.46 106.08 105.82	106.73 104.28 118.00
	ď	000.	55		36		p	4	.005	£.	69.
thy	ţ	3.89	34		92	thy	F	.75	3.81	1.89	85.
Empathy	SD	9.98 8.59	8.64	9.41	8.17	Empathy	SD	1.61 .49 2.05	6.05 9.49 8.88 8.70 8.84	8.23 9.15 9.15 8.98	8.95 9.32 1.73
	M	68.93 73.96	73.48	72.93	74.21	2	M	72.41 73.42 70.62	72.50 70.16 69.17 72.00 74.28	71.40 73.46 73.66 74.86	73.31 72.66 77.00
	ď	80.	90.		.001		þ	રે	.003	5	92:
petence	ţ	1.75	-1.85		3.22	petence	F	9.	4.14	71:	.28
Social Competence	SD	27.97 25.12	24.82	26.49	25.32	Social Comp	SD	29.24 25.51 18.02	12.98 21.03 27.98 26.32 25.65	26.36 26.82 24.48 24.83	25.92 23.62 28.87
S	M	275.91 282.50	279-55	284.45	291.16	S	M	281.59 281.86 273.92	276.17 275.39 270.21 273.10 284.77	283.24 278.62 281.92 284.12	281.51 282.58 271.33
Variable		Ĭ	ime Morning Night ub Member Non-member		Source	SES Low Middle High Numberof Friends	1-2 3-4 5-6 7-8	Freshman Sophomore Junior Senior	18-22 23-27 28-32		
Va		Gender Male Female School Time		Social Club				SES Number	رُ	Sept.	284 4

## 5. Discussion

In this study, we examined the associations of Turkish preschool pre-service teacher's personal and educational characteristics with their social competence, empathy, and communication skills, and differences in these characteristics on their social competence, empathy, and communication skills.

Consistent with previous research, gender appears to be related to the empathy, communication, and social competence of pre-service teachers (Burleson, Samter, 1990; Yiğiter et al., 2011; Yuksel, 1998). In parallel with bivariate results, female Turkish pre-service teachers scored higher than male Turkish pre-service teachers on their empathy and communication skills. This result is consistent with previous research showing that female pre-service teachers showed higher levels of communication skills than did male pre-service teachers in a Turkish state university context (Guven, 2001). In addition, female Turkish pre-service teachers showed higher levels of empathic skills than did male Turkish pre-service teachers. Duru (2002) also found congruent findings that female Turkish preservice teachers tended to show higher level of empathic skills than male Turkish pre-service teachers (Duru, 2002). In particular, the researcher found that Turkish pre-service teachers who are pursuing social science degrees (e.g., education, art, educational sciences) showed higher levels of empathic tendencies than Turkish pre-service teachers in other areas of study (Duru, 2002). In addition, female Turkish pre-service teachers in elementary teaching departments perceived themselves to be more positive in communication skills as compared to males (Nacar, Tumkaya, 2012). Along with this finding, the results of the current study indicate that female pre-service teachers tended to demonstrate higher scores in communication skills.

The current findings showed that the communication skills of Turkish preschool pre-service teachers differed depending upon their socioeconomic status (SES). In particular, pre-service teachers from low-SES backgrounds reported higher communication skills than pre-service teachers from high-SES backgrounds. This is in contrast to findings by Nacar, Tumkaya (2001) who found that as SES increased, teachers' communication skills increased proportionally. However, the authors (Nacar, Tumkaya, 2001) collected their data from a different demographic group at a university. For this reason, differences in SES may vary across college students and its relation to communication skills.

Another finding from the current study revealed that pre-service teachers who had higher numbers of friends scored higher on social competence and empathy skills, as compared to their counterpart peers with a fewer number of friends. Previous work parallel findings with the current study by stating that college students who had more friends than their peers scored higher on social skills such as social networking, empathic tendency, and altruism (Avci et al., 2013). Although the nature of the current study is not experimental in order to infer causal associations between number of friends and social competence, it is still noteworthy that having friends may be helpful for pre-service teachers to improve their social skills, which can be useful for them to engage in social interaction with both adults and children.

Finally, results from independent t-tests revealed that Turkish pre-service preschool teachers who are members of a social club during college years scored higher on social competence and communication skills than those who are not members of a social club. Similar to having a higher number of friends, this result is similar to previous findings showing that Turkish pre-service teachers from different majors in colleges of education perceived being a member social club during college years as part of their social capital (Toprak, Bozgeyikli, 2011). Thus, active membership in social clubs may benefit pre-service teachers by utilizing opportunities of improving social and communication skills through interactions with other peers as well as community.

# 6. Conclusion and Implications

The findings from the current study showed that pre-service preschool teachers' social competence, empathy, and communication skills differed across gender, SES, membership to social club, and number of friends. These findings extend previous research by demonstrating that pre-service teachers' social competence, empathy, and communication skills may depend upon their personal and educational characteristics (Alber, Heward, 1996; Brakx et al., 2006).

Implications of these findings suggest that pre-service teachers can use college years to gain social capital, such as social networking, interpersonal communication skills, problem solving skills, and development of empathic skills with one another (Aylor, 2003; Bakx et al., 2006; Nacar,

Tumkaya, 2011). Although the current sample was Turkish pre-service teachers, findings can be translated to another context such that recognizing what kind of characteristics may play a role in pre-service teachers' social competence, empathy, communication skills can help university administration and policymakers to develop effective programs to foster pre-service teachers' social capital. Indeed, the recognition of personal and educational characteristics of pre-service teachers may be important for university administration and student services to create effective and responsive social development programs for pre-service teachers.

Teachers' emotional support such as warmth, sensitivity, encouragement, and attention to students' concerns helps young children to regulate their behaviors and exhibit prosocial behaviors in classrooms (Merritt et al., 2012). From this perspective, pre-service preschool teachers should develop essential social skills, such as social competence, communication skills, and empathy during their college years so that they can use these skills to provide effective and supportive emotional and instructional classroom environment for children in their classroom.

# 7. Limitations and Future Directions

There are several limitations in the current study that must be mentioned. First, the study sample was drawn from only one state university in Turkey. Future studies with different university student populations may improve generalizability of these findings.

Second, only self-reports were used in the current study. This may have reduced the independent nature and increase social desirability within data. Future studies should use different types of data collection instruments, such as observations and peer–reports of social skills to have independent data for the study variables.

Third, all data was collected within one semester period. Therefore, we were not able to examine how measured constructs have changed over time. Future studies should focus on the developmental aspects of constructs using a longitudinal approach to better investigate change in the measured constructs over time.

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## **References**

Alber, Heward, 1996 - Alber S.R., Heward W.L. (1996). "GOTCHA!" Twenty-five behavior traps guaranteed to extend your students' academic and social skills. *Intervention in School and Clinic*, 31, 285–289.

Avci et al., 2013 - Avci D., Aydin D., Ozbasaran F. (2013). The relation of empathy-altruism and the investigation of altruistic behaviour with regard to some variables of nursing students. Balikesir Health Sciences Journal, 2(2), 108-113.

Aylor, 2003 - Aylor B. (2003). The impact of sex, gender, and cognitive complexity on the perceived importance of teacher communication skills. *Communication Studies*, 54(4), 496-509. doi:10.1080/10510970309363306

Bakx, 2006 - Bakx A.A., van der Sanden J.M., Sijtsma K.K., Croon M.A., Vermetten Y.M. (2006). The role of students' personality characteristics, self-perceived competence and learning conceptions in the acquisition and development of social communicative competence: A longitudinal study. *Higher Education*, 51(1), 71-104. doi:10.1007/s10734-004-6377-6

Burleson, Samter, 1990 - Burleson B., Samter W. (1990). Effects of cognitive complexity on the perceived importance of communication skills in friends. Communication Research, 17, 165-182.

Davis, 2003 - Davis H.A. (2003). Conceptualizing the role and influence of student-teacher relationships on children's social and cognitive development. *Educational Psychologist*, 38(4), 207-234.

Duru, 2002 - Duru E. (2002). Öğretmen adaylarının empatik eğilim düzeylerinin bazı psikososyal değişkenler açısından incelenmesi [Investigation of pre-service teachers' level of empathic tendency by several psychosocial variables]. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi*, 2(12), 21-34.

Güven, ve Akyüz, 2001 - Güven, A. ve Akyüz M.Y., (2001). Öğretmen adaylarının iletişim ve problem cözme becerilerine ilişkin görüşleri [Pre-service teachers' perceptions about communication and problem solving skills]. Ege Eğitim Dergisi [Ege Education Journal], l, 13-22.

Heymann, Earle, 2000 - Heymann S., Earle A. (2000). Low-Income parents: How do working conditions affect their opportunity to help school-age children at risk? *American Educational Research Journal*, 833-848.

Hojat et al., 2002 - Hojat M, Gonnella J.S., Mangione S., Magee M. (2002). Empathy in medical students as related to academic performance, clinical competence and gender. *Medical Education*, 36 (6), 522 527. doi:10.1046/j.1365-2923.2002.01234.x

Mashburn et al., 2008 - Mashburn A.J., Pianta R.C., Hamre B.K., Downer J.T., Barbarin O.A., Bryant D., Early D.M. (2008). Measures of classroom quality in prekindergarten and children's development of academic, language, and social skills. *Child Development*, 79(3), 732-749. doi: 10.1111/j.1467-8624.2008.01154.x.

Merritt et al., 2012 - Merritt E.G., Wanless S.B., Rimm-Kauffman S.E., Cameron C., Peugh J.L. (2012). The contribution of teachers' emotional support to children's social behaviors and self-regulatory skills in first grade. School Psychology Review, 40(2), 141-159.

Nacar, Tumkaya, 2011 - Nacar F.S., Tumkaya S. (2011). Analysis of the relationship between the communication of the class teachers and their skills to solve interpersonal problems. *Elementary Education Online*, 10(2), 493-511.

Öz, 1998 - Öz F. (1998) The relationship between empathic tendency, empathic skills and academic performance of senior students of nursing. *Journal of Cumhuriyet University School of Nursing*, 2, 32–39.

Ozerbas et al., 2007 - Ozerbas M.A., Bulut M., Usta E. (2007). Ogretmen adaylarinin algiladiklari iletisim becerisi duzeylerinin incelenmesi [the investigation of pre-service teachers 'perceived communication skills level]. Ahi Evran University Kirsehir Faculty of Education Journal, 8(1), 123-135.

Ozcan, 2010 - Ozcan C.T., Oflaz F.F., Sutcu Cicek H.H. (2010). Empathy: the effects of undergraduate nursing education in Turkey. International Nursing Review, 57(4), 493-499. doi:10.1111/j.1466-7657.2010.00832.x

Pianta, 1999 - Pianta R.C. (1999). Enhancing Relationships between Children and Teachers. Washington, DC: American Psychological Association.

Reynolds et al., 1990 - Reynolds W.J., Scott B. Jessiman W.C. (1999) Empathy has not been measured in clients' terms or effectively taught: a review of the literature. Journal of Advanced Nursing, 30, 1177–1185.

Schlundt, McFall, 1985 - Schlundt D.G., McFall R.M. (1985). 'New Directions in the assessment of socialcompetence and social skills', In L'Abate, L. and Milan, A. M. (eds.), Handbook of Social Skills Training and Research. New York: John Wiley and Sons, pp. 22–49.

Smith, Addison, 2013 - Smith I., Addison C. (2013). The "new" school leader: training instructional leaders for a new generation of teachers and learners. Academy of Educational Leadership Journal, 17(2), 135-140.

Sumi, 2011 - Sumi K. (2011). Relations of social problem solving with interpersonal competence in Japanese students. Psychological Reports, 109(3), 976-982. doi:10.2466/07.20.21.28.PR0.109.6.976-982

Toprak, Bozgeyikli, 2011 - Toprak E., Bozgeyikli H. (2011). Öğretmen adaylarının sosyal sermaye düzeylerinin karşilaştırmali incelenmesi [Comparative analysis of social capital level of teacher candidates-Case of Erciyes University]. Sosyal Bilimler Enstitüsü Dergisi, 31, 125-147.

Wright et al., 2013 - Wright K.B., Rosenberg J., Egbert N., Ploeger N. A., Bernard D.R., King, S. (2013). Communication Competence, Social Support, and Depression Among College Students: A Model of Facebook and Face-to-Face Support Network Influence. *Journal Of Health Communication*, 18(1), 41-57. doi:10.1080/10810730.2012.688250

Yiğiter et al., 2011 - Yiğiter K., Kolayiş H., Yenigün Ö., Taşkıran Y. (2011). Kocaeli Üniversitesi Beden Eğitimi ve Spor Yüksekokulunda okuyan öğrencilerin empatik becerilerinin belirlenmesi [Determination of empathic skills of students at Kocaeli University physical education and sports. *International Journal Of Human Sciences*, 8(2), 936-945.

Yuksel, 1997 - Yuksel G. (1997). Sosyal beceri egitiminin universite ogrencilerinin sosyal beceri duzeyine etkisi [Influence of social competence training on college students' level of social competence. (Unpublished doctoral dissertation). Gazi University: Ankara.