Investigation of the Relationship Between the Empathic Tendency Skills and Problem Solving Skills of Turkish Primary School Students*

Seda İmece [i]
Ege University

Belgin Arslan Cansever [ii]
Ege University

Abstract

The aim of this study is to investigate whether there is a relationship between empathy tendency skills and problem solving skills of 10 year old Turkish primary school students. At the same time, it is aimed to find out whether these students 'empathy level and problem solving ability differ according to the student's gender, number of siblings, socioeconomic level, parental age and parents' educational status. The study sample constitutes 418 fourth grade students from three primary schools in the city of Izmir, Turkey. In the study, the KA-SI Empathy Tendency Scale-Child Form developed by Kaya and Siyez (2010) and Problem Solving Inventory is developed by Serin, Bulut-Serin, Saygılı (2010). Independent Groups t Test, One Way Analysis of Variance (ANOVA), Kruksal Wallis H Test; Tukey and Mann Whitney U Test in determining which groups differ; Pearson Product Moment Correlation Analysis was applied to determine the relationship between groups. The findings of the study showed that there is a positive directional medium-strong relationship between the empathy score of the students and the confidence in problem solving skills and problem solving scores. There is a very weak positive relationship between empathy and avoidance score. It is thought that the results obtained in the research can contribute to the programs that will be prepared in order to develop empathy and problem solving skills in children.

Keywords: Primary school, empathy, empathic tendency, problem, problem solving skills

DOI: 10.29329/ijpe.2019.212.2

---

[*] This study was produced from the master thesis of the first author under the supervision of the second author. And also, this paper is presented at the 17th International Classroom Teaching Symposium (USOS 2018) held in Ankara on April 11-14.

[i] **Seda İmece**, Elementary Education, Ege University Social Science Enstitute.

[ii] **Belgin Arslan Cansever,** Assoc. Prof. Dr., Elementary Education, Ege University, ORCID: 0000-0002-0720-8096.

Correspondence: nejlacalik@gmail.com

INTRODUCTION

New technologies at the end of the 20th century showed that our decision-making system was not only a logical calculation, but also emotions played an important role in this process (Gerdes, 2011). Having good communication skills in a globalized world has positive effects on both social and work life. Being in society is having effective communication skills. Communication skills are the ability of an individual to communicate emotion and thoughts to another person in an unmasked manner by using empathy and respect effectively and accurately. In addition, it is considered as learned behaviors that make it easy to live in society by establishing qualified relationships with others (Şahin, 1998). It can be said that the individuals with communication skills are more able to cope with the problems they face in their lives, to develop sound relationships and to be more successful in their social lives (Cüceloğlu, 2004). In interpersonal relations, goals, wishes and thoughts are not always compatible. The important point is to maintain communication in a healthy way despite all these differences. Lefevre (2015) refers to the necessity of including learning opportunities associated with real life in the process of education in the development of communication skills of children. During the implementation, face-to-face connection with children is mentioned as an important process. Primary school is a period in which the children are opened to the outside world after the family environment and intensely interact with the social environment. This period includes features that will form the basis of the child's future life (Yörükoğlu, 1996: 421). In this period, children become more aware of others than the pre-school period. Primary school period is the period of disintegration of the self-center. It is a stage in which the child can realize that there are others and realize that they are "unique" like him. Extensions of this feature are seen in the form of communication in the game and social relations (Yılmaz-Yüksel, 2003). During the primary school years in which other people were discovered, the way that children communicate with their surroundings influences whose children throughout their life and leaves a permanent impression in their lives.

LITERATURE REVIEW

Empathy in Childhood

Empathy is an increasingly important concept in the media, academia, national and international policies, arts, ethics, health professionals education, patient and elderly care (Coplan, 2014). This concept is one of the skills required to establish a healthy communication. According to Rogers, empathy is that a person correctly understands, feels and communicates the feelings and thoughts of a person against a particular situation (Rogers, 1970; cited in: Dökmen, 2015: 157). Eisenberg (1982) states that the development of empathy is not suddenly, but as years go by. In psychoanalytic theory, it is suggested that the first formation of empathy started from child-parent relations in early childhood. It has been observed that individuals who have developed empathy skills have a healthier communication, have a better understanding of life, make healthier decisions in solving problems and therefore exhibit less aggressive behavior (Türnüklü, 2004). Pişkin (1991) mentioned that the individuals who are empathically weak are likely to fail in interpersonal communication according to empathically developed individuals. Understanding the behavior of others requires understanding the emotions that cause their behavior and understanding what reactions these emotions cause. The fact that children have empathy to be accepted by their peers and have positive interactions with other children is the most decisive factor (Özden, 2014, p.83). The essential element for the development of empathy is the formation of the concepts of "self" and "others" in the cognitive development of the child. Children, first, "self" and then the formation of the "other" can understand the point of view of others (Aydin, 2010, p. 145). It is very important for the children to gain and internalize this skill in primary school age, where cognitive development and permanent track behavior changes are intense. Empathy prevents many communication problems from occurring and enables problems to be solved in the least damaging way (Rehber, 2007). Children in the 10-year age group are at the end of the egocentric period and at the beginning of the abstract process period. During this period, it is a combination of multiple anxieties such as accepting, understanding, and loving oneself and those around them. Besides this, it is important that children have empathic

tendencies and use these skills to solve problems in daily life. Developing an empathic understanding of interpersonal relationships enables children to display a more tolerant approach to their attitudes towards other people. If tolerance in human relations is high, problems will be solved smoothly. In this way, differences between people can become a source of wealth, not a cause of conflict (Özbek, 2005; Riedler & Eryaman, 2016). Children with this skill can look at events from different angles and can accurately analyze the problems they face. A child who correctly analyzes the problems he faces becomes a self-confident individual in the society.

Importance of Problem Solving Skills in Childhood

Human beings have been faced with various problems since their existence and they are trying to find solutions to these problems. To be able to solve problems in a healthy way and to establish positive relationships with other people requires having sufficient problem solving skills. Problem solving adequacy can be considered as an art that is developed through repeated opportunities for solving the problem. The child discovers and develops his / her abilities through opportunities to solve problems. The child, who is encouraged to find a solution in the face of the difficulties encountered, finds an opportunity to use his knowledge, skills, understanding and needs while trying to carry out the studies required by the current problem and increases his confidence (Eroğlu, 2001, p.12). Children usually begin to interact with their peers from the age of 4 and mostly in their primary school years. It is expected that children will have the behaviors and skills such as being accepted, taking responsibility, developing good relations, being responsible for their own behaviors, establishing good relations with friends, playing and obeying the rules of the environment, sharing, helping, respecting. In fact, it is inevitable for children to have problems with their peers, teachers and parents in developing and demonstrating these behaviors. It can be said that the most favorable environment in which problem-solving skills can be developed is the primary school age as a result of the fact that problems cannot be avoided at any stage of life since childhood. In this period, it is thought that the teacher's ability to create an environment for the children to solve their problems and to overcome a problem in their own way positively affects the personality development of children. Passing the primary school period in this way will enable individuals to struggle with the difficulties experienced in every period of life. Today's society needs individuals who have creative and analytical intelligence and can solve the different problems they face. It is possible to maintain the existence of the society by educating the individuals who are equipped with these qualities (Bilen, 1999, p.48). It is thought that developing problem solving skills in children will also contribute to the solution of community problems (Eroğlu, 2001: 12). It can be said that the understanding of 21st century education is based on change and transformation, and empathy and problem solving skills are among the most important keys of these concepts (Eryaman, 2007). In this century, where competition is also experienced intensely, the ones expected from the next generations; To be able to keep up with these changes, to be able to transfer information accurately by analyzing, being flexible and productive, and to be able to tolerate interpersonal differences. Developing empathy and problem solving skills in primary school children will enable them to grow as more dynamic and more powerful individuals. In this context, the aim of the study is to examine whether there is a relationship between empathy tendency skills and problem solving skills of primary school students. Besides, it is aimed to determine whether empathy trend level and problem solving skills differ according to student gender, number of siblings, socio-economic level, parental age and parental education status.

METHOD

Research Model

This research, which examines the relationship between empathy tendency skills and problem solving skills of the fourth grade primary school students, is in the relational survey model. This model is a research approach that aims to describe a situation that exists in the past or the present. The subject or object, which is the subject of the research, is tried to be defined in its own conditions and as it is. There is no attempt to influence them in any way. Relational survey model is a descriptive study

model and it aims to determine the presence and / or degree of change between two and more variables (Karasar, 2015).

Sample

The population of the study consisted of 47,929 students, 23.568 girls and 24.371 boys, studying in the 4th class of state and private primary schools in İzmir. The cluster sampling method was used to determine the research sample. Karasar (2015) describes the cluster sampling method as a sample in which all clusters in the universe have the chance to be selected equally. In this study, primary schools in İzmir were classified according to three different socio-economic levels as upper-middle-lower according to their districts. Schools were identified from each socioeconomic level by using simple random sampling method. In the study, 123 (57 females and 66 males) were enrolled in the upper socio-economic school; 145 (75 females and 70 males) in the middle socio-economic school; the study was conducted with 150 students (76 girls and 74 boys) who were studying at the lower socio-economic school. The sample of the study consisted of 418 students.

Data Collection Tools

In order to determine the students' empathy trend levels, KA-Sİ Empathic Tendency Scale Child Form developed by Kaya and Siyez (2010) was used. In order to determine problem solving skills, Problem Solving Inventory developed by Serin, Bulut-Serin, Saygılı (2010) was utilized. The Personal Information Form used in the research consists of questions about determining the gender, number of siblings, parental age, parental education status. The Empathy Tendency Scale developed by Kaya and Siyez in 2010 has two sub-dimensions: emotional empathy and cognitive empathy. In emotional empathy subscale 7; there are 6 items in the sub-dimension of cognitive empathy. The way the form is prepared in a four-degree structure: (1) Not suitable for me, (2) A bit suitable for me, (3) Very suitable for me and (4) It is totally suitable for me. There are no negative substances in the scale. Therefore, the score values of the responder responses are collected in parallel to the response mode. Emotional empathy score with 7 items measuring emotional empathy; cognitive empathy score is obtained by collecting 6 items measuring cognitive empathy. These two sub-dimension scores are collected to find the empathy trend score.As the scores obtained from the scale increase, the empathic tendency increases and as the scores obtained from the scale decreases empathic tendency decreases (Kaya and Siyez, 2010, p.119). The reliability coefficient (cronbach alpha) for emotional empathy and cognitive empathy subscales was .78 and. 71. The reliability coefficient of the whole scale was .84. The Problem Solving Inventory for Children developed by Serin, Bulut-Serin, Saygili (2010) is arranged in a five-point likert format. The inventory with 24 items was composed of 3 factors: Confidence in problem solving skills, self-control and avoidance. The cronbach alpha reliability coefficient of the whole inventory was found to be .80. The way in which the scale responds is: I never behave like this (1); I behave in a rare way (2); I behave like that in a row (3); I often behave like this (4); I always behave like this (5). Negative items are scored on the contrary of the above response. Children's self-perception of problem solving increases as points increase; children's self-perception in problem solving decreases as the score decreases (Serin, Bulut-Serin, Saygılı, 2010, p. 454).

Analysis of Data

In this study, Pearson Moments Product Correlation Test was applied to determine whether there was a significant relationship between the problem solving inventory and empathy tendency scale scores. In the analysis of the data, the independent groups t-test and One-Way Analysis of Variance (ANOVA) were used when the values were normally distributed when analyzing the differences between the groups. Kruskal Wallis-H and Mann Whitney-U test were used in the cases where the values were not distributed normally. Independent Groups t-test was used to determine whether the scores of the empathy trend scale score and sub-dimension scores, problem-solving inventory score, confidence in problem-solving skills and self-control sub-dimensions differ according to gender variable. One-way analysis of variance (ANOVA) was applied to determine whether the

number of siblings, mother education level, father's education level, mother age, father age, socio-economic level varied according to the variables. Post Hoc Tukey test was used for multiple comparison tests in order to determine the difference between the groups. The Mann Whitney-U test was used to determine whether the problem solving inventory avoidance subdimension scores differ according to gender variable. Kruksal Wallis-H Test was applied to determine whether the number of siblings, mother education level, father's education level, mother age, father age, socio-economic level varied according to the variables.

FINDINGS

In this study, the relationship between the students' empathy level and problem solving skills were discussed. The results of the Pearson Moments Product Correlation Coefficient to determine the relationship between the Empathy Tendency Scale and its Sub-dimension scores, and the relationship between the Problem Solving Inventory and the Sub-Dimensional Scores are given in Table 1.

Table 1. Relationship between Empathy Tendency Scale and Problem Solving Inventory Sub-Size Scores

		Emotional Empathy	Cognitive Empathy	Empathy (Total)	Problem Solving Skills Confidence	Self-Control	Avoidance	Problem Solving (Total)
Emotional Empathy	r	1	,644**	,927**	,475**	-,029	,122*	,340**
	p		,000	,000	,000	,553	,013	,000
	n	418	418	418	418	418	418	418
Cognitive Empathy	r		1	,884**	,499**	,109*	,213**	,433**
	p			,000	,000	,026	,000	,000
	n		418	418	418	418	418	418
Empathy (Total)	r			1	,535**	,036	,179**	,420**
	p				,000	,466	,000	,000
	n			418	418	418	418	418
Problem Solving Skills Confidence	r				1	,222**	,255**	,835**
	p					,000	,000	,000
	n				418	418	418	418
Self-Control	r					1	,532**	,668**
	p						,000	,000
	n					418	418	418
Avoidance	r						1	,630**
	p							,000
	n						418	418
Problem Solving (Total)	r							1
	p							
	n							418

**p<0,01, *p<0,05

When Table 1 is examined, it can be said that there is a positive directional medium-strong relationship between empathic tendency and problem solving scores (r = .420, p <.01).

Table 2: Empathy Tendency Scale Score and Sub-Dimensional Scores Differences by Gender Variable

Gender		N	$\bar{X}$	S.s.	t	p
Emotional Empathy	Girl	207	20,88	4,79	4,553	,000*
	Boy	209	18,69	5,04		
Cognitive Empathy	Girl	207	18,38	3,67	2,400	,017*
	Boy	209	17,44	4,31		
Empathy (Total)	Girl	207	39,27	7,52	3,960	,000*
	Boy	209	36,13	8,61		

*p<0,0

According to Table 2, there was a statistically significant difference between girls and boys in terms of empathic tendency scores (p <0.05). Girls have a higher empathy tendency than boys.

Table 3: Empathy Tendency Scale Score and Sub-dimension Scores Differences by Socio-economic Levels

Socio-economic level		N	$\bar{X}$	S.s.	F	p	Significant difference
Emotional Empathy	Upper Socio-economic	123	21,58	4,82	19,239	,000*	1-2
	Middle socio-economic	145	20,08	4,93			1-3
	Lower socio-economic	150	17,99	4,70			2-3
Cognitive Empathy	Upper Socio-economic	123	19,98	3,46	50,886	,000*	1-2
	Middle socio-economic	145	18,43	3,44			1-3
	Lower socio-economic	150	15,64	3,92			2-3
Empathy (Total)	Upper Socio-economic	123	41,55	7,51	38,456	,000*	1-2
	Middle socio-economic	145	38,51	7,62			1-3
	Lower socio-economic	150	33,63	7,57			2-3

*p<0,05 1= upper 2= middle 3= lower

According to Table 3, there was a statistically significant difference between the socio-economic groups in terms of empathy scores (p <0.05). According to this, the students with the upper socio-economic level have the highest empathy tendency and the lowest socio-economic level the lowest empathy of the students.

Table 4: Empathy Tendency Scale Score and Sub-dimension Scores Differences by Maternal Learning Status

Mother education status		N	$\bar{X}$	S.s	F	p	Significant difference
Emotional Empathy	Illiterate	54	17,04	4,36	5,891	,000*	1-4
	Primary School	78	19,14	4,89			1-5
	Middle School	49	19,22	4,90			1-6
	High school	86	20,10	4,94			
	Undergraduate	121	20,89	5,07			
	Graduate	29	21,52	4,62			
Cognitive Empathy	Illiterate	54	15,33	3,75	13,800	,000*	1-4 / 1-5
	Primary School	78	16,49	4,01			1-6 / 2-4
	Middle School	49	16,90	3,98			2-5 / 2-6
	High school	86	18,60	3,44			3-5 / 3-6
	Undergraduate	121	19,17	3,84			
	Graduate	29	20,34	3,02			
Empathy (Total)	Illiterate	54	32,37	6,79	10,799	,000*	1-4 / 1-5
	Primary School	78	35,63	7,97			1-6
	Middle School	49	36,12	8,37			2-5
	High school	86	38,71	7,54			2-6
	Undergraduate	121	40,06	8,11			3-5
	Graduate	29	41,86	6,84			3-6

* p <0.05 1 = illiterate 2 = primary school 3 = secondary school 4 = high school 5 = undergraduate 6 = graduate

According to Table 4, the empathy tendency of those whose mother is graduate is the highest and the empathy tendency of the mother and the illiterate is the lowest.

Table 5: Empathy Tendency Scale Score and Sub-dimension Scores Differences by Father Learning Status

Father education status		N	$\bar{X}$	S.s	F	p	Significant difference
Emotional Empathy	Illiterate	34	16,76	4,17	5,433	,000*	1-4 1-5 1-6
	Primary School	70	19,10	5,23			
	Middle School	66	18,79	4,92			
	High school	77	20,86	4,75			
	Undergraduate	135	20,21	5,08			
	Graduate	35	21,71	4,44			
Cognitive Empathy	Illiterate	34	14,50	3,34	13,933	,000*	1-2 1-4 1-5 1-6 2-4 2-5 2-6 3-4 3-5 3-6
	Primary School	70	16,76	4,20			
	Middle School	66	16,45	4,02			
	High school	77	18,62	3,41			
	Undergraduate	135	19,01	3,72			
	Graduate	35	19,97	3,39			
Empathy (Total)	Illiterate	34	31,26	6,30	10,386	,000*	1-4 1-5 1-6 2-5 2-6 3-4 3-5 3-6
	Primary School	70	35,86	8,42			
	Middle School	66	35,24	8,36			
	High school	77	39,48	7,23			
	Undergraduate	135	39,22	7,95			
	Graduate	35	41,69	7,24			

*p<0,05 1= illiterate 2= primary 3= middle 4= high school 5= undergraduate 6= graduate

According to Table 5, the empathy tendency of those whose father is graduate is the highest and the empathy tendency of the mother and the illiterate is the lowest.

Table 6: Problem Solving Inventory Score, Confidence in Problem Ability and Self-Supervision Sub-dimension Differences According to Socio-economic Level

Socio-economic level		n	$\bar{X}$	S.s.	F	p	Significant difference
Confidence in Problem Solving	Upper socio-economic	123	45,54	10,01	4,389	,013*	1-3
	Middle socio-economic	145	43,76	10,71			
	Lower socio-economic	150	41,80	10,49			
Self Control	Upper socio-economic	123	25,59	6,21	4,684	,010*	1-3
	Middle socio-economic	145	24,04	5,67			
	Lower socio-economic	150	23,49	5,56			
Problem Solving (Total)	Upper socio-economic	123	91,41	16,12	7,805	,000*	1-3
	Middle socio-economic	145	87,44	15,46			

	Lower socio-economic	150	83,81	15,89	

*p<0,05 1= upper 2= middle 3= lower

According to Table 6, students with upper socio-economic level have the highest confidence in problem-solving skills, self-control and problem-solving skills. However, the lowest socio-economic level of students is the lowest.

Table 7: Problem Solving Inventory of Sub Size Scores Differentiation by Socio-economic Level

Socio-economic level		n	Rank Average	x^2	p	Significant difference
Avoidance	Upper socio-economic	123	235,25	11,205	,004*	1-3
	Middle socio-economic	145	211,55			
	Lower socio-economic	150	186,41			

*p<0,05 1= upper 2= middle 3= lower

According to Table 7, the students with the upper socio-economic level have the highest avoidance behavior while the lowest socio-economic level is the lowest.

Table 8: Problem Solving Inventory Score, Problem Solving Skills Confidence and Self-Regulatory Sub-dimension scores differ according to Mother Learning Status

Mother education status		n	$\bar{X}$	S.s.	F	p	Significant difference
Confidence in Problem Solving	Illiterate	54	43,59	9,90	1,168	,324	
	Primary school	78	42,44	10,71			
	Middle School	49	40,90	10,81			
	High school	86	44,15	10,51			
	University	121	44,61	10,17			
	Graduate	29	44,62	11,56			
Self Control	Illiterate	54	24,48	5,37	4,029	,001*	2-5
	Primary school	78	22,31	5,92			
	Middle School	49	23,00	5,39			
	High school	86	24,35	5,47			
	University	121	25,75	5,89			
	Graduate	29	24,93	6,41			
Problem Solving (Total)	Illiterate	54	87,15	15,81	3,222	,007*	2-5 3-5
	Primary school	78	83,67	15,52			
	Middle School	49	81,80	16,90			
	High school	86	88,12	15,83			
	University	121	90,60	15,72			
	Graduate	29	89,45	14,72			

*p<0,05 1= *p<0,05 1= illiterate 2 = primary school 3 = secondary school 4 = high school 5 = university 6 = graduate

According to Table 8, the self-control of the students whose mothers are university graduate is the highest. However, it was determined that the self-control of the students whose mothers are primary school graduates is at the lowest level. Similarly, students whose mothers are university graduates have the most problem-solving skills. On the other hand, the problem solving skills of the students whose mothers were graduated from middle school were the lowest.

Tablo 9: Problem Solving Inventory Score, Problem Ability Confidence and Self-Regulatory Sub-dimensions of the difference according to the status of Father Education

Father education status		n	$\bar{X}$	S.s.	F	p	Binary difference
Confidence in Problem Solving	Illiterate	34	39,53	11,34	2,610	,024*	1-6
	Primary school	70	43,10	10,19			
	Middle School	66	41,45	10,91			
	High school	77	45,16	9,63			
	University	135	44,27	10,57			
	Graduate	35	46,46	10,15			
Self Control	Illiterate	34	22,97	5,49	3,563	,004*	3-5
	Primary school	70	24,54	5,40			
	Middle School	66	22,71	5,88			
	High school	77	23,21	5,45			
	University	135	25,55	5,96			
	Graduate	35	25,60	6,38			
Problem Solving (Total)	Illiterate	34	79,32	16,05	4,408	,001*	1-5
	Primary school	70	87,96	15,36			1-6
	Middle School	66	82,64	16,87			3-5
	High school	77	87,35	14,23			3-6
	University	135	89,84	16,41			
	Graduate	35	92,57	14,70			

*p<0,05 1= illiterate 2 = primary school 3 = middle school 4 = high school 5 = university 6 = graduate

According to Table 9, the students whose fathers are graduate have the highest confidence in problem solving skills. The fathers, who are illiterate, have the children with the lowest confidence in problem solving skills. Similarly, the students whose fathers are graduate have the highest self-control. Those with a secondary school education have the lowest self-control. While the problem solving skills of the students whose father is a graduate has the highest problem, the problem solving ability of the father is the lowest.

Table 10: Problem Solving Inventory Avoidance Sub-Size Scores difference according to the status of Father Education

Father education status		n	Rank Average	x^2	p	Significant difference
Avoidance	Illiterate	34	134,09	24,845	,000*	1-2
	Primary school	70	232,91			1-4
	Middle School	66	183,83			1-5
	High school	77	197,19			2-3
	University	135	226,61			
	Graduate	35	239,50			

*p<0,05 1= illiterate 2 = primary school 3 = middle School 4 = high School 5 = University 6 = graduate

According to Table 10, the father has the highest level of avoidance behavior. The fathers, who are illiterate, have the children with the lowest avoidance behavior.

RESULTS AND DISCUSSION

Research shows that empathy and problem solving skills increase or decrease in the individual together, thus empathy and problem solving ability can be seen in the same proportion in an individual. Being parallel with the findings in the study, Rehber's (2007) study showed that students with high empathic tendency had higher problem solving behaviors than those with low empathic tendency. When a person with high empathy skills has a positive communication, he / she will be able to put himself / herself in the place of someone else and try to understand his / her emotions. This increases the likelihood of problem-solving skills.

In another finding, it was concluded that female students' empathy tendency levels were higher than males. According to Rehber (2007), parenting attitudes of parents differ from society to society as well as by gender. Each society approaches the gender according to its cultural characteristics and structure. In Turkish society, girls are raised with the suggestion that they are more compatible and understanding than boys. It can be said that this facilitates empathy for girls. The low empathy tendency of boys may be caused by the fact that boys are always seen as strong and should not be able to express their feelings. Yüksel (2009), on the other hand, believes that girls ' linguistic ability develops earlier than boys and this helps girls to explain their feelings and understand others' feelings. In addition, when we look at the behavior of students in this age group and their adaptation to their group, it can be seen that female students express their thoughts and feelings more easily than boys. This helps the girls to communicate more effectively, and thus show more empathetic behaviors in their social circles. Tamres, Janicki, and Helgeson (2002) reported that girls have more strategies and skills to solve the problem than boys.

As a result of the examination of parents educational status and empathy, the students' empathy level increased as the education level of the parents increased. The education level of parents affects their attitudes towards their children. According to Yeşilyaprak (1993), parents who are primary school graduates and parents with university degrees differ in their attitudes towards their children. Especially mother's education level affects the development of girls personality. Alisinanoğlu and Ulutaş (2000) stated that mothers who are not literate or have low level of education show more restrictive and dependent behaviors on girls in the society. Therefore, parallel to the results of the study, it was thought that the educational level of the parents would increase and the level of empathy of the child would increase. The inadequacy of the socio-economic situation leads to the inability of the family members to meet the basic needs of the family and thus cause the family members not to get satisfaction from life. This is reflected in family relationships as tension, irritability, and instability (Alisinanoğlu and Ulutaş, 2007; Yeşilyaprak, 1993). In these types of families where parents' education level is generally low, problems are solved mostly by non-verbal methods and healthy communication within the family cannot be established. This way of life and communication can negatively affect the empathy tendency of children. Kuzgun (1972) stated that as the socio-economic level increases, the positive behaviors of mothers and fathers have increased. This situation is reflected in the way of communication and the children of these families can be more empathetic. According to the results of another study, the problem solving ability of the students increases as the level of father education increases. The educational level of parents affects the way they communicate with their children. In this context, the attitude of the family towards the children affects them in all aspects. The democratic and overprotective attitudes of the parents towards their children vary according to the educational situation. It is known that when the education level increases the excessive protective attitude decreases and the democratic attitude increases (Özyürek, 2015). In this context, it is thought that the problem-solving skills of the children whose thoughts are taken, whose ideas are respected and cared, can be improved more. Recently it is considered that mothers and fathers in Turkey are tending to share the responsibility in raising their children. In this context, the behaviors and attitudes of fathers towards their children are a determining factor in the development of children's behavioral and cognitive skills. For this reason, it was thought that the education level of the father affected the problem solving skills of the child. One of the results obtained in this study is that as the socio-economic level of students increases, problem solving skills increase. Similarly, in the study conducted with the fourth and fifth grade students of Gömleksiz and

Bozpolat (2012), problem solving skills were increased as socio-economic level increased. Children's physical, cognitive and social development conditions are directly related to the socio-economic level of the family. In families with high socio-economic status, children have more opportunities to have fun, rest and other social activities. With these opportunities, the stimulus and environment richness offered to the child increases the probability of children being self-confident, sociable, more willing to solve problems, searching for different solutions and not taking shelter in adults (Gömleksiz and Bozpolat, 2012).

RECOMMENDATIONS

The following recommendations have been developed in the light of the results of the study and the literature:

In the study, there was a relationship between empathy tendency and problem solving skills. As such, emphasis should be placed on empathy and problem solving skills starting from pre-school period. By using empathy, the child who uses his communication skills properly will have fewer problems and will be able to produce alternative solutions to their problems. Related activities can be included in guidance practices for developing empathy and problem solving skills in children. Primary school curriculum for empathy and problem solving skills can be included. In-service seminars can be given to teachers so that students can develop empathy and problem solving skills. In this sense, activity books that will help teachers in the classroom can be prepared and guided. Parents can be guided by information and awareness raising activities on the development of empathy and problem solving skills in children. This study can be applied to 10 age groups in order to see how the related skills and variables develop in children in different age groups, and in what way the variables are affected. In this study, quantitative research method has been adopted. Researchers planning to conduct research in this area may also be advised to obtain more in-depth knowledge by taking advantage of the qualitative research method.

REFERENCES

Açar, K. (2012). Normal ve Zihinsel Engelli Ergenlerin Empati Düzeyi ile Annelerinin Empati Düzeyi Arasındaki İlişkinin İncelenmesi, [Yayımlanmamış Yüksek Lisans Tezi], Marmara Üniversitesi Eğitim Bilimleri Enstitüsü, İstanbul

Akça Ay, F. (1999). Hemşirelerin Empati Becerilerinin Değerlendirilmesi, [Yayımlanmamış Yüksek Lisans Tezi], Marmara Üniversitesi Sağlık Bilimleri Enstitüsü, İstanbul

Alisinanoğlu, F. & Ulutaş, İ. (2000). Çocuklarda Kaygı ve Bunu Etkileyen Etmenler. *Milli Eğitim Dergisi*, 145-146.

Aydın, B. (2010). *Çocuk ve Ergen Psikolojisi*. Ankara: Nobel Yayıncılık.

Baran, G. A. (2013). Genç ve Gençlik: Sosyolojik Bakış. *Gençlik ve Araştırma Dergisi*, 1 (1).

Bilen, M. (1999). *Plandan Uygulamaya Öğretim*. Ankara: Anı Yayıncılık.

Coplan, A. (2014). Understanding Empathy: Its features and effects. In a Coplan & P. Goldie (Eds.), *Empathy: Philosophical and psychological perspectives*, pp. 3-18. New York: Oxford University Press.

Cüceloğlu, D. (2004). *İnsan ve Davranışı.* İstanbul: Remzi Kitabevi.

Dökmen, Ü. (2015). *Sanatta ve Günlük Yaşamda İletişim Çatışmaları ve Empati*. İstanbul: Remzi Kitabevi.

Eisenberg- Berg, N. & Lennon, R. (1980). Altruiisim and the Assessment of Empathy in the Preschool Years. *Child Development, (51*), 552-557.

Eroğlu, E. (2001). Ailenin Çocuklarda Problem Çözme Yeteneğinin Gelişmesi Üzerine Etkisi, [Yayımlanmamış Yüksek Lisans Tezi], Sakarya Üniversitesi Sosyal Bilimler Enstitüsü, Sakarya.

Eryaman, M. Y. (2007). From reflective practice to practical wisdom: Toward a post-foundational teacher education. *International Journal of Progressive Education*, *3*(1), 87-107.

Gerdes, K.E. (2011). Empathy, Sympathy, and Pity: 21st-century Definitions and Implications for Practice and Research. *Journal of Social Service Research, 37*(3), 230-41.

Gömleksiz, M. N. & Bozpolat, E. (2012). İlköğretim 4 ve 5. sınıf Öğrencilerinin Problem Çözme Becerilerine İlişkin Görüşlerinin Değerlendirilmesi. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, *12(* 2), 23-40.

Gürsoy, T. (2015). 13-15 Yaş Grubundaki Bireylerde Empatinin Aleksitimi Düzeyleri Üzerine Etkisi. [Yayımlanmamış Yüksek Lisans Tezi], İstanbul Arel Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.

Karasar, N. (2015). *Bilimsel Araştırma Yöntemi*. Ankara: Nobel Akademik Yayıncılık.

Kaya, A. & Siyez, D. M. (2010). KA-Sİ Çocuk ve Ergenler için Empatik Eğilim Ölçeği Geliştirilmesi: Geçerlik ve Güvenirlik Çalışması. *Eğitim ve Bilim Dergisi, 35*, 110-125.

Kuzgun, Y. (1972). Anne-Baba Tutumlarının Bireyin Kendini Gerçekleştirme Düzeyine Etkisi. [Yayımlanmamış Doktora Tezi], Hacettepe Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.

Küçükkaragöz, H., Akay, Y. & Canbulat T. (2011). Bir Grup İlköğretim Öğrencisinin Bazı Psiko-Sosyal Değişkenlere Göre Empatik Beceri Düzeyleri. *Uşak Üniversitesi Sosyal Bilimler Dergisi, 2*(4), 88-100.

Lefevre, M. (2015). Becoming Effective Communicators with Children: Developing Practitioner Capability through Social Work Education. *British Journal of Social Work, 45*, 204-224.

Özbek, M. (2005). İnsan İlişkilerinde Empatinin Yeri ve Önemi. *Sosyal Siyaset Konferansları Dergisi Sayı, 49*, 568-585.

Özden, M. S. (2014). Çocuk Gelişimi, Kültür, Kişilik ve Empati İlişkisi. *Empati,* (Aysın Turpoğlu Çelik, Ed.), 43-80, İstanbul.

Özyürek, A. (2015). Öğretmen ve Ebeveyn Tutumlarının Okul Öncesi Dönem Çocuklarının Problem Çözme Becerilerine Etkisinin İncelenmesi. [Yayımlanmamış Yüksek Lisans Tezi], Karabük Üniversitesi Sağlık Bilimler Enstitüsü, Karabük.

Pişkin, M. (1991). Empati, Kaygı ve Çatışma Eğilimi Arasındaki İlişki. *Anadolu Üniversitesi Eğitim Bilimleri Dergisi, 22* (2), 775-784.

Rehber, E. (2007). İlköğretim İkinci Kademe Öğrencilerinin Empati Eğilim Düzeylerine göre Çatışma Çözme Davranışlarının İncelenmesi. [Yayımlanmamış Yüksek Lisans Tezi], Çukurova Üniversitesi Sosyal Bilimler Enstitüsü, Adana.

Riedler, M. & Eryaman M.Y. (2016). Complexity, Diversity and Ambiguity in Teaching and Teacher Education: Practical Wisdom, Pedagogical Fitness and Tact of Teaching. *International Journal of Progressive Education. 12*(3): 172-186

Serin, N. B. & Derin, R. (2008). İlköğretim Öğrencilerinin Kişilerarası Problem Çözme Becerisi Algıları ve Denetim Odağı Düzeylerini Etkileyen Faktörler. *Uluslararası İnsan Bilimleri Dergisi, 5* (1), 1-18.

Tamres, L. K., Janicki, D. & Helgeson, V. S. (2002). Sex Differences in Coping Behavior: A Meta-Analytic Review and an Examination of Relative Coping. *Personality and Social Psychology Review, 6*(1) , 2-30.

Türnüklü, A. (2004). Okullarda Sosyal ve Duygusal Öğrenme. *Kuram ve Uygulamada Eğitim Yönetimi Dergisi, 37,* 136-157.

Yeşilyaprak, B. (1993). Kişilik Gelişiminde Ailesel Faktörlerin Etkisine İlişkin Bir Araştırma. *Kişilik Gelişimi ve Aile,* 1(3).

Yörükoğlu, A. (1996). *Çocuk Ruh Sağlığı*. Ankara: Özgür Yayınları.

Yüksel, A. (2009). İlköğretim 5. Sınıf Öğrencilerinin Empatik Becerileriyle Aile İşlevleri ve Benlik Kavramları Arasındaki İlişkinin İncelenmesi. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi, 1*(25).

Yüksel-Yılmaz, A. (2003). Empati Eğitimi Programının İlköğretim Öğrencilerinin Empatik Becerilerine Etkisi. [Yayımlanmamış Doktora Tezi], Ankara Üniversitesi Eğitim Bilimleri Enstitüsü, Ankara.