The Effect of TMPT Program on Pre-school Children's Social Problem Solving Skills*

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ARTICLE INFO	ABSTRACT
	Purpose: Starting Thinking Training at an early age is important. However, few studies were found regarding Thinking Training programs for pre-school children and the contributions of these programs to children's social problem-solving. In this context, the TMPT Program was developed for pre-school children and the effect of the program on 5-6 year-old children's social problem-solving skills was examined. **Research Methods:** The data of the study were obtained from a total of 70 children, including 32 in the experiment group and 38 in the control group.

Thirty-two of the children in the study group were girls and 38 were boys. An experimental design with a pre-test and post-test control group was used. Within the scope of the study the Thinking from Multidimensional Perspectives Training Program was implemented in the experimental group. Through the TMPT Program, the following steps were examined: self-recognition, recognizing the other, recognition of the third one, group perspective, and social and universal perspective. The Wally Social Problem-Solving Test was used to determine if there was a difference between pre-test and post-test scores. Independent t-test was used to determine if there was a difference between experiment and control groups in terms of their pre-test and post-test scores (0.05 was determined as the significance level). **Findings:** The results revealed that the TMPT Program has a positive effect on 5-6 year-old pre-school children's social problem-solving skills. **Implications for Research and Practice:** Depending on the findings of the study, it is thought that training programs developed to support 5-6-year-old children's social problem-solving skills should include Thinking Training activities within their contents.

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Introduction

The preschool period is when children start to recognize and investigate their environment, are willing to communicate with their environment, curious, have a strong imagination, are inquisitive, they begin to acquire behaviors and habits that are appropriate to the values and cultural structure of society, and their personality lays its foundation (Oguzkan & Oral, 1997). During this period, when children work to resolve some of the situations or problems they encounter, and they start reasoning to solve these problems, they usually enter the process of thinking via using their current cognitive potentials (Turner & Helms, 1991; Bal & Temel, 2014). Thinking is the most important component of the process of gathering information,, understanding, and learning. It forms the basis of questioning, evaluating, and producing new information practices (Gunes, 2012). The person's quality of life and learning are associated with the quality of their thinking (Fisher, 2013). The main function of education should be teaching children active thinking skills (Fisher, 2013). Thinking education is an important factor for education.

Problem-solving is the basis of learning (Goffin & Tull, 1985; Kayili & Ari, 2015). All encountered problems require the use of problem-solving skills that are needed for establishing healthy interpersonal relationships and maintaining lives in an effective and consistent way (Yuksel, 2008). Social problem-solving skills can be expressed as the social and emotional adjustment of people via solving the problems arising from the differences in their ideas, beliefs, values, or requirements (Pellegrini & Urbain, 1986; Gur,2016; Gur, Kocak & Demircan, 2016). Cam and Tumkaya (2006) defined social problem-solving as discovering the effective coping methods used while solving problems encountered in everyday life and as producing effective cognitive-behavior processes. Social problem-solving skills that are a part of social development also plays an important role in children's socialization (Yilmaz & Tepeli, 2013; Yoleri, 2014). It is important for children to learn thinking skills that will help them avoid social problems and solve these problems when faced (Yoleri, 2014; Sun, Jackson,Burns & Anderson,2017). Thinking skills play an important role in problem-solving.

Social problem-solving skills that are personal can be a determinant of the quality of life (Yaban & Yukselen, 2007; Cayir, 2015).These play important roles in the social interactions of children (Diener, Wrighr, Beverly & Black,2016). Children's acquiring of values to solve social problems at an early age via thinking activities, making explanations about why they think like that and how, and the association of thinking with all fields are very important goals. Lipman (1988) expressed that these goals can only be fulfilled with thinking experiences (Mutlu & Aktan, 2011). The researches carried out on Thinking Training in the world and in the country are examined and found that Thinking Training has as a positive contribution to children's development (Fields, 1995; Imbrusciano, 1997; Campbell, 2002; Daniel, 2000; Doherr, 2000; IAPC, 2002; Cayir, 2015; Doron, 2016; Gur, Kocak & Demircan, 2016; Sun et al., 2017). In other respects, Trickey & Topping (2004) also carried out a study and found that Thinking Training enhances participation in listening and assertiveness. In addition, Okur (2008) conducted a study with 6-year-old children and found that

Thinking Training caused a difference in terms of children's acting as an individual and their ability to make original sentences. It can be said that Thinking Training has positive effects on children.

Teaching children how to think is both a rational and moral attempt (Gregory, 2008). Thinking is the more than the sum of isolated thinking skills (Bjorklund & Causey, 2007). Human beings are social creatures and it is important for them to understand themselves and others. Education should not only be individual-based; to bring the social perspective it should also be community-based (Fisher, 2013). Time should be made in the educational system for deliberately developing the ability to think, since the ideas that thinking is necessary and a skill that can be taught are both accepted (De Bono, 1972). Researches on the subject show that without a scheduled training process students cannot adequately develop their thinking skills, thus facing various difficulties and challenges (Pascarella, 1989; Romano, 1992; Gunes, 2012). A scheduled training process for Thinking Training is important for the development of thinking skills (Romano, 1992). For maximum potential development, scheduled Thinking Training is important.

Wallace (2002) and Legett (2017) point to the importance of starting Thinking Training at an early age. Since the preschool period forms the basis of human life (Hamre & Pianta, 2001), it is important to include Thinking Training it is important to include Thinking Training in the preschool educational process. A search of the literature shows that the few studies have been conducted regarding Thinking Training programs for pre-school children and the contributions of these programs to children's social problem-solving. In this context, thinking with the Multi-Dimensional Perspectives Training Program is developed for pre-school children (Gur, Kocak & Demircan, 2016) and the effect of Thinking with Multi-Dimensional Perspective Training Program on 5-6-year-old children's social problem-solving skills is examined. The aim of this study is to investigate the impact of the TMPT Program on 5-6-year-old pre-school children's social problem-solving skills.

Method

Research Design

This research took place in a pre-test, final test, and a control group research fashion. In this fashions, experimental and control groups were found. These groups were chosen randomly. The experiment and control groups were subjected to tests before and after the experiment. Experimental design provides opportunities to make comparisons like this (Buyukozturk, 2016; Buyukozturk, 2012; Karasar, 1999). The dependent variable for this research is the children's social problem-solving skills. The independent variable is the TMPT Program, which was applied to the experimental group.

Research Sample

The sample for this research was preschoolers in the Yenimahalle district of Ankara. In the experiment group, there were 6 teachers and 45 children (these children were educated in these 6 teacher's' classes). The experiment group took "TMPT Program Training''- the teachers took courses to learn the program and then applied it to their classes). The experiment group was from the Etimesgut Spring Flowers Pre-school Education Institution. The control group consisted of 45 children from the Sincan Spring Flowers Pre-school Education Institution.

At the beginning there were 90 children. However, this number decreased to 70 at the end of the research because of the absence of some children on pretest or final test applications and some children had 15 points right from pre-tests (the highest score to get from the test), so these children were removed. As a result, the research was carried out with the data collected from these 70 children. The distribution of the experiment and control groups according to age and gender is presented in Table 1 and Table 2.

Table 1

Gender Distribution of Experimental and Control Groups

	Experiment		Control		Total	
	n	%	n	%	n	%
Girl	16	50	16	42	32	46
Boy	16	50	22	58	38	54
Total	32	46	38	54	70	100

As seen in Table 1, there were 16 girls and 16 boys, totaling 32 children in the experiment group; and 16 girls and 22 boys, totaling 38 boys in the control group.

Table 2

Age Distribution of Experimental and Control Groups

	Experiment		Control		Total	
	n	%	n	%	n	%
Age 5	13	41	17	36	30	43
Age 6	19	59	21	64	40	57
Total	32	46	38	54	70	100

As shown in Table 2, there were 30 children who were 5-years-old and 40 children who were 6-years-old.

Research Instruments and Procedures

The Wally Social Problem-solving Test was used as a pretest and posttest for the experiment and the control groups in this study. Beside this, the Personal Information Form was used.

Wally Social Problem-solving Test: The Wally Social Problem-solving Test used to evaluate social problem-solving skills of children in the present study was reproduced from the combination of two tests: Spivack and Shure's (1985) Preschool Problem-solving Test and Rubin and Rose-Krasnor's (1988) Children Social Problem-solving Test (Rubin & Rose-Krasnor, 1992).The test was carried out by Carolyn Webster-Stratton within the project of "Incredible Years" (Webster-Stratton, 1990; Webster-Stratton, Reid, & Beauchaine, 2013). In the test, the responses of children in conflict situations occurring from interpersonal relationships are assessed and their social problem-solving skills are evaluated. The test consists of 15 images. These images are prepared for boys and girls separately, and show conflicts or issues in interpersonal relations. These images are presented to the child one by one. After each image, the child is asked how he would solve the problem or what he says if he faced this problem. The Wally Social Problem-solving Test has 11 themes. These themes are problems like rejection, making a mistake, unfair treatment, victimization, prohibition, loneliness, cheating, disappointment, having a dilemma, disapproval from adults, and attacks (Dereli, 2008; Yilmaz, 2012; Giren, 2013). Each answer given by children is scored as positive (P), negative (N), and no score (empty). The lowest score is zero (0), and the highest score is fifteen (15).

Kayili and Ari (2015) carried out the Turkish adaptation study of the Wally Social Problem-solving Test on pre-school children via 699 data. In the content validity of the study, eight field specialists reported that the test is appropriate for pre-school children for evaluating their social problem-solving skills. The KMO coefficient calculated for the construct validity was found to be .814. The Bartlett Sphericity Test was found to be significant ($x2 = 1164,354$; $p < .01$). The item factor loads ranged from .34 to .67. Fifteen questions were grouped under a single factor (Yilmaz, 2012; Dereli-Iman,2013; Giren, 2013; Yilmaz & Tepeli, 2013). Yılmaz and Tepeli's (2013) research also stated that the test is composed of 15 items in the original form and grouped under a single factor. Kayili and Ari (2015) calculated the reliability coefficient of the test for five-year-old children as .81. The high K-20 reliability coefficient values shows that the test is reliable (Buyukozturk, 2012). Yilmaz studied (2012) five-year-old children and found the two halves test reliability coefficient to be .77 for the Wally Social Problem-solving Test (n = 504). Test retest results were as follows; the lowest was .66 and the highest .93. The consistency ratio average of the participants was .77. The data obtained revealed that the test-retest reliability of the Wally Social Problem-solving Test was adequate. In her study with y-year-old children, Dereli-Iman (2013) retrieved similar results. According to all these results, the Wally Social Problem-solving Test is found and accepted as a valid and reliable instrument for assessment of five and six-year-old Turkish children's social problem-solving skills and considered appropriate to use in the study. The reliability coefficient of the test for this was calculated to be .71 and the reliability re-test result was found to be .73.

Personal Information Form: Developed by the researchers to gather information regarding participant's age, gender, and school.

Thinking from Multidimensional Perspectives Training Program: The TMPT Program was developed by researchers in order to enhance five- and a six-year-old children's multi-dimensional thinking. Based on Thinking Training, the main objective is to assist children explore by means of stimuli that are interesting to them (for example stories, poems, and arts), and to obtain the thinking skills about the topics that are directly related to their past, present, and future (Gur, 2010; Gur, 2011a;Gur, 2011b; Gur, Kocak &Demircan, 2016; Stanley & Bowkett, 2004). On developing the program, Socrates', Rumi's, Piaget's, Vygotsky's, Bruner's, and Lipman's views on education were all accepted as a base. Through the TMPT Program, five dimensions are examined.

First Dimension (Self-Recognition or Me Step): This dimension is relevant to a child's self-recognition. It contains the influence of incidents and conditions on children and evaluation of happening from the"I" point of view. As an activity for the class, after listening to the story of "The Little Red Hen", children answer the question "If I were the hero of the story, what would I do?" This activity can be used as a first-dimension activity for children.

Second Dimension (You step;recognizing the other, evaluating the incident from his point of view; empathic perspective): The aim of this dimension is children's awareness of other people or awareness of personal characteristics. This dimension centers upon the similarities and differences by making comparisons. As an activity for the class, after watching short films on horses and zebras and examining photos of these two animals, children can discuss the similarities and differences between them. "If we draw lines (like zebra's lines) on a white horse, does it become a zebra? Why?" This question is asked by the teacher and the children discuss the answer. This activity can be used as a 2nd dimension activity.

Third Dimension (Raising awareness of a third person/object or an incident rather than himself): The aim of this dimension is children's evaluation of a condition or incidents by joining the point of view of a third person. When the child thinks about a happening (living with their father) and the effect of this incident (how their mum felt), this can be seen as 3rd dimension thinking. As an activity for the class, after examining a painting by Vincent van Gogh (First Steps), the children think about the heroes of the painting, who they are, what they are doing, and what do they think about? Then they discuss the questions. This activity can be used as a 3rd dimension activity for children.

Fourth Dimension (Pluralist perspective (they)): Together with I and you and third dimension perspectives, the fourth perspective involves evaluations of groups, incidents, and conditions considering more than three dimensions. As an activity for the class, the pollution of the sea can be discussed. At first children watch a short documentary (film) on the sea pollution and examine sea pollution photos. How the sea becomes dirty can be discussed. (Why does it become dirty? How are the animals

living in the sea affected? How might they feel? These are questions that can be discussed concerning the topic.

Fifth Dimension (The evaluations of the condition from five or more perspectives or thinking from universal perspectives): The aim of this step is to establish the foundation of a universal perspective. As an activity for the class, "If you could make a device for a better world, what would this device look like?" This topic can be discussed and then each child can design his/her own device.

In the program, each month one dimension is discussed in the classroom and each dimension consists of 20 activities. In other words, the program consists of 100 activities in total. These are science, math, music, and story time activities. Each activity takes an average of thirty minutes. The activities carried out before the discussions are seen as an instrument for Thinking Training. Having unique or extraordinary tasks are not seen as an important factor; in fact, tasks that are easy to apply are preferred. For the TMPT Program application, the most important thing is the discussion process as it aims to enhance thinking skills. The adult should not judge the child's ideas. If necessary, s/he may try to clarify the topic by asking the children open-ended questions. The aim of the thinking activities is experiencing the thinking process, not to think as an adult. The most important thing here for the children is that: to learn how to think, not what to think (Gur 2016; Gur, Kocak & Demircan, 2016).

Research Process

The necessary information in relation to the content of the research was sent to preschools. Then permission was obtained from the schools. The pre-schools that volunteered to participate in the study were taken as the study groups. In one school the TMPT Program was applied and the other school was the control group. The six teachers in the experimental group were trained once a month about how to use the TMPT Program and then applied this content in their own classes. Educational content and special materials needed for training the children were given on a monthly basis to the teachers in the experimental group. Each month one dimension was discussed. Randomly selected children from the three different classes who had the Thinking from Multidimensional Perspectives Training Program formed the experimental group. Randomly selected children from the three different classes who did not have the Thinking from Multidimensional Perspectives Training, were volunteered to participate and had similar features with the pilot group formed the control group. Before and after the applications of the TMPT Program the researchers applied pre-tests and final tests to the experiment and control groups. Data was collected by the researchers. All pre-tests were applied to both the experimental and control groups in October. All post-tests were applied by the researchers in April. All pre-tests and post-tests were applied in the kindergartens where the children were educated. At the end of the program an evaluation meeting was organized. The teachers who participated in the study attended that meeting and all reported positive opinions about the activities of the program in terms of the children's age, participation, and the application process.

Ethics

This study was ethically approved by the researchers' universities. Teachers who participated in the study were volunteers. Children whose participation documents were signed and approved by their parents participated in the study. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Data Analysis

The data gathered and encoded within the case of the running problem and the sub-problems of the research was tested using the SPSS 21 package program. The independent t-test was used in determining if there is a difference between the scores of the groups (pre-test and final test). In contrast, a dependent t-test (pre-test/final test) was used to determine the enhancement of the experiment and control groups within themselves and to test the differences (the significance level was taken as .05).

Results

The aim of this study is to investigate the impact of the TMPT Program on 5-6-year-old pre-school children's social problem-solving skills. In this part, the findings are given and explained in Tables 3-6.

Table 3

The Dependent T-test Results Regarding the Comparison of the Wally Social Problem-solving Pre-test Results of Children in the Experiment and Control Groups

	Groups	n	M	ss	M_1-M_2	sd	t	P
Pre-test	*Experiment*	32	10.47	2.918	0.81	68	-1.19	.237
	Control	38	9.66	2.763				

p> .05

As seen in Table 3, there is no significant difference in 5 and 6-year-old children's pre-test scores in the experimental and control groups (t = -, 1.19, p> .05). It can be said that statistically significant difference between the two groups cannot be found and the similarity of their features makes them appropriate for the study.

Table 4.

The Independent T-test Results Regarding the Comparison of the Wally Social Problem-solving Post-test Results of Children in the Experiment and Control Groups

	Groups	n	M	ss	M_1-M_2	sd	t	p
Post-test	*Experiment*	32	13.53	2.000	1.37	68	2.79	.007*
	Control	38	12.16	2.099				

p< .05

As seen in Table 4, there is a significant difference in terms of 5-6-year-old children's final test scores in the experimental and control groups (t = 2.79, p<0.05). While the arithmetic mean difference of the Wally Social Problem-solving test was 0.81 in pre-tests, the same difference increased to 1.37 arithmetic mean in post-tests.

Table 5

The Dependent T-test Results Regarding the Comparison of the Wally Social Problem-solving Pre-test and Post-test Scores of Children in the Experimental Group

Groups	n	M	Ss	M_1-M_2	sd	t	p
Pre-test	32	10.47	2.92	3.06	31	-6.13	.001*
Post-test	32	13.53	2.00				

P < .01

As seen in Table 5, there is a significant difference between 5-6-year-old children's pre-test and post-test scores in the experimental group (t = -6 13 p < .01). The increase of 3.06 in the arithmetic mean was in favor of post-tests.

Table 6

The Dependent T-test Results Regarding the Comparison of the Wally Social Problem-solving Pre-test and Post-test Scores of Children in the Control Group

Groups	n	M	Ss	M_1-M_2	d	t	p
Pre-test	38	9.66	2.763	2.5	37	-5.69	.001*
Post-test	38	12.16	2.099				

p< .01

As seen in Table 6, there is a significant difference in terms of 5-6-year-old children's pre-test and post-test scores in the control group (t = -5.69 p< .01). The increase of 2.5 in the arithmetic mean was in favor of post-tests. The difference in the experimental group children's pre-test—final test arithmetic mean is 3.06, and, the difference in the control group children's pre-test – final test arithmetic mean is 2.05. The difference between these two arithmetic means is 0.56.

Discussion and Conclusion

The purpose of the study is to examine the effects of the TMPT Program on 5 and 6-year-old children's social problem-solving skills. Data for the study were gathered from 70 children. The experimental group had 32 children and the control group had 38 children. Thirty children were found in the 5-year-old group and 40 children were found in the 6-year-old group.

When pre-test and post-test scores of children in the experimental and control groups from the Wally Social Problem-solving test are compared, there are no significant differences between the experiment and control groups in terms of their pre-test scores. However, the difference is found to be statistically meaningful for the post-test scores. This shows that there was a positive increase/development in children's social problem-solving skills during the process. However, the difference between the pre-test and final test scores of the children in both groups was statistically significant.

Positive development in the control group suggests that during October through April, the preschool training process in kindergarten positively supported thechildren's social problem skills. These findings are also supported by Kok, Tugluk, and Bay (2005) and Cimen (2000). Since the process was long it is thought that preschool education also affects children's social problem-solving skills. However, the difference between the pre-test and final scores of children in the experiment and control groups was significant; the difference between both in terms of their post-tests was statistically significant. It is thought that the TMPT Program applied to the experimental group children affected them positively. In addition to this, if the discussion processes during the training program is taken into consideration, it can be said that children can make detailed interpretations on different topics.

Bal and Temel (2014) carried out research that consisted of 180 children over 4-6 years and concluded that having training in different perspective-taking skills supports interpersonal problem-solving skills. Perspective-taking makes it easy for the individual to understand and feel the thoughts of others, so it is important in terms of social interaction.

When the individual senses the thoughts of others, social interactions are more predictable and it is easy to take the next step, depending on the knowledge that people infer from each other (Dixion & Moore, 1990: 1502). Daniel, Lafortune, Pallascio, Splitter, Slade & Garza (2005) found in their study that Thinking Training

activates children's processes of metacognitive thinking, creative thinking, logical thinking, and responsibility-oriented thinking. Kefeli (2011) and Sun et al. (2017) state that the Thinking Training process contributes to children in expressing themselves and their reasoning.

Allen (2005) conducted a qualitative study that applied Thinking Training for four months and observed that after Thinking Training the children developed self-awareness, confidence, and sensitivity to others. Okur (2008) developed a program for Thinking Training and found that it positively contributes to 6-year-old children's social skills. Researches carried out on the effects of Thinking Training applications on children, shows that these applications support children in establishing cause-effect relationships and their social communication skills (Sasseville, 1994; Doron, 2016). An evaluation of these findings shows that the Thinking Training process can support children's social problem-solving skills. The results reveal that the TMPT Program has a positive effect on 5-6-year-old pre-school children's social problem-solving skills.

Depending on the findings of the study, it is thought that training programs developed to support 5-6-year-old children's social problem-solving skills should include Thinking Training activities. Social problem-solving skills are a key element the social lives of humans that cannot be ignored. Therefore, educational applications that contribute to the development of these skills are very important for children. Considering all of this, it is necessary to apply qualified practices on Thinking Training in pre-school education institutions. In this context, qualified Thinking Training-oriented education programs can be developed and a Thinking Training activity pool with various documents (booklets, web content, etc.) that are easily reached can be created for teachers. However, it should be remembered that before Thinking Training application, the teachers should receive adequate training via a scheduled training process. This will significantly affect the quality of the education given to children. Educational seminars about how to apply a TMPT program or other programs that have proven their effectiveness in Thinking Training can be organized for teachers who are working with 5-6 year-olds across the country.

References

Akca, N. ve Tasci, S. (2009). Hemsirelik egitimi ve elestirel dusunme [Nursing education and critical thinking]. *Journal of Mersin University Faculty of Education*, 5(2), 187-195. Retrieved from [http://dergipark.gov.tr/download/article-file/160769

Allen, T.L. (2005). *Exploring worldview perspectives with 8th grade students* (Unpublished Doctoral Dissertation). Montclair State University.

Bal, O. & Temel, Z. F. (2014). The study of the relationship between 4-6 year-old preschool children's interpersonal problem solving and perspective-taking

skills. *Journal of Trakya University Faculty of Education*, 4 (1), 156-169. Retrieved from http://dergipark.gov.tr/download/article-file/200335.

Bjorklund,D.F., Causey, K.B.(2017). *Children's thinking* (6th ed) United Kingdom: Sage Publication.

Buyukozturk, S. (2012). *Sosyal bilimler icin veri analizi el kitabi* [*Data analysis handbook for social sciences*]. Ankara: Pegem Academic Publishing.

Buyukozturk, S. (2016). *Deneysel Desenler* [Experimental Designs]. Ankara: Pegem Academic Publishing.

Campbell, J. (2002). *An evaluation of a pilot intervention involving teaching philosophy to upper primary school children in two primary schools, using the philosophy for children methodology* (Unpublished MSc Educational Psychology thesis).University of Dundee.

Cam, S. & Tumkaya, S. (2006). Interpersonal problem solving in College students. *Çukurova University Journal of Social Sciences Institute*, 15 (2),119-132.

Cayir, N.A. (2015). *A qualitative research on philosophy education for children* (Unpublished doctoral dissertation). Hacettepe University, Ankara,Turkey.

Cimen, S. (2000). *The study of the psycho-social development of 5-6 year old children who are attending nurseries at universities in Ankara* (Unpublished Master's Thesis). Ankara University, Institute of Science, Ankara,Turkey.

Daniel, M. F.(2000). Learning to think and to speak: An account of an experiment ınvolving children aged 3 to 5 in France and Quebec. *Thinking*,15(3),17-25.

Daniel, M.,Lafortune, L.,Pallascio, R.,Splitter, L., Slade, C., & Garza, T. (2005). Modeling the development process of dialogical critical thinking in pupils aged 10 to 12 years. *Communication Education*, 54(4), 334-354.

De Bono, E. (1972). *Children solve problems*. London: Penguin Press.

Dereli, E. (2008). *The study of the effect of social skills training program on 6 year-old children's social problem-solving skills* (Unpublished doctoral dissertation. Selçuk University, Institute of Social Sciences, Konya, Turkey.

Dereli-Iman, E. (2013). The adaptation of Social Problem Solving Scale to Turkish for 6 year-olds and the relationship between their preschool behavior problems and social problem solving skills. *Educational Sciences in Theory and Practice*, 13, 491-498. Retrieved from

http://www.kuyeb.com/pdf/en/27bfeeae6825c4bd52ff2dd51a2272df91498.pdf

Diener, M.L., Wright, C., Beverly, B. & Black, T. (2016). Socioemotional correlates of creative potential in preschool age children: thinking beyond student academic assessments. *Creativity Research Journal*, 4(28), 400-457.

Dixion, A. J. & F. Moore, C. (1990). The development of perspective taking: understanding differences in information and weighting. *Child Development*, 61, 1502- 1513

Doherr, E. (2000). *The demonstration of cognitive abilities central to cognitive behavioural therapy in young people: Examining the influence of age and teaching method on degree of ability* (Unpublished clinical psychology doctoral dissertation). University of East Anglia.

Doron, E. (2016). Short term intervention model for enhancing divergent thinking among school aged children. *Creativity Research Journal,* 3(28), 372-378.

Fields, J. (1995). Empirical data research into the claims for using philosophy techniques with young children. *Early Child Development and Care*,107, 115–128.

Fisher, R. (2013). *Teaching thinking: Philosophical enquiry in the classroom.* (Kindle Edition). USA: Bloomsbury Academic.

Giren, S. (2013). *The effects of social problem-solving education on six years of children's skills in mathematics* (Unpublished doctoral dissertation). Selcuk University, Institute of Social Sciences, Konya,Turkey.

Goffin, S. G., & Tull, C.Q. (1985). Problem solving: Encouraging active learning. *Young Children*, 40, 28-32.

Gregory, M. (2008). *Philosophy for children: Practitioner handbook*. Montclair, USA: IAPC Publication.

Gunes, F. (2012). Ogrencilerin düşünme becerilerini geliştirme[Developing students' thinking skills]. *TUBAR*(32),127-146. Retrieved from http://dergipark.ulakbim.gov.tr/tubar/article/viewFile/5000073170/50000673 93

Gur, C. (2010). Philosophy with children. *Civil Academy,* 8(2), 43-54.

Gur, C. (2011a). Philosophy in the early years. *Procedia-Social and Behavioral Sciences*, 12, 501-511. Retrieved from

https://www.sciencedirect.com/journal/procedia-social-and-behavioral-sciences/vol/12

Gur, C. (2011b). Philosophy for Children. *2nd International Conference on New Trends in Education and Their Implications*. 27-29 April 2011, Antalya, Turkey: Siyasal Bookstore (1312-1318).

Gur, C. (2016). How should the education of thinking be? Thinking with multidimensional perspectives. *British Journal of Education*, *4*(2), 61-73.

Gur, C., Kocak, N. &Demircan, A. (2016). *Okul öncesinde cok boyutlu bakis acilariyla düşünme eğitimi [Multidimensional thinking education for preschool children].* Ankara: Ani Yayincilik.

Hamre, B.K. & Pianta, R.C. (2001). Early teacher-child relationships and trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625–638.

Institute for the Advancement of Philosophy for Children (2002). *IAPC research: experimentation and qualitative information*. Available online at: www.montclair.edu/pages/iapc/experimentalinfo. html. Retrieved 11.09.2015.

Karasar, N. (1999). *Bilimsel arastirma yontemi* [*Scientific research method]*. Ankara: Nobel.

Kayili, G. & Ari, R. (2015). Wally Social Problem Solving Test: Validity and reliability study. *International Journal of Educational Sciences*, 2(3), 51-60.

Kefeli, I. (2011). Searching for a new model in teaching philosophy. O*zne*, 14, 199-210.

Kok, M., Tugluk, M.N., & Bay, E. (2005). The study of the impact of pre-school education on children's developmental characteristics. *Kazım Karabekir Faculty of Education Journal*, 11, 294-303.

Leggett, N. (2017). Early childhood creativity: challenging educators in their role to intentionally develop creative thinking in children. *Early Childhood Education Journal*, 6(45),845-853.

Lipman, M. (1988). *Philosophy goes to school*. Philadelphia: Temple University Press.

Mutlu, E. & Aktan, E. (2011). The study of the pre-school teachers' attitudes about thinking training. *Turkish Journal of Educational Sciences*, 9(4), 799-830. Retrieved from http://dergipark.gov.tr/download/article-file/256200

Oguzkan, S. & Oral, G. (1997). *Preschool education*. Istanbul: Milli Eğitim Printing House.

Okur, M. (2008). *The effect of Philosophy Education Program on 6 year-old children's social skills of assertiveness, cooperation and self-control* (Unpublished Master's Thesis) Marmara University, Istanbul.

Pascarella, E. T. (1989). The development of critical thinking: Does college make a difference? *Journal of College Student Development,* 30(1),19-26.

Pellegrini, D.S. & Urbain, E.S. (1986). An evaluation of interpersonal cognitive problem solving training with children. *Child Psychology and Psychiatry*, 26(1), 17-41.

Romano, G. (1992). Comment favoriser le développement des habiletés de pensée chez nos élèves. *Pédagogie Collégiale*, 6, 1.

Rubin, K. H., & Rose-Krasnor, L. (1992). Interpersonal problem-solving and social competence in children. In V. B. Van Hasselt & M. Hersen (Eds.), *Handbook of social development: A lifespan perspective* (pp. 2-59). New York: Plenum.

Sasseville, M. (1994). Self esteem, logical skills and philosophy for children. *Thinking*, 4(2), 30–32.

Spivack, G. & Shure, M. B. (1985). ICPS and beyond: Centripetal and centrifugal forces. *American Journal of Community Psychology*, 13, 226-243.

Stanley, S. & Bowkett, S. (2004). But why? Teacher's manual: Developing philosophical thinking in the classroom. UK: Network Educational Press.

Sun, J., Jackson, J., Burns, M., & Anderson, R. C. (2017). Children's Emergent Leadership and Relational Thinking in Collaborative Learning In Smith, B. K., Borge, M., Mercier, E., and Lim, K. Y. (Eds.). (2017). Making a Difference: Prioritizing Equity and Access in CSCL, 12th International Conference on Computer Supported Collaborative Learning (CSCL) 2017, Volume 2. Philadelphia, PA: International Society of the Learning Sciences. Retrieved from

https://repository.isls.org/bitstream/1/277/1/72.pdf

Trickey, S. & Topping, K. J. (2004). Philosophy for children: A systematic review. *Research Papers in Education*, 19(3), 365-379.

Turner, J.S. & Helms, D.B. (1991). *Lifespan development*. (4th Ed.). Mishawaka, in: Harcourt College Publishers.

Wallace, B. (2002). *Teaching thinking skills across the early years*. London: David Fulton Publishers.

Webster-Stratton, C. (1990). *Dina Dinosaur's social skills and problem-solving curriculum*. Seattle, WA: Incredible Years.

Webster-Stratton, C., Reid, M. J. & Beauchaine, T. P. (2013). One-year follow-up of combined parent and child intervention for young children with ADHD. *Journal of Clinical Child and Adolescent Psychology*, 42, 251-261.

Yaban, H. & Yukselen., A. (2007). Social Problem solving skills in a group of children in need aged seven-eleven. *Society and Social Work*, 18 (1),53-72. Retrieved from http://dergipark.gov.tr/download/article-file/153084

Yilmaz, E. (2012). *The study of the effect of 60-72 months old children's ability to understand emotions on their social problem-solving skills* (Unpublished master's thesis). Selcuk University, Institute of Social Sciences, Konya,Turkey.

Yilmaz, E. & Tepeli, K. (2013). Examination of social problem solving skills of 60-72 months old children in terms of their emotion understanding skills. *Turkiye Sosyal Arastirmalar Dergisi (Turkey Journal of Social Researches)*,172, 117-130.

Yoleri, S. (2014). Investigation of relationship between the skills to solve interpersonal problems and concept development of preschool children. *Education and Science*, 39 (173),1-9. Retrieved 29.07.2017 from

egitimvebilim.ted.org.tr/index.php/EB/article/.../1389/740.

Yuksel, C. (2008). Universite oğrencilerinin kisilerarası iliskilerinde yasadiklari problemleri cozme becerilerinin belirlenmesi. [Determination of university

students' ınterpersonal problem solving skills]. (Unpublished master's thesis). Selçuk University, Institute of Social Sciences, Konya, Turkey.

ÇBDE Programının Okul Öncesi Çocukların Sosyal Problem Çözme Becerileri Üzerindeki Etkisinin İncelenmesi

Özet

Problem Durumu: Okulöncesi dönem, çocukların çevrelerini tanımaya başladığı, çevreleriyle iletişim kurmaya istekli olduğu, topluma uygun alışkanlıkları kazanmaya başladıkları bir dönemdir. Bu dönemde çocuklar, karşılaştıkları çeşitli problem çözmeye yönelik durumlar karşısında düşünme süreci içerisine girmektedirler. Düşünme, bilgi edinme, anlama ve öğrenme sürecinin en önemli bileşenidir ve bilgileri sorgulama, değerlendirme ve yeni bilgiler üretme çalışmalarının temelini oluşturmaktadır. Kişinin yaşam kalitesi ve öğrenmesi düşünme kalitesiyle birebir ilişkilidir.

Öğrenmenin düşünme kalitesi ile bire bir ilişki içerisinde olduğu gibi, problem çözme de öğrenme için vaz geçilmezdir. Sağlıklı iletişim ve etkileşimin varlığı, etkin ve uyumlu yaşam süreci ve iyi düzeyde toplumsal ilişkiler için etkin problem çözme becerileri gereklidir. Sosyal gelişimin bir parçası olan sosyal problem çözme becerileri de çocuğun toplumsallaşmasında önemli bir rol oynar. Çocukların sosyal problemler karşısında çözüm yolları üretebilmek için düşünmeye yönelik becerilerin desteklenmesi önemlidir. Çocukların düşünme etkinlikleri yoluyla erken yaşlarda sosyal problem çözmeye yönelik değerler kazanmaları, neden böyle düşündüklerinin ve nasıl düşündüklerinin açıklamalarını yapabilmeleri ve düşünmenin her alanla ilişkilendirilebilmesi çok önemli bir hedeftir. Bu hedef ise ancak düşünme deneyimleriyle gerçekleştirilebilecektir.

Dünyada ve ülkemizde Düşünme Eğitimi konusunda gerçekleştirilen çalışmalar değerlendirildiğinde, Düşünme Eğitimi çalışmalarının, çocukların gelişimlerine olumlu katkılar sağladığı görülmektedir (Fields,1995; Imbrusciano, 1997; Campbell, 2002; Daniel, 2000; Doherr, 2000; IAPC, 2002; Çayır, 2015; Doron, 2016; Gur, Kocak ve Demircan, 2016; Sun et al., 2017). Bunların yanı sıra, Trickey ve Topping (2004)'in yapmış olduğu çalışmanın sonucunda, Düşünme Eğitimi'nin dinlemeye ve grup tartışmalarına katılımı (atılganlık) arttırdığı sonucuna varılmıştır. Okur (2008) ise, altı yaş grubu çocuklarla yürütmüş olduğu çalışmasında, çocukların Düşünme Eğitimi ile bireysel hareket etme ve özgün cümleler kurabilme yeteneklerinde farklılaşma olduğunu gözlemlemiştir.

Çocuklara düşünmeyi öğretmek hem rasyonel, hem de ahlaki bir girişimdir. Düşünme hem bireyin kendisi, hem de kendisi dışında kalan diğer bireyler üzerine olabilmektedir. Eğitim sisteminde düşünme yeteneğinin geliştirilmesi için, bilinçli olarak zaman ayrılması gerekmektedir. Çünkü düşünmenin gerekliliği ve öğrenilebilir bir beceri olduğu fikri kabul edilmiştir (De Bono, 1972: 10). Konuyla ilgili araştırmalar, programlı bir eğitim süreci olmaksızın öğrencilerin düşünme becerilerini yeterince geliştiremediklerine, bu sebeple birçok sıkıntı yaşayabildiklerine işaret etmektedir (Pascarella, 1989; Romano, 1992; Güneş,2012). Düşünme eğitimine yönelik programlı bir eğitim süreci düşünme yeteneğinin gelişimi açısından önem teşkil etmektedir (Romano, 1992).

Wallace (2002) ve Legett (2017) düşünme eğitimine erken yaşlarda başlamanın önemine işaret etmektedir. Okul öncesi dönem bir çok kazanımın temelinin atıldığı bir dönemdir. Bu gerçekten hareketle düşünme eğitiminin okul öncesi dönemden başlayarak eğitim sürecine dâhil edilmesinin önemli olduğu ifade edilebilir. Düşünme Eğitimi konusunda gerçekleştirilen çalışmalara ilişkin yapılan literatür taraması sonucunda okul öncesi dönem çocukları için geliştirilmiş düşünme eğitimi programlarına yönelik olan ve bu programların sosyal problem çözmeye katkılarını değerlendirmek amacıyla yapılan çalışmaların yok denecek kadar az sayıda olduğu görülmüştür. Bu bağlamda, okul öncesinde düşünme eğitimine yönelik geliştirilmiş bir programın okul öncesi çocukların sosyal problem çözme becerileri üzerindeki etkisinin incelenmesinin çocuklarda düşünme eğitimi literatürüne katkı sağlayacağı düşünülmüştür.

Araştırmanın Amacı: Yukarıda ifade edilenlerden yola çıkılarak okul öncesi dönem çocuklarına yönelik olarak Çok Boyutlu Bakış Açılarıyla Düşünme Eğitimi Programı Gür, Koçak ve Demircan (2016) tarafından geliştirilmiş ve bu programın 5-6 yaş çocuklarının sosyal problem çözme becerileri üzerindeki etkisinin incelenmesi amacıyla bu çalışma gerçekleştirilmiştir.

Araştırmanın Yöntemi: Bu çalışmada veriler 32 deney 38 kontrol grubu olmak üzere toplam 70 çocuktan elde edilmiştir. 5 yaş grubunda toplam olarak 30, 6 yaş grubunda ise toplam 40 çocuk bulunmaktadır. Bu çocukların 32'i kız, 38'i ise erkektir. Çalışmada ön test- son test kontrol gruplu deneysel desen kullanılmıştır. Araştırma kapsamında deneme grubuna ÇBDE Programı uygulanmıştır. Ön test ve son test olarak Wally Sosyal Problem Çözme Testi (Wally Social Problem Solving Test) kullanılmıştır. Deneme ve kontrol gruplarının (öntest- sontest) puanları arasında anlamlı bir fark olup olmadığının test edilmesi için bağımsız t testi uygulanmıştır.. Bu grupların kendi içerisindeki ilerlemelerin belirlenmesi ve öntest-sontest arasındaki farklılıkları test etmek için ise bağımlı t-testi kullanılmıştır. Farklılıkların test edilmesinde 0.05 anlamlılık düzeyi baz alınmıştır.

Araştırmanın Bulguları: Deneme ve kontrol gruplarında yer alan çocukların Wally Sosyal Problem Çözme Ölçeği ön test ve son test puanlarının karşılaştırıldığında, ön test puanları açısından istatistiksel olarak iki grup açısından anlamlı bir farklılık bulunmazken, son testler arasındaki farkın anlamlı olduğu sonucuna varılmıştır. Bu durum süreç içerisinde çocukların sosyal problem çözme becerilerinde olumlu artışın

gerçekleştiğini düşündürmektedir. Bununla birlikte hem kontrol hem de deney gruplarında çocukların ön test ve son test puanları arasındaki fark istatistiksel olarak anlamlı bulunmuştur. Bu durum programın uygulandığı 5 aylık eğitim süreci içerisinde alınan okul öncesi eğitiminin çocukların sosyal problem becerilerini olumlu yönde desteklediğine işaret etmektedir. Sürecin uzun olması okul öncesi eğitimin etkilerinin de görülmesine neden olduğunu düşündürmektedir. Ancak hem deneme ve kontrol grubunda bulunan çocukların ön test ve son testleri arasındaki fark anlamlı olmakla birlikte, deneme ve kontrol gruplarının son test puanları arasındaki fark istatistiksel açıdan anlamlı bulunmuştur. Bu farklılığın deneme grubuna uygulanan ÇBDE Programı ile ilişkili olabileceği düşünülmektedir.

Araştırmanın Sonuçları ve Öneriler: ÇBDE Programının okul öncesi eğitim kurumuna devam eden 5-6 yaş grubu çocukların sosyal problem çözme becerileri üzerindeki etkisinin incelenmesi amacıyla gerçekleştirilen bu çalışmanın sonucunda, bu 5-6 yaş grubu çocukların sosyal problem çözme becerileri üzerindeki etkisinin olumlu olduğu bulunmuştur.

Elde edilen araştırma bulguları doğrultusunda 5-6 yaş grubu çocuklar için hazırlanan sosyal problem çözme becerisinin geliştirilmesine yönelik eğitim programlarının içeriklerinde düşünme eğitimi etkinliklerine yer verilmesinin etkin bir öğrenme bağlamında ciddi katkılar sunacağı düşünülmektedir. Sosyal problem çözme becerisi insanın toplumsal hayatı için göz ardı edilemez bir unsurdur. Bu nedenle çocuklar için bu becerinin gelişimine katkı sunacak eğitimsel uygulamalar oldukça önemlidir.

Anahtar Kelimeler: Düşünme uygulamaları, küçük çocuklar Çok Boyutlu Bakış Açılarıyla Düşünme, düşünme becerileri.