

Investigation of Relationship between the Skills to Solve Interpersonal Problems and Concept Development of Preschool Children

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Abstract

This study aims to examine the relation between the concept development and the solutions of interpersonal problems of 4-6 year old children. The study is in a relational survey method. The sample of the study consisted of 757 preschool children of between the ages of 4 and 6, who were attending preschool and living in İzmir. The children's concept development was determined by the Bracken Basic Concept Scale-Expressive Form (BBCS-E), which was designed by Bracken (1984) and adapted to three and six-year-old Turkish children by Yoleri (2010). For abilities in solving interpersonal problems, Interpersonal Problem Solving Test (PIPS), which was developed by Spivack ve Shure (1974) and adapted by Dinçer (1995) to Turkish children, were used. The statistical examinations of the concept development and solutions brought to interpersonal problems have been assessed with Pearson Correlation Analysis. Results of this study shows that there was a statistically significant positive relationship between the total points of solutions brought by the children to interpersonal problems and the SRC, Direction/Position, and Time/Sequence concepts. However, it was found out that there is no statistically significant relation from self/social awareness, texture/material and quantity.

Key words: Preschool education, development, interpersonal problem solving, concept development.

Introduction

The requirement of maintaining and developing culture, which are the most important purpose of communities, is possible with education of the oncoming generation in the best way. Education begins in the family when a child is born, and lasts for life with education and teaching activities conducted in and out of the school. Emerging technologies, innovations and fast flow in science, art, culture and technology worldwide necessitate support of education by an organized institution in addition to the family. This gave rise to the concepts of "Preschool Education" or "Early Childhood Education" (Baykan & Turla, 1995).

Preschool period is the foundation of human life (Hamre & Pianta, 2001). Preschool children learn life through activities and develop their skills in this way. Children who have received preschool education were found to have higher creative thinking (Can Yaşar & Aral, 2010), school readiness scores (Yazıcı, 2002), and lower problem behaviors (Özbey & Alisinanoğlu, 2009) than children who haven't received preschool education. In addition, pre-school education helps in learning the causes of problems seen in a child's learning ability, and in correcting, thus resolving them before starting primary school (Wechselberg & Puyn, 1993).

Development takes place in three areas in general: physical, cognitive, and psychosocial. Physical area is related to sensory capacities, motor skills, and physical properties. Cognitive area covers all mental capabilities and activities, even organization of thought. It involves activities such as perception, reasoning, memory, problem solving and language. Psychosocial area addresses personal

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qualities and social skills. It involves peculiar behavior, feelings and reactions of children against social conditions (Bayhan & Artan, 2004). Development of cognitive skills depends on understanding and using concepts. According to Piaget's theory of cognitive development, children require three basic kinds of information for learning to happen: physical, logical-mathematical, and social information. Physical information is the knowledge of physical properties of any object. Size, shape, texture and weight are among these. When children discover relationships between objects, situations, and people, logical - mathematical knowledge develops. Quantitative concepts are examples of logical - mathematical knowledge. Lastly, children acquire social knowledge by social interaction with others (peers and adults) (Lutz & Huitt, 2004; Gestwicki, 2010). Children encounter with various opportunities for the formation of social knowledge when they are together with their peers and adults. Preschool education enables children to interact and communicate with their peers as well as creates a natural environment for emergence of interpersonal problems (Hay, Payne & Chadwick, 2004; Ladd, 2006).

Problem solving is the foundation of learning (Goffin & Tull, 1985). All problems encountered require the use of problem solving skills for people to establish healthy interpersonal relationships and sustain their lives an effective and harmonious way (Yüksel, 2008). Interpersonal problem-solving skill can be represented as that people ensure social and emotional adaptation by solving their problems arising from differences between their thoughts, beliefs, values or requirements (Pellegrini & Urbain, 1986). It is important for children to learn the skills of thinking so that they prevent interpersonal problems and can use such skills to solve such problems. Thinking skills that are necessary to solve interpersonal problems include:

- A. Alternative thinking: The ability to produce multiple alternative solutions to a case of interpersonal problems,
- B. Consequential thinking: the ability to foresee near and long-term results of a specific solution and use this information in the decision making process,
- C. Means-end thinking: the ability to carefully prepare or plan a series of specific actions to achieve a specific purpose and create a tool to achieve the purpose (Shure & Spivack, 1982).

The foundations of interpersonal problem-solving skills are established in preschool institutions. Pre-school educational institutions create a social environment by bringing children together with their peers and enabling them to interact and communicate with their friends. Thus, they also offer various opportunities for children to develop their social skills necessary to solve interpersonal problems, which is a natural part of life. Research has shown that children can acquire problem solver way of thinking with an appropriate education at a period as early as 4 years of age (Anlıak & Dinçer, 2005).

When pre-school children try to solve some situations or problems they encounter and start to reason to solve them, they usually enter into the thinking process by using their existing conceptual potentials (Turner & Helms, 1991). Conceptual development is a development process which begins with the development of thought when a child is born, and covers experiences which help the child fulfill a set of skills. Many concepts a child has gained in his early childhood help him gain problem solving skills, use creativity, and establish cause-effect relationship (Şahin & Karaaslan, 2006). Concepts are the names of the categories used to classify similar objects, people, events, ideas and processes (Ülgen, 2004). Concepts allow making a distinction between these groups as well as reveal inter-group relations. They are mental tools that enable individuals to think, understand physical and social world and make sensible communication (Senemoğlu, 2010). According to Lind (1996), concepts are acquired by engagement of children with the environment in an active way. They form their own information as they look around. As they learn to classify something by its categories, they compare them with each other, and count them; children develop basic cognitive information that makes sense of the world around them (cited by Beaty, 2000). In preschool age, children learn the basic concepts and begin to use them (Bracken & Shaughnessy, 2003).

Concept facilitates communication between people. We can tell our requests and messages in a more understandable manner using concepts. Concepts allow information to be classified and organized systematically. Relationships between concepts comprise principles. Understanding the principles helps problem solving. Concepts provide a relatively permanent information system. When an individual learns a concept, she/he can recognize instances of that concept and expand the knowledge system she/he has (Erden & Akman, 2003). Concepts are required to improve learning skills, solve problems, and provide thinking. If problems are not felt, the need to solve a problem is not felt (Güven & Aydın, 2004).

Concepts closely related to mental development and language development or skills related to learning concepts are very important for pre-school children. Children's failure to acquire concepts in a timely manner could adversely affect their educational experiences (Wilson, 2004). Another important point is that whether a child's vocabulary includes words children use to express themselves or concepts that are required to solve problems or not. During the literature search, it was found that there were studies in which the link between conceptual development and demographical variables such as age (Ari et al., 2000), gender (Balat Uyanık, 2009) by methods and techniques such as drama (Yalım, 2009), computer-assisted education (Bütün Ayhan & Aral, 2005) was investigated in preschool children. However, there was no study that addresses conceptual development in combination with interpersonal problem-solving skills. However, it was suggested that children who have learned to use concepts related to interpersonal problem solving can use these concepts in mathematics, adaptation to school, science, social relationships as well as other areas (Shure, 2001; Spence, 2003). Based on this, the main purpose of this research was to investigate the relationship between interpersonal problem-solving skills and conceptual development in preschool children.

Method

Model

The study is in a relational survey method. The relational survey method is a research model as another type of survey models, which aim to determine the presence and the level of change variance between two or more variables (Karasar, 2007).

Participants

The population of the study consisted of children aged 4 to 6 years from kindergartens of Ministry of National Education and kindergartens of primary schools in the province of İzmir. The sample group of the study consisted of 757 children aged 4 to 6 years from kindergartens of Ministry of National Education and kindergartens of primary schools in the central districts of the province of İzmir. The sample group was selected by simple random sampling method. In simple random sampling method, a list of kindergartens of Ministry of National Education and kindergartens of primary schools in the centre of the province of Izmir was made and a draw was made. In the draw, 13 schools were selected. The study was conducted with a total of 757 children from thirteen schools. 389 of the children were girls (51.4%) and 368 (48.6%) were boys. The average age of children was 5 years, 5 months. The number of children attending kindergartens was identified according to Ministry of National Education, İzmir Provincial Directorate of National Education, Department of Statistics pre-school education data.

Instruments

Data collected through the following instruments were analyzed in this study:

The children's concept development was determined by the Bracken Basic Concept Scale-Expressive Form (BBCS-E), which was designed by Bracken (1984) and adapted to three and six-year-old Turkish children by Yoleri (2010). The BBCS-E consists of 10 sub-tests used for children aged 3.0 to 6.11. These sub-tests: colors, letters, numbers/counting, size/comparisons, shapes, direction/position, self-social awareness, texture/material, quantity, time/sequence. The scores are calculated by counting the correct answers given to the items in each sub-test. Each correct answer given by the child is scored as 1, and each incorrect answer as 0. If only the "School Readiness

Composite (SRC)" measure is used (the first 5 concept subscales), administration takes approximately 5-10 minutes. Bracken Basic Concept Scale-Expressive Form, in reliability study, the correlation of test-retest is $r = .99$ ($p < .001$). Bracken Basic Concept Scale- Expressive Form, Spearman Brown two-half test correlation is .86 and KR-20 reliability has been calculated as .89.

For abilities in solving interpersonal problems, Interpersonal Problem Solving Test (PIPS) were used. Preschool Interpersonal Problem Solving Test (PIPS) was developed by Shure and Spivack (1974). PIPS was developed to evaluate preschool children's cognitive skills that they use in interpersonal problem solving and to get them to think about alternative solutions to the problem. The test was adapted to Turkish by Dinçer (1995). Preschool Interpersonal Problem Solving Test (PIPS) was applied to the children individually and lasted approximately 20-30 minutes. The test consisted of two sections with short stories. It includes short stories related to various problem situations about peers and mothers. The child is asked to find ways of solutions related to short stories that were presented to him/her during implementation (Anlıak & Dinçer, 2005). This measure tests children's ability to conceptualize distinct and relevant solutions to two prototypical problem situations: (a) one child wanting a toy that another child currently has (peer problem) and (b) a child wanting to avert a parent's anger after breaking something valuable (mother problem). A minimum of three stories was presented, even if the child provided no scorable responses. In this research, Preschool Interpersonal Problem Solving Test-peer problem category was used.

Procedure

Before the start of practice, necessary permits were obtained from Provincial Directorate of National Education in İzmir and the schools were visited with these permits. During data collection process of the study, first of all, a meeting was held with preschool teachers from the schools which agreed to participate in the study. The teachers were given information about the research and scales. In addition to this, appropriate rooms where the practice can be conducted in the schools were identified. Then, introduction events were organized with children for a week, followed by practices. The Bracken Concept Development Scale-Expressive Form and Preschool Interpersonal Problem Solving Test were individually applied to children by the researcher. During the practice, the children were individually taken to appropriate rooms specified inside the school, which are not far from their own classes. It took about 30 minutes to conduct the practice for each child.

Data Analyses

Data were analyzed using SPSS version 15.0. Relation between interpersonal problem solving skills and concept development were analyzed by Pearson Product-Moment Correlation Coefficient Technique.

Results

Table 1.

Descriptive statistics, means, standard deviations and Pearson correlations matrix for study variables

	$\chi \pm SS$	1	2	3	4	5	6	7
1. PIPS	3.27±1.58	--	.32**	.22**	.18	.06	.07	.49**
2. SRC	32.02±9.18		--	.42**	.28**	.30**	.24**	.30**
3. Direction/position	27.57±1.89			--	.37**	.19**	.17**	.36**
4. Self-social awareness	16.50±.81				--	.09**	.02**	.23**
5. Texture/material	11.95±1.87					--	.48**	.19**
6. Quantity	9.59±1.31						--	.10**
7. Time/sequence	11.92±1.35							--

As seen in Table 1, there was a significant positive relationship between total score of the Interpersonal Problem Solving Test (PIPS) and School Readiness of children aged between 4 and 6 ($r = .32$; $p < .01$). In the same way, a significant positive relationship was determined between total score of the Interpersonal Problem Solving Test (PIPS) and the direction/position sub-test of Bracken Basic Concept Scale-Expressive Form of children ($r = .22$, $p < .01$). Another result indicated that there was a

significant positive relationship between total score of the Interpersonal Problem Solving Test (PIPS) and the time/sequence sub-test of Bracken Basic Concept Scale-Expressive Form of children ($r = .49, p < .01$). The level of school readiness, direction/position and time/sequence increases together with the increase in the level of Interpersonal Problem Solving score in children. The level of school readiness, direction/position and time/sequence decreases together with the decrease in the level of Interpersonal Problem Solving score in children. However, it was found out that there is no significant relation from self/social awareness, texture/material and quantity.

Discussion

The results of the study revealed that there is a significant relationship between total score of solutions produced by children to interpersonal problems and School Readiness (color, letter/sound, number/counting, size/comparison, shapes) comprised by the first five sub-tests of Bracken Basic Concept Scale-Expressive Form. In addition to this, a significant correlation was found between interpersonal problem solving skill and direction/position and time/sequence, which are the sub-tests of Bracken Basic Concept Scale-Expressive Form. On the contrary, no significant correlation was found in terms of self/social awareness, texture/material and quantity sub-tests.

In the study, a significant correlation was identified between Interpersonal Problem Solving scores and School Readiness, one of the sub-tests of Bracken Basic Concept Scale-Expressive Form. In a study in which basic conceptual knowledge of kindergarten students was investigated, a significant correlation was discovered between the students' conceptual knowledge and academic performance and in-class learning behaviors. According to the results of the study, lack of concepts as well as poor learning behaviors and problem solving skills can be observed in children who do not have enough knowledge about basic concepts when they start school (Glutting, Kelly, Boehm & Burnett, 1989). Shure, Spivack and Jaeger (1971) conducted a study to investigate the correlation between 4-year-old-children's adaptation to school and their problem solving thoughts in real life. At the end of the study conducted using interpersonal problem solving scale, it was seen that all children used the word "Please" in the case of the problem related to peers or replied in "Want" category. The children who solve problems by a high rate and have consistent social behaviors were found to conceptualize a wide range of solutions in the case of interpersonal problems.

Another finding of the study was the presence of a significant correlation between interpersonal problem solving scores and Direction/position and Time/sequence, which are the sub-tests of Bracken Basic Concept Scale-Expressive Form. Direction/position sub-test evaluates position (behind, over, under) of an object relative to an object or more objects, position (open, closed and down) or settlement direction (right, left, corner, middle) of an object relative to itself or another object which hasn't been mentioned. Concepts such as location, time, amount and classification form the basis for a child's thinking skills. Children can understand the relationship between objects (the cat is between the boxes), location (Zeynep is on the chair) and characteristics (Ali is a short boy) of people, and the sequence of events (I first went to the garden, then I rode on a swing) through concepts. They can follow teachers' instructions (first paint squares, then triangles) and thus, can fulfill the requirements of various activities. Lastly, they can participate in problem solving activities requiring skills such as classification, sorting, comparison and identifying several properties (Boehm, 2000). Time/sequence sub-test was developed to measure children's skills to comprehend events taking place at a time or in sequence, and rate of occurrence or sequence of these events. Time awareness skill covers the skill to recall the sequence of events occurring at a time, put events in the proper sequence. In children, the development of time perception can be more successful in solving problems experienced. Research demonstrated that 4-year-olds fail to distinguish future events, whereas 5-year-olds are more successful in distinguishing events occurring in the next week and following months (Friedman, 2000). Friedman (1991) examined the development of time memory in 40 children aged 4-6-8 years going to kindergarten, first grade and third grade. The children were shown pictures of two events they experienced seven weeks and a week before the test, respectively, and were asked questions about which one took place first and which one took place after, and in which season,

month, week, day and time of the day the respective event took place. It was seen that first and third graders answered the questions correctly, whereas about half of the kindergarten students answered incorrectly.

At the end of the study, no significant correlation was found between interpersonal problem solving skill and self/social awareness sub-tests of Bracken Basic Concept Scale-Expressive Form. This finding contrasts with the results of other research. Self is a system of personal feelings; values and concepts gained by an individual as a result of his/her interactions with physical and social environment (Yavuzer, 2002). Self/social awareness subtest includes items for understanding the feelings of the other individual (happy, sad, angry, etc.) and for social awareness (gender, age), which are important in the case of interpersonal problem solving skills. Richardson and Lee (2010) demonstrated that interpersonal problem solving program (I Can Problem Solve) supports self-concept in children, at the end of their investigations. Munger (2004) investigated whether a total of 30 children aged 3 to 6 years correctly remembered sad or pleasant stories. In the study, two different versions of the same story (one is sad and the other happy) were read to the child, and the children were asked to answer questions related to the sad and happy stories read to them 3 days ago, and to tell the end of these stories. As a result of the study, the children who told the end of the story with a happy ending were found to remember facts more than the children who told the end of the story with a sad ending did.

According to Boehm (2000), children should learn basic concepts so that they can a) understand and describe objects, places, characteristics of people, the relationship between the situations and sequence of events (e.g. I first went to the garden, then I rode on a swing), b) follow instructions of the teacher (e.g. first paint squares, then triangles), c) fulfill requests of the teacher in the areas of language and speech, math, science) follow the instructions of teacher-made and standardized tests and e) participate in problem solving activities involving skills of classification, sorting, comparison and identifying several properties. Programs prepared to ensure that children acquire problem solving skill include concepts such as same-different, if-then, thought to take a leading part in problem solving and skills to describe basic feelings (happy, sad, angry) (Fantuzzo et al., 2007). Interpersonal problem solving skill is a skill the foundations of which is laid at an early age so when children are given the opportunity to solve their own problems, their cognitive skills such as observation, comparison, organizing information, evaluation. Accordingly, interpersonal problem solving skills which begin to develop in childhood are thought to have significantly important functions for puberty and thereafter (Goffin & Tull, 1985).

Our study has some limitations. The study was conducted on preschool children living in central districts of only one province, which prevents making a comprehensive evaluation and generalization. Another limitation is that the results are limited by data obtained from children included in the study. Further studies should involve longitudinal investigations about the subject. For example, long-term research in which interpersonal solving skills and conceptual development are monitored from kindergarten until primary school should be conducted.

Conclusion

It should be ensured that children acquire the idea that there is not only one solution to problem situations, and there can be alternative solutions. Various programs can be organized so that children acquire social skills, including sharing, helping each other, putting yourself instead of other people, creating positive relationships with others, which are effective in problem solving, and support their social development. For the same purpose, special programs should be prepared for children who have problems in peer relationships in pre-school period. Considering that a child's experiences with the environment positively affect conceptual development of the child, it is clear that preschool children should be provided with rich experiences about concepts. Therefore, activities supporting children's concept development in this period are of great importance.

References

- Anliak, Ş. & Dinçer, Ç. (2005) Okul öncesi dönemde kişilerarası bilişsel problem çözme becerilerinin geliştirilmesi. *Eğitim Araştırmaları*, 20, 122-134.
- Arı, M., Üstün, E., Akman, B. & Etikan, İ. (2000). 4-6 yaş grubu çocuklarda kavram gelişimi. *Gazi Üniversitesi Endüstriyel Sanatlar Fakültesi Dergisi*, 8(8),1-9.
- Bütün Ayhan, A. & Aral, N. (2007). Bracken Temel Kavram Ölçeği-Gözden Geçirilmiş Formunun altı yaş çocukları için uyarlama çalışması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 32, 42-51.
- Balat Uyanık, G. (2009). Anasınıfına devam eden çocukların cinsiyetlerine göre temel ilişkisel kavram bilgilerinin incelenmesi. *Eğitim ve Bilim*, 34(153), 117-126.
- Baykan, S. & Turla, A. (1995). *Okulöncesi Eğitimde İlke ve Yöntemler*. Gazi Üniversitesi Mesleki Eğitim Fakültesi. Bizim Büro Basımevi (2.Basım). Ankara.
- Bayhan, S.P. & Artan, İ. (2004). *Çocuk Gelişimi ve Eğitimi*. Morpa Kültür Yayınları. İstanbul.
- Beaty, J.J. (2000). *Skills for Preschool Teachers. Sixth Edition*. (Edt: Ann Castel Davis). Merrill Publishing Company. New Jersey: USA.
- Boehm, A.E. (2000). *Boehm-R Boehm Test of Basic Concepts Revised Manual*. U.S.A: San Antonio, The Psychological Corporation. Harcourt Assesment Company.
- Bracken, B.A. (1984). *Bracken Basic Concept Scale Examiner's Manual*. The Psychological Corporation, Harcourt Brace Jovanovich, Inc.
- Bracken, B.A., & Shaughnessy, M.F. (2003). An interview with Bruce Bracken about the measurement of basic concepts in children. *North American Journal of Psychology*, 5(3), 351-363.
- Bracken, B.A. (2006). *Bracken Basic Concept Scale-Expressive*. The Psychological Corporation, Harcourt Brace & Company, San Antonio: USA.
- Can Yaşar, M. & Aral, N. (2010). Yaratıcı düşünme becerilerinde okul öncesi eğitimin etkisi. *Kuramsal Eğitimbilim*, 3(2), 201-209.
- Dinçer, F.Ç. (1995). *Anaokuluna Devam Eden 5Yaş Grubu Çocuklarına Kişilerarası Problem Çözme Becerilerinin Kazandırılmasında Eğitimin Etkisinin İncelenmesi*. Doktora Tezi, Hacettepe Üniversitesi. Ankara.
- Erden, M. & Akman, A. (2003). *Eğitim Psikolojisi: Gelişim Öğrenme Öğretme*. Arkadaş Yayınevi. İstanbul.
- Fantuzzo, J., Bulotsky-Shearer, R., McDermott, P., McWayne, C., Perlman, S. & Frye, D. (2007). Investigation of dimensions of social-emotional classroom behavior and school readiness for low-income urban preschool children. *School Psychology Review*, 36(1), 44-62.
- Freidman, W.J. (1991). The development of children's memory for the time of past events. *Child Development*, 62, 139-155.
- Friedman. W.J. (2000). The development of children's knowledge of the times of future events. *Child Development*, 71(4), 913-932.
- Gestwicki, C. (2010). *Developmentally Appropriate Practice: Curriculum and Development in Early Education*, 4th Edition. Belmont, CA. : Wadsworth Cengage Learning.
- Glutting, J.J., Kelly, M.S., Boehm, A.E., & Burnett, T.R. (1989). Stability and predictive validity of the Boehm test of basic concepts- Revised among black kindergartners. *Journal of School Psychology*, 27, 365-371.
- Güven, Y. & Aydın, O. (2004). *Beş-Altı Yaş Çocuklarının Akıl Yürütme Yeteneği İle Sezgisel Düşünme Yetenekleri Arasındaki İlişki*. Yapa Yayınları. 1. Uluslararası Okul Öncesi Eğitim Kongresi. Kongre Kitabı. 1. Cilt. (pp. 430-437). İstanbul.
- Goffin, S.G., & Tull, C.Q. (1985). Problem solving: Encouraging active learning. *Young Children*, 40, 28-32.

- 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.
- Hay, D.F., Payne A., & Chadwick, A. (2004). Peer relations in childhood. *Journal of Child Psychology and Psychiatry*, 45(1), 84-108.
- Karasar, N. (2007). *Bilimsel Araştırma Yöntemi*. Nobel Yayın Dağıtım(14. Baskı), Ankara.
- Ladd, G.W. (2006). Peer rejection, aggressive or withdrawn behavior, and psychological maladjustment from ages 5 to 12: An Examination of four predictive models. *Child Development*, 77(4), 822-846.
- Lutz, S., & Huitt, W. (2004). Connecting cognitive development and constructivism: Implications from theory for instruction and assessment. *Constructivism in the Human Sciences*, 9(1), 67-90.
- Munger, T. (2004). Children's Memories of Happy and Sad Stories. Retrieved 09 November 2009, from <<http://www.anselm.edu/internet/psych/theses/2005/munger/mainpage.html>>
- Özbey, S. & Alisinanoğlu, F. (2009). Okul öncesi eğitim kurumuna devam eden 60-72 aylık çocukların problem davranışlarının bazı değişkenlere göre incelenmesi. *Uluslararası Sosyal Araştırmalar Dergisi*, 2(6), 493-517.
- 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.
- Richardson, D.L. & Lee, T.L. (2010). *I can problem solve: Teaching children how to think*. Workshop presented at CYFAR 2010 Conference, San Francisco, CA.
- Senemoğlu, N. (2010). *Gelişim Öğrenme ve Öğretim, Kuramdan Uygulamaya*. Pegem- A yayınları (17. Baskı). Ankara.
- Shure, M.B., Spivack, G. & Jaeger, M. (1971). Problem solving thinking and adjustment among disadvantaged preschool children. *Child Development*, 42, 1791-1803.
- Shure, M.B., & Spivack, G. (1974). *The PIPS test manual: A cognitive measure of interpersonal problem-solving ability*. Philadelphia: Hahnemann University.
- Shure, M.B. & Spivack, G. (1982). Interpersonal problem-solving in young children: a cognitive approach to prevention. *American Journal of Community Psychology*, 10(3), 341- 356.
- Shure, M. B. (1992). *The PIPS Test Manual* (2nd ed.). Philadelphia: Hahnemann University.
- Shure, M.B. (2001). *I can problem solve (An interpersonal cognitive problem-solving program)* (ICPS). 2nd ed. 2001, Illinois: Research Press.
- Spence, S.H. (2003). Social skills training with children and young people: theory, evidence and practice. *Child and Adolescent Mental Health*, 8(2), 84-96.
- Şahin, S. & Karaaslan, B.T. (2006). Üç-altı yaş grubu çocukların sosyal beceri düzeylerinin incelenmesi. *Çocuk Gelişimi ve Eğitimi Dergisi*, 1(2), 74-80.
- Turner, J.S. & Helms, D.B. (1991). *Lifespan Development*. 4th ed. Mishawaka, IN: Harcourt College Publishers.
- Ülgen, G. (2004). *Kavram Geliştirme*. 4. Baskı. Nobel Yayın. Ankara.
- Yalım, N. (2009). *5-6 Yaş Çocuklarında Matematiksel Şekil Algısı ve Sayı Kavramının Gelişiminde Drama Yönteminin Etkisi*. Yayınlanmamış Yüksek Lisans Tezi. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.
- Yazıcı, Z. (2002). Okul öncesi eğitiminin okul olgunluğu üzerine etkisinin incelenmesi. *Milli Eğitim Dergisi*, 155-156.
- Yavuzer, H. (2002). *Bedensel, Zihinsel ve Sosyal Gelişimiyle Çocuğun İlk Altı Yılı*. Remzi Kitabevi, İstanbul.
- Yoleri, S. (2010). *Bracken Temel Kavram Gelişimi Ölçeği İfade Edici Türkçe Formu'nun oluşturulması ve temel kavramlarla kişilerarası problem çözme becerileri arasındaki ilişkinin incelenmesi*. Marmara Üniversitesi

Eđitim Bilimleri Enstitüsü, İlköđretim Anabilim Dalı, Okul Öncesi Öđretmenliđi Bilim Dalı.
Doktora Tezi. İstanbul.

Yüksel, Ç. (2008). *Üniversite öğrencilerinin kişilerarası ilişkilerinde yaşadıkları problemleri çözme becerilerinin belirlenmesi*. Yayımlanmamış Yüksek Lisans Tezi, Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya.

Wechselberg, K. & Puyn, U. (1993). *Anne ve Çocuk*. Çev. Kınalıbay E., Remzi Kitabevi. İstanbul.

Wilson, P. (2004). A preliminary investigation of an early intervention program: Examining the intervention effectiveness of the bracken basic concept development program and the bracken basic concept scale-revised with head start students. *Psychology in the Schools*, 41(3), 301-311.