

## The Effect of Play Supported Program on the School Readiness of 60-72 Month-Old Disadvantaged Children<sup>ab</sup>

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### ABSTRACT

The aim of this research is to examine the effect of The Play supported Program designed for 60-72 month-old disadvantaged children on their readiness levels. The sample of the research has consisted of an experimental group and a control group, each having twenty 60-72 months old children (10 girls and 10 boys) at Göztepe Semiha Şakir Children's Home, an institution under the Turkish Republic Social Services and Society for the Protection of Children in Kadıköy Istanbul during 2010-2011 Academic Year. Research was designed according to pretest-posttest control group model. The Play Supported Program was prepared for the 60-72 month-old disadvantaged children and the training program has been carried out with the experimental group. The control group was not given an extra program. The development and application forms of "Marmara Primary School Education Readiness Scale", which was developed and standardized by Polat Unutkan in 2003, have been used to gather data in the research. The results of the research show that there are significant differences in the favor of experiment group on the aspects of Mathematics, Science, Audio Capabilities, Cognitive and Language Development, Social and Emotional Development, Physical Development, and Self-Care Skills.

**Keywords:** School Readiness, Disadvantaged Children, Play Supported Program of School Readiness, Social Services and Society for the Protection of Children.

### INTRODUCTION

There is a high number of children that need protection in Turkey. According to the data given by the Directorate General of Children's Services under the Ministry of Family and Social Policies in December 2014, the number of children in Turkey are 101.607 (<http://cocukhizmetleri.aile.gov.tr>). The sufficiency of services provided is debatable (Şimşek, Erol, Öztıp, and Özcan, 2008). Due to the factors such as lack of family and negative environmental conditions, children growing up under institutional care, suffer from cognitive, physical, emotional, and social developmental regression and deterioration. Problems for such disadvantaged children are more than just finding accommodation or meeting their clothing or nourishment needs (Fidan, 2005; Şimşek et. al., 2008). According to the results of comparative studies conducted on children who grow up in institutions versus those that grow up with their families, the former frequently suffer from problems with agreement, cooperating, and empathizing (Sloutsky, 1997) that play a major role in social life and family environment; they demonstrate behavioral problems that may continue during their schooling such as attention problems, hyperactivity, and impulsivity (MacLean, 2003); stereotypical behavioral problems such as rocking, and thumb sucking (Yörükoğlu, 1968); have problems with success at school, talent developing, and extracurricular activities (Tuzcuoğlu, 1989) in addition to low cognitive performance, inability to participate in social or emotional transactions, failure to think in correct concepts and terms, getting stuck in details, inability to pass from material world to abstract world with reason and imagination. Children that grow up in institutions fall behind development even though they are well taken care of under good health conditions (Çörüş & Arık, 1999; Kırpınar & Ceyhun, 2013).

Özdemir, Sefer, and Türkođan (2008) emphasize the significance of individuals to take social responsibility in the current system to prepare and apply additional programs that would support emotional, social, cognitive, language, and psychomotor development of such disadvantaged children who live in children's homes and need protection. Disadvantaged children need Primary School Readiness Support Programs to make an equal start to primary school with other children. A number of studies concluded that children at low socio-economical level have low literacy (Oktay, 1983) and primary school readiness levels (Baldwin, 2011; Gonca, 2004; Isaacs and Magnuson, 2011; Polat Unutkan, 2006a; Polat Unutkan, 2006b; Polat Unutkan, 2007; Telegdy, 1974). This is

very important for ‘Children that Need Protection’ who suffer many losses in their lives and who are devoid of maternal love and care.

Preparing effective support programs along with qualified staff and rich and stimulant environmental are required to ensure disadvantaged children who are taken care of at institutions so for them to have equal primary school readiness skills as their counterparts and this is the most important obligation of ‘accepting right to education of the children and granting this right on equality of opportunity basis’ principle emphasized at that Article 28 of Convention on the Rights of the Children (<http://www.unicef.org/turkey>). In the light of results of current research, it can be argued that disadvantaged children need programs prepared with different methods and techniques especially to compliment preschool education. In this context, the aim of this study is to examine the impact of ‘Preschool Play supported Program Prepared for 60-72 Month-Old Disadvantageous Children’ on primary school readiness levels of such children.

### **THE STUDY**

Design of the study is pretest-posttest control group model. Participants are a total of 40 socially disadvantaged 60-72 months old children getting education at two classes of Göztepe Semiha Şakir Children’s Home in Kadıköy district of Istanbul, in 2010-2011 Academic Year. 20 children (10 boys and 10 girls) were randomly assigned to test group and 20 children (10 boys and 10 girls) were randomly assigned to control group.

### **DATA COLLECTION TOOLS**

Two data collection tools were used in the study. The first one is personal information form. The other tool is “Marmara Primary Education Readiness Scale” (MPERS) which was developed and standardized by Polat Unutkan in 2003 for 60-78 month-old Turkish children. The scale is composed of two parts as Development and Application forms. Development Form of MPERS has a total of 153 items, which consists of 4 sub-scales as cognitive and language (74 items), socio-emotional (40 items), physical development (23 items), and self-care skills (16 items) and is filled out by teachers or parents. In this study, teachers filled out development forms. Test-retest reliability (continuity coefficient) of development form was determined as  $r = .99$ . Internal consistency coefficient (cronbach alpha) was determined as  $r = .98$ . As validity study, its factor structure was established with factor analysis. Internal consistency-cronbach alphas of sub-scales of the development form used in this research were determined as; cognitive and language  $r = .97$ , socio-emotional  $r = .94$ , physical development  $r = .89$ , and self-care skills  $r = .80$ .

Application Form of Marmara Primary Education Readiness Scale used in this study has 5 sub-scales as mathematics (46 questions), science (14 questions), sound (8 questions), drawing (3 questions), and labyrinth (2 questions). Application Form is composed of 73 questions with pictures. Application form is individually applied to children. In this study application form was applied to each child by the researcher. Test-retest reliability (continuity coefficient) of application form was determined as  $r = .93$ ,  $p < 0.01$ . Internal consistency coefficient (cronbach alpha) is  $r = .93$ ,  $p < .01$ . As validity study, its factor structure is established with factor analysis. Internal consistency-cronbach alphas of sub-scales of the application form used in this research were determined as mathematic studies  $r = .96$ ,  $p < .01$ , sound studies  $r = .88$ ,  $p < .01$ , science studies  $r = .86$ ,  $p < .01$ , drawing studies  $r = .81$ ,  $p < .01$ , and labyrinth studies  $r = .95$ ,  $p < .01$ .

### **THE PLAY SUPPORTED PROGRAM**

In the study, ‘Play Supported Program for Primary School Readiness of 60-72 Month-Old Disadvantaged Children was developed by the researcher to increase primary school readiness levels of children. Education program was prepared in accordance with children’s developmental characteristics and in the scope of goals and objectives in preschool education program developed in 2006 for 36-72 month-old children. Goals and objectives were selected from cognitive and language development, socio-emotional development, physical development, and self-care skills and then developmentally appropriate activities were prepared for each development areas. Application of education program was planned to last for eight months during 2010-2011 education year on school days between September and May and as three play activities per day. The target of the games prepared in ‘Primary School Readiness Play supported Program for 60-72 Month-Old Disadvantaged Children’ was to make sure that children learn by having fun; thus, all activity types are presented with games. The draft of the program was carefully analyzed and altered by 5 experts according to the goals, objectives and study. The experts incorporated incorporating a primary school readiness program with play activities. Following revisions on the education program was made and the program was given its final shape. The duration of the education program is planned to be eight months during 2010-2011 education year during school days in between September and May by three play activities per day.

## FINDINGS

According to pretest results of children in test and control groups, no significant difference was found between MPERS Mathematics ( $U=184,500 - p>0,05$ ), Science ( $U=193,000 - p>0,05$ ), Sound ( $U=200,000 - p>0,05$ ), Labyrinth ( $U=137,500 - p>0,05$ ) sub-scale scores and Application total score ( $U=151,000 - p>0,05$ ). Contrary to these findings, there was a significant difference in total Drawing sub-scale scores between children in test and control groups ( $U=122,000 - p<0,05$ ). This difference was found to be in favor of experiment group. Again according to pretest results of children in experiment and control groups, no significant difference was found between Socio-Emotional Development ( $U=198,500 - p>0,05$ ), Physical Development ( $U=169,500 - p>0,05$ ), Self-Care Skills ( $U=166,000 - p>0,05$ ) sub-scale scores and Development total score ( $U=144,000 - p>0,05$ ). Contrary to these findings, a significant difference was found between Cognitive-Language Development sub-scale scores ( $U=126,500 - p<0,05$ ) and this difference was found to be in favor of experiment group.

A significant difference was found between MPERS Application Form Mathematics ( $z=-3,925 - p<0,05$ ), Science ( $z=-3,933 - p<0,05$ ), Sound ( $z=-3,948 - p<0,05$ ), Drawing ( $z=-3,825 - p<0,05$ ), Labyrinth ( $z=-3,666 - p<0,05$ ) sub-scale scores and Application total ( $z=-3,930 - p<0,05$ ) scores of children in experiment group. This difference was found to be in favor of posttest scores of experiment group. In addition to this finding, a significant difference was found between MPERS Development Form Cognitive-Language Development ( $z=-3,921 - p<0,05$ ), Socio-Emotional Development ( $z=-3,925 - p<0,05$ ), Physical Development ( $z=-3,925 - p<0,05$ ), Self-Care Skills ( $z=-3,927 - p<0,05$ ) sub-scale scores and Development total ( $z=-3,921 - p<0,05$ ) scores of children in experiment group. This difference was found to be in favor of posttest scores of test group.

A significant difference was found between MPERS Application Form Mathematics ( $z=-3,926 - p<0,05$ ), Science ( $z=3,949 - p<0,05$ ), Sound ( $z=-3,407 - p<0,05$ ), Drawing ( $z=3,919 - p<0,05$ ), Labyrinth ( $z=-3,592 - p<0,05$ ) sub-scale scores and Application total ( $z=-3,927 - p<0,05$ ) scores of children in control group. This difference was found to be in favor of posttest scores of control group. Similarly, a significant difference was found between MPERS Development Form Cognitive-Language Development ( $z=-3,921 - p<0,05$ ), Socio-Emotional Development ( $z=-3,922 - p<0,05$ ), Physical Development ( $z=-3,931 - p<0,05$ ), Self-Care Skills ( $z=-3,924 - p<0,05$ ) sub-scale scores and Development total ( $z=-3,921 - p<0,05$ ) scores of children in control group. This difference was found to be in favor of posttest scores of control group.

A significant difference was found between MPERS Mathematic ( $U=1,500 - p<0,05$ ), Science ( $U=26,000 - p<0,05$ ), Sound ( $U=3,000 - p<0,05$ ), Drawing ( $U=99,500 - p<0,05$ ) sub-scale scores and Application total scores ( $U=2,000 - p<0,05$ ) of children in experiment and control groups. Contrary to these findings, no statistically significant difference was found between MPERS Labyrinth sub-scale scores of children in experiment and control groups ( $U=150,000 - p>0,05$ ). Statistically significant differences were also found between MPERS Development Form Cognitive-Language Development ( $U=,000 - p<0,05$ ), Socio-Emotional Development ( $U=,000 - p<0,05$ ), Physical Development ( $U=,000 - p<0,05$ ), Self-Care Skills ( $U=6,000 - p<0,05$ ) sub-scale scores and Development total scores ( $U=,000 - p<0,05$ ) of children in experiment and control groups. This difference was found to be in favor of posttest scores of experiment group.

## CONCLUSIONS

In conclusion, socially disadvantaged children who participated in this study in the experimental group were found to have higher primary school readiness skills than those children in the control group. When the relevant literature is studied, it can be found that play supported programs have a positive influence on developing children's language (Ahioğlu, 1999; Kavsaoğlu, 1990; Lyytinen, Poikkeus & Laakso, 1997), psychomotor skills (Özdenk, 2007), and social skills (Durualp and Aral, 2010); in fact, play supports all development areas in children (Ömeroğlu, 1992) and children themselves ascribe great importance to it (Santo, 2006). According to the study carried out by Taylor, Gibbs and Slate (2000), children under risk from low socio-economic and diverse ethnic backgrounds participating in Georgia Preschool Education Program are positively influenced from their preschool experiences in terms of school maturity skills. These findings were also supported by a number of studies that revealed benefits of preschool education on academic and intellectual development of children under risk.

When we consider that the 'Play supported Program for Primary School Readiness of 60-72 Month-Old Disadvantaged Children' used in this study was prepared using play method, the positive development in primary school readiness skills of children in the experiment group proved the program's effectiveness. Also when results of studies that test the effectiveness of programs prepared with different methods and techniques, it can be noted that programs that supplement the Ministry of Education Preschool Education Program currently in use lead to positive developments on children's writing awareness (Aktan Kerem, 2001; Breit-Smith et. al., 2009; Edmonds et. al., 2009; Mol, Bus, and Jong, 2009), language development (Yayla, 2003) and sentence and

number maturity skills (Turhan, 2004). It can be argued that play as the basis of the program applied in this study and the fact that play enables children to learn by having fun, gaining first-hand experiences, and playing an active role in their learning lead to an increase in primary school readiness scores of children in experiment group. If we look at the results of the study conducted by Dilli (2013), the total scores of children in experimental group in the areas such as mathematics, science, sound, cognitive-language, socio-emotional, physical, self-care skills development and application and development, were all found to be higher than the scores of children in the control group of 'Play supported Program for Primary School Readiness of 60-72 Month-Old Disadvantageous Children'.

The reasons why primary school readiness scores of children in the control group differ significantly in favor of their posttest scores can be the positive impact preschool education on children's development (Atılgan, 2001; Bilecen, 1995; Ekinci, 2001; Damarlıoçak, 2007; Dinç, 2003; Gonca, 2004; Kılıç, 2008; Özbek, 2003; Öztürk, 1995; Uğur, 1998; Smith, Simmons, and Kameenui, 1995; as cited in Fitzsimmons, 1998; Seçilmiş, 1996; Taner, 2003; Tamkavas, 2003; Yangın, 2007) and the nature of development itself. In addition, the previous research demonstrated that children who receive preschool education have a higher level of primary school readiness compared to children who do not receive such education even when they have disadvantaged backgrounds (Erkan & Kırca, 2010; Pehlivan, 2006; Polat Unutkan, 2003; Polat Unutkan & Oktay 2004; Yeşil, 2008; Yılmaz & Dikici-Sığırtmaç, 2008) and have a higher level of cognitive thinking skills (Polat Unutkan, 2006b). Also, preschool education increases primary school readiness cognitively and supports children to achieve an easier socio-emotional adjustment to school (Turaşlı, 2006). Mathematical skills and academic success of children who receive preschool education such as attention-memory, number recognition, adding-subtracting (Polat Unutkan, 2007; Dursun, 2009); are also higher than those who do not receive such education (Anderson, 1994; Arı, Üstün and Akman, 1994; Arı, Üstün, Akman, and Etikan, 2000; Başer, 1996; Dağlı, 2007; Ergün, 2003; Tuğrul, 1992). The study conducted by Kmak (2010) proved that as years of preschool attendance increased, literacy skills in preschool also improved. In addition to all these studies, Uyanık Balat (2003) aimed to bring forward basic conceptual information of children in need of protection and children who live with their families. In this study, there was a significant difference in conceptual scores between children who could not attend preschool and children who could attend preschool for one year, two, and more years. As the duration of preschool education increases, the mean scores of children also increase. This result is in parallel to relevant studies and it brings forward the importance of preschool education.

This study conducted by the researcher revealed results that are relevant for researchers and educators, and the following suggestions are developed under the light of these findings:

- Effectiveness of this program prepared by the researcher should be tested with various samples and results of those studies should be compared with results of this study.
- The overall development of children in experiment group whose first grade readiness levels were supported with this study should be tracked throughout primary school to investigate the sustainability of the program.
- New studies that investigate the joint effect of support programs prepared for disadvantaged children should be conducted and diverse variables (gender, age, time spent at institution) on the first grade readiness levels of children should be regarded.
- Research that compares the impact of first grade readiness support programs on disadvantaged children and their non-disadvantaged counterparts can be planned.
- Results of this study and other relevant studies should be investigated by the relevant institutions so that necessary precautions can be taken to support an equal start to the first grade by disadvantaged children with their counterparts.

## REFERENCES

- Ahioğlu, E. N. (1999). *Sembolik oyunun 4 yaş çocuklarının dil kazanımına etkisi (Impact of symbolic play on language development of 4 year-old children)*. (Unpublished Master Thesis), Ankara University, Social Sciences Institute, Ankara.
- Aktan Kerem, E. (2001). *Okul öncesi dönem çocuklarında okuma gelişimi ve okumaya hazırlık programının etkisinin değerlendirilmesi (Evaluation of literacy development and the impact of literacy preparation program on pre-school children)*. (Unpublished PhD Thesis), Marmara University, Institute of Education Sciences, İstanbul.
- Anderson, G. R. (1999). Introduction: achieving permanency for all children in the child welfare system. *Journal of Multicultural Social Work*, 5(1/2), 1-8.
- Arı, M., Üstün, E., & Akman, B. (1994). 4-6 yaş anaokuluna giden ve gitmeyen çocukların kavram gelişimlerinin karşılaştırılması (Comparison of concept development at 4-6 year-old children who attend

- preschool versus children who do not). *10. YA-PA Okul Öncesi Eğitimi ve Yaygınlaştırılması Semineri (The 10<sup>th</sup> YA-PA Seminar on Preschool Education and Its Generalization)*. Ankara: Ya-Pa Publishing.
- Arı, M., Üstün, E., Akman, S., and Etikan, İ. (2000). 4-6 yaş grubu çocuklarda kavram gelişimi (Concept development at 4-6 year-old children) . *Gazi University Industrial Arts Education Faculty Magazine*, 8, 5-18.
- Atılğan, G. (2001). *Okul öncesi eğitim kurumlarına devam eden ve etmeyen ilköğretim 1.kademe 1. devre öğrencilerinin sosyal beceri özelliklerinin karşılaştırılması (Comparison of social skills of children at first semester of first grade who attended preschool versus children that did not)*. (Unpublished Master Thesis), Selçuk University, Konya.
- Balat Uyanık, G. (2003). *Altı yaş grubu korunmaya muhtaç ve ailesinin yanında kalan çocukların okula hazır bulunuşluk ile ilgili temel kavram bilgilerinin karşılaştırılması (Comparison of basic conceptual information regarding primary school readiness of children in need of protection versus children that live with their families)*. (Unpublished PhD Thesis), Hacettepe University, Health Sciences Institute, Ankara.
- Baldwin, C. N. (2011). *School Readiness: Parent perceptions, behaviors, and child ability related to ethnicity and socioeconomic status*. (Unpublished Master Thesis), The Faculty of the Department of Psychology, Western Kentucky University, Bowling Green.
- Başer, G. (1996). *Anasınıfı eğitimi alan ve almayan ilköğretim birinci sınıf öğrencilerinin akademik başarılarının karşılaştırılması (Comparison of academic successes of first grade students who attended preschool versus those that did not)*. (Unpublished Master Thesis). Gazi University, Ankara.
- Bilecen, N. (1995). *Birinci sınıfın etkilerine ulaşmada anasınıfına devam etme veya etmemenin etkisi (Impact of preschool attendance on achieving effects of first grade)*. (Unpublished Master Thesis). Balıkesir University, Balıkesir.
- Breit-Smith, A., Justice, L. M., McGinty, A.S., & Kaderavek J. (2009). How often and how much? Intensity of print referencing intervention. *Topics in Language Disorders*, 4, 360–369.
- Convention on the Rights of the Children*, [http://www.unicef.org/turkey/crc/\\_cr23d.html](http://www.unicef.org/turkey/crc/_cr23d.html) reached on: April 23<sup>rd</sup>, 2013.
- Çörüş, G., & Arık, İ. A. (1999). *Farklı ortamlarda bilişsel gelişim, İstanbul 1. çocuk kurultayı bildiriler kitabı (Cognitive development in different environments, İstanbul 1<sup>st</sup> Congress on Children Declaration (M.R. Şirin, S.U. Sayita), p.319-328, İstanbul Çocukları Vakfı Publishing, 1999, İstanbul*.
- Dağlı, A. (2007). *Okul öncesi eğitimi alan ve almayan ilköğretim birinci sınıf öğrencilerinin türkçe ve matematik derslerindeki akademik başarılarının karşılaştırılması (Academic success at Turkish and mathematics classes of first grade students that attended preschool versus those that did not)*. (Unpublished Master Thesis), Selçuk University, Social Sciences Institute, Konya.
- Damarlıoçak, S. (2007). *İlköğretim birinci sınıf öğrencilerinin dil gelişim düzeyleri ile okuma-yazma başarısı arasındaki ilişki (The relationship between language development and literacy success of first grade students)*. (Unpublished Master Thesis). İstanbul: Marmara University.
- Dilli, F. (2013). *60-72 Aylık sosyal açıdan dezavantajlı çocuklar için hazırlanan ilköğretime hazırlık destek programının çocukların ilköğretime hazırlanışlarına etkisi (The impact of primary school readiness support program prepared for 60-72 month-old disadvantaged children on primary school readiness)*. (Unpublished Master Thesis), Marmara University, İstanbul.
- Dinç, B. (2002). *Okul öncesi eğitimin 4-5 yaş çocuğunun sosyal gelişimine etkileri konusunda öğretmen görüşleri (Teachers' opinions on the impact of preschool education on social development of 4-5 year-old children)*. (Unpublished Master Thesis), Anadolu University, Education Sciences Institute, Eskişehir.
- Durualp, E. & Aral, N. (2010). Altı yaşındaki çocukların sosyal becerilerine oyun temelli sosyal beceri eğitiminin etkisinin incelenmesi (Studying the impact of play supported social skills education on social skills of six year-old children). *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi (H. U. Journal of Education)*, 39,160-172.
- Edmonds, E., O'Donoghue, C., Spano, S., & Algozzine, R. F. (2009). Learning when school is out. *The Journal of Educational Research*, 102 (3), 213-221.
- Ekinci, O. (2001). *Okul öncesi eğitimin ilköğretim birinci sınıf öğrencilerinin başarıları üzerine etkisi (The impact of preschool education on success of first grade students)*. (Unpublished Master Thesis), Gaziantep: Gaziantep University.
- Ergün, S. (2003). *Okul öncesi eğitim alan ve almayan ilköğretim birinci sınıf öğrencilerinin matematik yetenek ve başarılarının karşılaştırmalı olarak incelenmesi (Comparative study of first grade students who attended preschool versus those that did not in terms of mathematics abilities and success)*. (Master Thesis). İstanbul: Marmara University.
- Fidan M. (2005). *Sosyal hizmetler çocuk esirgeme kurumu çocuk yuvalarında barınan çocukların wisc-r skorlarının değerlendirilmesi (Evaluating wisc-r scores of children that live at children's homes)*. (Unpublished Master Thesis), İstanbul University, Institute of Forensic Sciences, İstanbul.

- Fitzsimmons, M. K. (1998). *Beginning Reading*, Eric Clearinghouse on Disabilities and Gifted Education, Reston, <http://www.ldonline.org/article/6281>.
- Gonca, H. (2004). *Ankara il merkezinde farklı sosyo-ekonomik ve kültürel ortamlarda yetişen ve ilköğretim okuluna yeni başlayan çocukların okul olgunluğunun incelenmesi (Studying school maturity of children from different socio-economic and cultural backgrounds who start primary school at Ankara center)*. (Unpublished Master Thesis), Hacettepe University, Health Sciences Institute, Ankara. <http://cocukhizmetleri.aile.gov.tr/data/544e2899369dc318044059c3/Aral%C4%B1k.pdf>
- Julia B. Isaacs and Katherine Magnuson (2011). *Income and Education as Predictors of Children's School Readiness, the social genome project*. [http://www.brookings.edu/~media/research/files/reports/2011/12/15%20school%20readiness%20isaacs/1214\\_school\\_readiness\\_isaacs.pdf](http://www.brookings.edu/~media/research/files/reports/2011/12/15%20school%20readiness%20isaacs/1214_school_readiness_isaacs.pdf)
- Kavsaoğlu, S. Z. (1990). *1,5-2,0 ve 4,5-5,0 yaş çocuklarında oyun yöntemi ile büyük-küçük ve uzun-kısa kavramlarının işlev ve dil düzeylerinde değerlendirilmesi (Evaluating in terms of function and language of big-small and tall-short concepts with play method at 1,5-2,0 and 4,5-5,0 year-old children)*. (Unpublished Master Thesis), Hacettepe University, Health Sciences Institute, Ankara.
- Kılıç, Z. (2008). *İlköğretim birinci sınıf öğretmenlerinin görüşlerine göre okul öncesi eğitim alan ve almayan öğrencilerin gelişim becerilerinin karşılaştırılması (A comparison by first grade teachers of developmental skills of children that attend preschool versus those that do not)*. (Unpublished Master Thesis), Beykent University, Social Sciences Institute, Istanbul.
- Kırca, A., & Erkan, S. (2010). Okul öncesi eğitimin ilköğretim birinci sınıf çocuklarının okula hazırbulunuşlarına etkisinin incelenmesi (Examining the impact of preschool education on school readiness levels of first grade students). *Hacettepe University Education Faculty Magazine*, 38, 94-106.
- Kırpınar, İ., & Ceyhun, H. (2013). Erzurum Çocuk Yuvası 0–6 yaş biriminde kalan çocukların sosyo-demografik özellikleri, davranışsal sorunları ve gelişim düzeyleri (Socio-demographic characteristics, behavioral problems and developmental levels of children who live at Erzurum Children's Home 0-6 age group). *Konuralp Medicine Magazine*, 5(2), 17-21
- Kmak, J. A. (2010). *Kindergarten literacy skills and their relationship to the type of preschool experience*. Unpublished doctoral thesis, Aurora University: USA.
- Lyytinen, P., Poikkeus, M., & Laakso, M. L. (1997). Language and symbolic play in toddlers. *International Journal of Behavioral Development*, 21 (2) , 289-302
- Maclean, K. (2003). The Impact of Institutionalization. *Development and Psychopathology*, 15, 853-884.
- Mol, S. E., Bus, A. G., & Jong M. T. (2009). Interactive book reading in early education: a tool to stimulate print knowledge as well as oral language. *Review of Educational Research*, 79(2), 979–1007.
- Oktay, A. (1983). *Okul olgunluğu (School maturity)*. İstanbul University Education Faculty Publishing No: 3089: İstanbul.
- Ömeroglu, E. (1992). *Çocuk ve Oyun (Children and Games)*. Republic of Turkey Family Research Institution. Ankara: Kılıçarslan Publishing.
- Özbek, A. (2003). *Okul öncesi eğitim kurumlarına devam eden ve etmeyen çocukların ilköğretim birinci sınıfta sosyal gelişim açısından öğretmen görüşüne dayalı olarak karşılaştırılması (Comparison of children who attend preschool versus those that do not in terms of social development at first grade based on teacher's opinion)*. (Unpublished Master Thesis), Anadolu University, Eskişehir.
- Özdemir, N., Sefer, N., & Türkdöğen, D. (2008). Bir sosyal sorumluluk projesi örneği: korunmaya muhtaç çocuklar (A social responsibility example: children in need of protection). *Cumhuriyet University Social Sciences Magazine*, 32(2), 283- 305.
- Özdenk Ç. (2007). *6 yaş grubu öğrencilerinin psikomotor gelişimlerinin sağlanmasında oyunun yeri ve önemi (Place and importance of play in psychomotor development of six year-old students)*. (Unpublished Master Thesis), Fırat University Social Sciences Institute, Elazığ.
- Öztürk, H. (1995). *Okul öncesi eğitim kurumlarına giden ve gitmeyen ilkokul birinci sınıf öğrencilerinin alıcı ve ifade edici dil düzeyleri (Receptive and expressive language levels of first grade students who attend preschool versus those that do not)*. (Unpublished Master Thesis), Gazi University, Ankara.
- Pehlivan, D. (2006). *Okul öncesi eğitim alan ve almayan öğrencilerin ilkokuma ve yazmaya geçiş sürecinin öğretmen ve öğrenci görüşleri doğrultusunda değerlendirilmesi (Evaluation of transition to literacy of students who attend preschool versus those that do not based on teacher and student opinions)*. (Unpublished Master Thesis), Çukurova University Social Sciences Institute, Adana.
- Polat Unutkan, Ö. (2003a). *Marmara ilköğretime hazır oluş ölçeğinin geliştirilmesi ve standardizasyonu (Development and standardization of Marmara primary school readiness scale)*. (Unpublished PhD Thesis), Marmara University, Education Sciences Institute, İstanbul.
- Polat Unutkan, Ö. (2003b). *Çocuğunuz okula hazır mı? (Is your child ready for school?) Eğitim İletişim Magazine*, August-September Issue, 31-34.

- Polat Unutkan, Ö.&Oktay.A.(2004). *Marmara İlköğretime Hazır Oluş Ölçeğinin Geliştirilmesi ve Standardizasyonu. (Development and standardization of Marmara school readiness inventory)First International Pre-School Education Congress* . Marmara University. Yapa Publishing. İstanbul, 336-352.
- Polat Unutkan, Ö. (2006a). *Okul öncesinde ilköğretime hazırlık (Primary school readiness at preschool)*. İstanbul: Morpa Kültür Publishing.
- Polat Unutkan, Ö. (2006b). İlköğretim 1. sınıfa başlarken: çocuk-öğretmen ve anne baba (Starting the first grade: child-teacher and parents), *İlköğretime Yeniden Bir Bakış (Primary School Revisited)*. Eds: Prof. Dr. Oktay- Dr. Özgül Polat Unutkan, Morpa Kültür Publishing, İstanbul, 10-11.
- Polat Unutkan, Ö. (2006c). A Study of pre-school children's school readiness related to scientific thinking skills. *Turkish Online Journal of Distance Education TOJDE*, 7(4).
- Polat Unutkan, Ö. (2007). Okul öncesi dönem çocuklarının matematik becerileri açısından ilköğretime hazır bulunuşluğunun incelenmesi (Studying primary school readiness of preschool children in terms of mathematics skills). *Hacettepe University Education Faculty Magazine*, 32, 243–254.
- Santo, A. (2006). *School readiness: perceptions of early childhood educators, parents and preschool children. Unpublished doctoral dissertation*, University of Toronto, Department of Human Development and Applied Psychology, Toronto.
- Seçilmiş, S. (1996). *Anaokuluna giden ve gitmeyen erken çocukluk dönemindeki çocukların dil gelişimi ile ilgili becerilerin incelenmesi (Studying language development skills of children in early childhood who attend preschool versus those that do not)*. (Unpublished Master Thesis), Hacettepe University, Ankara.
- Sloutsky, V. M. (1997). Institutional care and developmental outcomes of 1 and 7-year-old children: a contextualist perspective. *International Journal of Behavioral Development*, 20 (1): 131-151.
- Şimşek, Z., Erol, N., Öztıp, D., & Özcan, Ö. (2008). Kurum bakımındaki çocuk ve ergenlerde davranış ve duygusal sorunların epidemiyolojisi; ulusal örnekleme karşılaştırmalı bir araştırma (Epidemiology of behavior and emotional problems of children and adolescents under institutional care: comparative study with national sample). *Turkish Psychiatry Magazine*, 19(3), 235-246.
- Tamkavas, E. (2003). *5-6 yaş çocuklarının öz bakım becerilerinin cinsiyet ve okul öncesi eğitim alma durumlarına göre incelenmesi (Examining 5 and 6-year old children's self-care skills according to gender and preschool education)*. (Unpublished Master Thesis), Selçuk University Social Sciences Institute, Konya.
- Taner, M. (2003). *Okul öncesi eğitimi alan ve almayan farklı sosyo-ekonomik düzeylerdeki ilköğretim birinci sınıf öğrencilerinin dil gelişimlerinin karşılaştırılması (Comparison of language skills at first grade students from different socio-economic backgrounds who attend preschool and those that do not)*. (Unpublished Master Thesis), Uludağ University, Bursa.
- Taylor, K. K., Gibbs, A. S., & Slate, J. R. (2000). Preschool attendance and kindergarten readiness. *Early Childhood Education Journal*, 27(3), 191-195.
- Telegdy, G. A. (1974). The relationship between socioeconomic status and school readiness, *Psychology in the Schools*, 11(3), 351-356.
- Tuğrul. B. (1992). *Anaokulu eğitimi alan ve almayan çocukların ilkokul birinci sınıftaki akademik başarı ve ruhsal uyum davranışlarının karşılaştırmalı olarak incelenmesi (Comparative study of first grade students who attended preschool versus those that did not based on academic success and mental adjustment)*. (Unpublished PhD Thesis), Hacettepe University, Social Sciences Institute, Ankara.
- Turaşlı, N. (2006). *6 yaş grubu çocuklarda benlik algısını desteklemeye yönelik sosyal-duygusal hazırlık programının etkisinin incelenmesi (Studying the effect of socio-emotional preparation program directed towards supporting understanding of self in 6 year-old children)*. (Unpublished PhD Thesis), Marmara University, İstanbul.
- Turhan, G. (2004). *Anasınıfına devam eden alt sosyo-ekonomik düzeydeki çocuklara uygulanan matematiksel kavramları destekleyici eğitim programının cümle ve sayı olgunluğuna etkisinin incelenmesi (Studying the impact of education program supporting mathematics on sentence and number maturity of preschool students with low socio-economic background)*. (Unpublished Master Thesis), Gazi University, Ankara.
- Tuzcuoğlu, N. (1989). *Korunmaya muhtaç çocukların öğrenim problemleri (Learning problems of children in need of protection)*. (Unpublished Master Thesis), Gazi University, Social Sciences Institute, Ankara.
- Uğur, H. (1998). *Anasınıfı eğitiminin sosyalleşmedeki rolü ve öğrencileri sosyalleştirme açısından özel ve devlet anasınıflarının karşılaştırılması (Role of preschool education in socialization and comparison of public and private preschools in socialization of students)*. (Unpublished Master Thesis), Sakarya University, Social Sciences Institute, Sakarya.
- Yangın, B. (2007). Okul öncesi eğitim kurumlarındaki altı yaş çocuklarının yazmayı öğrenmeye hazır bulunuşluk durumları (Level of writing readiness of six year-old children in preschools). *Hacettepe University Education Faculty Magazine*, 32, 294-305.
- Yayla, Ş. (2003). *Alt Sosyo-ekonomik Düzeydeki Ailelerden Gelen 60–72 Aylar Arasındaki Çocuklara Uygulanan Dil Eğitim Programının Çocukların Dil Gelişimine Etkisinin İncelenmesi (Studying impact of*