



## The effects of life skills education program on problem behaviors and social skills of 4-year-old preschoolers<sup>1</sup>

**İsa Kaya**, *Fatih Sultan Mehmet Vakıf University, Turkey*, [ikaya@fsm.edu.tr](mailto:ikaya@fsm.edu.tr) ORCID: 0000-0003-3604-1368  
**M. Engin Deniz**, *Yildiz Technical University, Turkey*, [edeniz@yildiz.edu.tr](mailto:edeniz@yildiz.edu.tr) ORCID: 0000-0002-7930-3121

**Abstract.** The purpose of this study was to evaluate the effects of the Life Skill Program on 4-year-old preschoolers. The problem behaviors and social skills of the preschoolers made up the dependent variable while "Life Skills Program" was the independent variable in the study in which pretest-posttest design was used with an experimental approach. A total of 62 four-year-olds were divided into experimental (N=31) and control (N=31) groups. During 2012 Fall and 2013 Spring, the participants were selected from two state-funded preschools with random cluster sampling. Preschool and Kindergarten Behavior Scale (PKBS-2), which was developed by W. Merrill in 1994 and adapted to Turkish children by Alisinanoğlu and Özbey (2009), was used as data collection tool. The dependent t-test and independent t-test were used for statistical comparisons. The results indicated that the experimental group to which the life skill program implemented had statistically higher scores for Social Cooperation, Social Interaction and Social Independence compared to the pretest results while there was a meaningful decrease in their Externalizing Problems, Internalizing Problems, Antisocial and Self-Centered Problem Behaviors. The effects of the program lasted for 12 weeks. The Life Skills Program seemed to have positive effects on 4 year-old preschoolers as it helped them reduce problem behaviors and improve their social skills.

**Keywords:** Preschool education, social development, social skills, problem behavior, life skills program

Received: 09.05.2019

Accepted: 09.08.2019

Published: 15.03.2020

### INTRODUCTION

Preschool period is a time when development pace reaches its peak and the foundations of personality are laid. During that time, the people in the immediate environment serve as role models and children are open to learn anything they love. The development of the skills in this period provides a basis for the development of later skills (Günindi, 2011). According to Gresham et al. (2001), being able to interact successfully with peers and the adults in the inner circle is an important developmental stage for children. Forming close relationships with peers and the adults in the inner circle, making friends, maintaining friendships, peer acceptance and ending relationships that are negative or harmful are indicators of a child's social skill level (Bacanlı, 2008; Ergenekon, 2012). When children start school, they find out that many social skills and behaviors are not accepted at school unlike home and that they should behave differently at school (Senemoğlu, 1994). In literature, social skills are defined as the learned behaviors that provides positive reinforcement from the environment or that are used in interpersonal relations for the maintenance of the relationships (Gewertz, 2003). They can also refer to the special skills that children utilize to meet their physical and intellectual needs even if they do not have any problems in their social environment (Önder, 2003). Therefore, social skills are learnable behaviors that enables integration into society and makes social participation easier with observable skills, such as communication, academic performance, self-control, adaptation and enterprise in addition to the non-observable cognitive and affective elements. Social skills, which are defined as the ability to behave appropriately for social environments, play a crucial role in the establishment of interpersonal relationships and reaching social aims (Avcıoğlu, 2005). Social skills, such as helping others, requesting help or information, expressing gratitude, apologizing, starting a conversation, replying to a question, following rules, waiting for one's turn, cooperating, receiving criticism, requesting feedback and

<sup>1</sup> This article is produced from the author's doctoral thesis. entitled "The Effects of Life Skills Education Program on Problem Behaviors and Social Skills of 4-Year-old Preschoolers".

introducing oneself, are the tools that help individuals accommodate to and integrate into society, communicate and interact with peers and others (Çifci and Sucuoğlu, 2004).

Cooperation, taking responsibility, self-control, empathy and enterprise are some of the important social skills that are expected to develop during preschool years (Gresham and Elliott, 1990). If an individual does not have the social skills that are necessary for social occasions, he or she may have social incompetence. Gresham and Elliott (1990) classify social skill deficits as acquisition deficits, social performance deficits, self-control and performance skill deficits. Social incompetence in children leads to inadequate interaction and communication among peers, which results in problem behaviors (Avcıoğlu, 2005). There seems to be a negative association between social skills and problem behaviors as increasing the level of social skills leads to a decrease in problem behaviors. Doss and Reichle (1991) define challenging behavior as behaviors that causes self-injury or injury of others, prevent the acquisition of new skills, isolates a child from his/her social environment. Bailey and Wolery (1992) state that in order for a behavior to be classified as challenging it should meet some criteria. Therefore, a behavior is challenging or problematic if it blocks learning, positive social interactions or it is harmful to the child, peers, adults or family members.

When a child's behaviors do not meet parental expectations or confront them, they are often seen as challenging behavior. The continuity, intensity and severity of a behavior is important to the assessment and evaluation of a behavior. Severity or extremeness of a behavior is the first dimension that is noticed because of the first impression it gives. The studies on the definition and diagnosis of problem behavior have also used other terms, including challenging behavior, undesirable behavior, adaptive and maladaptive behavior (Ünal, 2006). Problem behaviors can be classified as internalizing and externalizing problem behaviors (Caldarella and Merrell; 1997; Gimpel and Holland, 2003; Rusby, 1999). Externalizing problem behaviors result from the failure of emotional and behavioral control and include disruptive behaviors, such as hitting, stealing, threatening, aggressiveness, hyperactivity, being antisocial, disrupting ongoing activities, extreme resistance and violating rules. Externalizing problem behaviors cannot be disguised as they are observable and they can be turned into serious behavioral problem without early intervention. On the other hand, behaviors, such as withdrawal, somatic compliances and anxiety (worryment, fears, nervousness, oppression, etc.), are classified as internalizing problem behaviors.

Internalizing problem behaviors which are not diagnosed and intervened at an early stage might lead to mental and psychological problems, such as depression and social isolation. As time goes by, internalizing problem behaviors may turn into psychological problems, such as withdrawal, negative sense of self and social incompetence (Alisinanoğlu and Özbey, 2009). Behaviors like disobedience, swearing, lying, stubbornness, jealousy, aggressiveness and shyness may be seen as problematic during the preschool years (Birkan, 2002). Behaviors like resistance, disobedience and not sharing during the preschool years may turn into fighting, lying and stealing during the elementary school period and gradually become serious problems including violent, committing crimes, causing damage to others' properties, school dropout, using drugs and alcohol, joining gangs and other disruptive behaviors in the adolescence and adulthood years (Reid, 1993).

Research points out that the problem behaviors are shaped during the early years (Fischer, Rolf, Hasazi, and Cummings, 1984) and settled over time. They also indicate that problem behaviors during preschool years predict academic success and problems with learning in the 3<sup>rd</sup> grade. Bruder (2010), who underlines the importance of early intervention to children, families, school and society, states that the earlier the intervention is, the more beneficial it will be for those shareholders. Therefore, intervention programs developed for children should cover the early years. While the planning and implementation of the intervention programs targeting social skill incompetence and problem behaviors require less time and effort compared to the later years, it will be more beneficial and effective during the early years (Olweus, Block, and Radke-Yarrow, 1986). As the source of problem behaviors may be the child, family and school, intervention programs should target all of these components in the planning and implementation process. Walker et al. (1998) suggests that school performance can be improved with the successful implementation of a comprehensive intervention program for the child, family, teachers and classmates from the very early years

on.

In Turkey, the number of the programs for social skills and problem behaviors seems scarce while most of them target children who are six or older. The early intervention programs developed by Diken, Cavkaytar, Batu, Bozkurt and Kurtilmaz (2011), Durualp and Aral (2009) and Özbey (2009) improved children's social skills and reduced problem behavior at home and school environment. Although most of the preschool population in the current system is made up of 4 and 5-year-olds (48-66 months), to the best of our knowledge, there are no specific programs designed to improve life and social skills of preschoolers. In order to meet the need in this field, the Life Skills Education Program (Aprender A Convivir Program) developed by Benítez et al. (2011) in Spain was adapted to 4-year-old Turkish children and culture to see its effects on problem behaviors and social skills.

## METHOD

### Research Model

A true experimental design with pre/post-test and control groups was employed. The dependent variable is the problem behaviors and social skills of 4-year-olds (48-60 months) while the independent variable is the "Life Skills Education Program", the effects of which were investigated. The children in the experimental group received the Life Skills Education Program implemented by the researcher while the children in the control group continued their regular activities.

**Table 1.** *Research design*

Groups	Pre-test	Activity	Post-test	Follow-up
Experimental	PKBS-2 *	Life Skills Education Program	PKBS-2	PKBS-2
Control	PKBS-2		PKBS-2	PKBS-2

\* PKBS-2 : Preschool and Kindergarten Behavior Scales-Second Edition

### Participants

The study was conducted in independent and state-funded preschools in Konya. 4-year-old (48-60 months) preschoolers who had not received any special training apart from preschool education made up the sample of the study during the fall of 2012 and spring of 2013. The participants were selected from two state-funded preschools with random cluster sampling.

**Table 2.** *The distribution of the children in the experimental and control groups by gender*

Gender	Experimental group	Control groups	Total
Girls	17	16	33
Boys	14	15	29
Total	31	31	62

A total of 62 children made up the sample of the study as seen in Table. Experimental group and control group included 31 children each. 17 (%54.8) and 14 (%45.2) of the children in the experimental group were girls and boys, respectively. On the other hand, 16 (%51.6) and 15 (%48.4) of the children in the experimental group were girls and boys, respectively.

### Data Collection Tools

"Demographic Information Form" and "Preschool and Kindergarten Behaviour Scale (PKBS-2)" were used for the data collection. PKBS-2, which was developed by Merrill (1994) and revised in 2003, is used to assess social skills and problem behaviors of children ages 3 through 6. It was standardized with a sample of ratings of 3317 children. It consists of 76 items on two separate scales (Social Skills and Problem Behaviors) which are rated on a 4-point scale (0 = Never, 1 = Rarely, 2 = Sometimes, 3 = Often). In the English version of the test, the internal consistency reliability is .90 and .97 for Social Skills and Problem Behavior scales with .81 to .95 for the

subscales. The higher scores in Social Skills Scale indicates higher levels of social skills with lower scores indicating low levels of social skills. The higher scores in Problem Behavior Scale denote a more significant degree of problem behaviors while lower scores might be described as having less problem behaviors. The scale was adapted to Turkish by Alisinanoğlu and Özbey (2009). Social Skills Scale is made up of three factors, which are Social Cooperation, Social Interaction and Social Independence. The construct validity coefficients for all three factors were .96, .91 and .88, respectively. The explained variance for the first, second and third factors was .67, .52 and .64, respectively. Cronbach's Alpha for the first, second and third factors in Social Skills Scale was .92, .88, and .88, respectively. The value of the total Cronbach's Alpha of the Social Skills Scale was .94. Problem Behavior Scale includes 4 factors, which are Externalizing Problem Behavior, Internalizing Problem Behavior, Antisocial Behavior, and Self-centered Behavior. The construct validity coefficients for all four factors were .96, .90, .89, and .75, respectively. The explained variance for the first, second, third and fourth factors was .62, .65, .73, and .51, respectively. Cronbach's Alpha for the first, second, third and fourth factors in Problem Behavior Scale was .95, .87, .81, and .72, respectively. The value of the total Cronbach's Alpha of the Problem Behavior Scale was .96. Therefore, the scale is a highly reliable and valid measure of social skills and problem behaviors.

### **Data Collection and Analysis**

PKBS-2 was rated by teachers for each child. The teachers were told to consider the behaviors of a child in the last three months while rating the scale. All the children in both experimental and control groups were assessed with the pre-test. At the end of the program, the same teachers completed the post-test forms for the experimental and control groups. 12 weeks later, follow-up test was administered to test the permanence of the program. SPSS program was used for the data analysis. Frequency (*f*) and percentage (%) analyses were employed to describe the parental and child related variables. The dependent-sample and independent-sample t-test was used to compare the pre-test results of the control and experimental groups, the pre-test and post-test results of both groups and the post-test and follow-up test results. The results were interpreted at significance level of .05

### **Life Skills Education Program**

"Life Skills Education Program" (Aprender A Convivir Program) was developed by Benítez et al. (2011) for 4-year-old children in Spain. The program aims to reduce the effects of risk factors that children may have in their life-time by supporting the development of social skills and adaptation and preventing problem behavior. After getting the permissions for the use, the program was translated into Turkish. Next, Turkish version was reviewed by 2 faculty members, 3 educators and a Turkish Language teacher before the ambiguous and unclear statements and instructions were simplified and clarified. The program developed for 4-year-old children is divided into four thematic modules which follow an easy-to-difficult sequence with a universal perspective. The first module is about the rules and rule-following. It aims to help children learn to follow some age-appropriate rules for school life by focusing on the importance of following rules and the consequences of not following rules. The second module is about emotions and feelings. It aims to help children understand different emotions and expressions, expressing their feelings and reading others' emotions. The third module is called "Communication Skills", which aims to teach children how to communicate, express their needs, listen to others and understand others' intentions. The last module is "Helping and Cooperation" which emphasizes the importance of helping others, sharing and cooperation. The skills in the previous modules are prerequisites of the skills acquired in this module as a child needs to have the skills for interaction and communication before he/she can learn to help and cooperate with others. Each module has 3 units each having 2 parts with a total of 12 units and 24 parts, which are completed in 12 weeks (2 days per week). It lasted about 2 hours a day. The activities are varied and relevant to the content of the units (for instance, coloring a page altogether, a dialogue between a parent and a child on a situation related to the theme on the colored page that week). The aim of the activities supported by family involvement is to have parents spend quality time with their child(ren). The program makes use of puppets and a series of imaginary characters in each unit. The purpose of these characters is to draw

children's attention to the skills to be learned in a more effective way. The overall aim of the program is to help children learn the skills by playing, singing, coloring, engaging in conversations and activities while having fun. Each part includes learning outcomes to be assessed and table of specifications for each child to make the learned skills permanent. At the end of each part, the learning outcomes are evaluated.

## FINDINGS

### The Difference between the Experimental and Control Group Pretest Mean Scores in Social Skills and Problem Behavior Tests

Before the implementation of the Life Skills Education Program, pre-test mean scores of each group was compared with t-test to ensure that both the experimental group and the control group represented the population equally well. In other words, both groups had statistically similar mean scores in social skills (social cooperation, social interaction and social independence) and problem behavior (externalizing problem behavior, internalizing problem behavior, antisocial behavior and self-centered behavior).

**Table 3.** *Experimental and control group social skills (social cooperation, social interaction and social independence) pre-test results with n,  $\bar{X}$ , Ss and t values*

	<i>N</i>	$\bar{x}$	<i>Ss</i>	<i>t</i>	<i>p</i>
<b>Social cooperation</b>					
Experimental	31	36,74	4,89	1,299	,199
Control	31	35,06	5,25		
<b>Social interaction</b>					
Experimental	31	11,87	2,69	-1,191	,238
Control	31	12,74	3,05		
<b>Social independence</b>					
Experimental	31	26,22	2,40	-0,244	,808
Control	31	26,38	2,77		

As seen in Table 3, no significant difference was found between the experimental and control groups' pre-test mean scores with respect to social cooperation ( $t=1,299$ ,  $p=0.199$ ), social interaction ( $t=-1,191$ ,  $p=0.238$ ), social independence ( $t=-2,244$ ,  $p=0.808$ ) subscales ( $p>0.05$ ), which suggests that the children in the experimental and control groups have similar traits and represent the population equally well.

The mean scores for externalizing problem behavior, internalizing problem behavior, antisocial behavior and self-centered behavior were compared to see whether there is a significant difference between the problem behavior subscales in the experimental and control groups. No significant difference was found between the groups with respect to externalizing problem behavior ( $t=-0,996$ ,  $p=0,323$ ), internalizing problem behavior ( $t=0,669$ ,  $p=0,506$ ), antisocial behavior ( $t=781$ ,  $p=0,743$ ) and self-centered behavior ( $t=-0644$ ,  $p=0,522$ ) subscales ( $p>0.05$ ), which suggests that the two groups are homogeneous regarding problem behavior subscales.

**Table 4.** Experimental and control group problem behaviors (externalizing problem behavior, internalizing problem behavior, antisocial behavior, self-centered behavior) pre-test results with  $n$ ,  $\bar{X}$ ,  $Ss$  and  $t$  values

	$N$	$\bar{x}$	$Ss$	$t$	$p$
<b>Externalizing problem behavior</b>					
Experimental	31	23,25	6,33	-0,996	,323
Control	31	24,70	5,06		
<b>Internalizing problem behavior</b>					
Experimental	31	7,32	1,73	0,669	,506
Control	31	6,96	2,38		
<b>Antisocial behavior</b>					
Experimental	31	3,83	1,09	0,781	,743
Control	31	3,93	1,20		
<b>Self-centered behavior</b>					
Experimental	31	5,64	2,42	-0,644	,522
Control	31	6,03	2,30		

#### The Difference between the Experimental and Control Group Pre-test/Post-test Mean Scores in Social Skills and Problem Behavior Tests

**Table 5.** Experimental group social skills (social cooperation, social interaction and social independence) pre-test/post-test results with  $n$ ,  $\bar{X}$ ,  $Ss$  and  $t$  values

	$N$	$\bar{x}$	$Ss$	$t$	$p$
<b>Social cooperation</b>					
Pre-test	31	36,74	4,89	-7,934	,001
Post-test	31	43,74	,77		
<b>Social interaction</b>					
Pre-test	31	11,87	2,69	-8,710	,001
Post-test	31	15,80	,79		
<b>Social independence</b>					
Pre-test	31	26,22	2,40	-10,335	,001
Post-test	31	31,41	1,87		

The comparison of the pre-test and post-test scores of the experimental and control group in Table 5 indicates a significant difference between social cooperation ( $t=-7.934$ ;  $p=0.001$ ), social interaction ( $t= -8.710$ ;  $p=0.001$ ) and social independence ( $t= -10.335$ ;  $p=0.001$ ) scores ( $p<0.05$ ). Besides, the post-test mean scores for social cooperation, social interaction and social independence are higher than the pre-test scores, which suggests that Life Skills Education Program may have led to an increase the social skills mean scores of the children in the experimental group.

As seen in Table 6, there is a statistically significant difference between the pre-test and post-test results of the children in the experimental group with respect to externalizing problem behavior ( $t=6,063$ ;  $p=0.001$ ), internalizing problem behavior ( $t= 6,641$ ;  $p=0.001$ ), antisocial behavior ( $t= 3,583$ ;  $p=0.001$ ) and self-centered behavior ( $t= 4,831$ ;  $p=0.001$ ) ( $p<0.05$ ).

**Table 6.** Experimental group problem behaviors (externalizing problem behavior, internalizing problem behavior, antisocial behavior, self-centered behavior) pre-test/post-test results with  $n$ ,  $\bar{X}$ ,  $Ss$  and  $t$  values

	$N$	$\bar{x}$	$Ss$	$t$	$p$
<b>Externalizing problem behavior</b>					
Pre-test	31	23,25	6,33	6,063	,001
Post-test	31	16,51	1,17		
<b>Internalizing problem behavior</b>					
Pre-test	31	7,32	1,73	6,641	,001
Post-test	31	5,22	,95		
<b>Antisocial behavior</b>					
Pre-test	31	3,83	1,09	3,583	,001
Post-test	31	3,06	,35		
<b>Self-centered behavior</b>					
Pre-test	31	5,64	2,42	4,831	,001
Post-test	31	4,06	1,38		

**The Difference between the Control Group Pre-test/Post-test Mean Scores in Social Skills and Problem Behavior Tests**

Table 7 shows that there is no significant difference between the pre-test and post-test mean scores of social cooperation ( $t=-987$ ,  $p=0,332$ ), social interaction ( $t=-1,057$ ,  $p=0,299$ ) and social independence ( $t=-1,086$ ,  $p=0,286$ ) among the children in the control group ( $p>0.05$ ). This means that the difference in the mean scores of children in the control group who did not receive the life skills education is not meaningful.

**Table 7.** Control group social skills (social cooperation, social interaction and social independence) pre-test/post-test results with  $n$ ,  $\bar{X}$ ,  $Ss$  and  $t$  values

	$N$	$\bar{x}$	$Ss$	$t$	$p$
<b>Social cooperation</b>					
Pre-test	31	35,06	5,25	-0,987	,332
Post-test	31	36,51	5,75		
<b>Social interaction</b>					
Pre-test	31	12,74	3,05	-1,057	,299
Post-test	31	13,25	3,16		
<b>Social independence</b>					
Pre-test	31	26,38	2,77	-1,086	,286
Post-test	31	27,32	4,03		

**Table 8** Control group problem behaviors (externalizing problem behavior, internalizing problem behavior, antisocial behavior, self-centered behavior) pre-test/post-test results with  $n$ ,  $\bar{X}$ ,  $Ss$  and  $t$  values

	$N$	$\bar{x}$	$Ss$	$t$	$p$
<b>Externalizing problem behavior</b>					
Pre-test	31	24,70	5,06	0,036	,972
Post-test	31	24,67	6,49		
<b>Internalizing problem behavior</b>					
Pre-test	31	6,96	2,38	0,886	,383
Post-test	31	6,61	1,49		
<b>Antisocial behavior</b>					
Pre-test	31	3,93	1,20	0,960	,345
Post-test	31	3,70	,78		
<b>Self-centered behavior</b>					
Pre-test	31	6,03	2,30	0,387	,702
Post-test	31	5,83	1,59		

The results indicated that there is no significant difference between the pre-test and post-test mean scores of the children in the control group with respect to externalizing problem behavior ( $t= 0,036$ ;  $p=0.972$ ), internalizing problem behavior ( $t= 0.886$ ;  $p=0.383$ ), antisocial behavior ( $t= 0,960$ ;  $p=0.345$ ) and self-centered behavior ( $t= 0,387$ ;  $p=0.702$ ) ( $p>0.05$ ).

### The Difference between the Experimental and Control Group Post-test Mean Scores in Social Skills and Problem Behavior Tests

**Table 9.** Experimental and control group social skills (social cooperation, social interaction and social independence) post-test results with  $n$ ,  $\bar{X}$ ,  $Ss$  and  $t$  values

	$n$	$\bar{x}$	$Ss$	$t$	$p$
<b>Social cooperation</b>					
Experimental	31	43,74	0,77	6,928	,001
Control	31	36,51	5,75		
<b>Social interaction</b>					
Experimental	31	15,80	,79	4,353	,001
Control	31	13,25	3,16		
<b>Social independence</b>					
Experimental	31	31,41	1,87	5,125	,001
Control	31	27,32	4,03		

The analysis to test the difference between the post-test mean scores of the experimental and the control group revealed a significant difference in social cooperation ( $t= 6.928$ ;  $p=0.001$ ), social interaction ( $t= 4.353$ ;  $p=0.001$ ) and social independence ( $t=5,125$ ;  $p=0.001$ ) ( $p<0.05$ ). This implies that the Life Skills Education Program had a positive impact on social skills of the children in the experimental group by leading to a significant increase in their scores.

**Table 10.** Experimental and control group problem behaviors (externalizing problems behavior, internalizing problem behavior, antisocial behavior, self-centered behavior) post-test results with  $n$ ,  $\bar{X}$ ,  $Ss$  and  $t$  values

	$n$	$\bar{x}$	$Ss$	$t$	$p$
<b>Externalizing problem behavior</b>					
Experimental	31	16,51	1,17	-6,886	,001
Control	31	24,67	6,49		
<b>Internalizing problem behavior</b>					
Experimental	31	5,22	,95	-4,345	,001
Control	31	6,61	1,49		
<b>Antisocial behavior</b>					
Experimental	31	3,06	,35	-4,170	,001
Control	31	3,70	,78		
<b>Self-centered behavior</b>					
Experimental	31	4,06	1,38	-4,673	,001
Control	31	5,83	1,59		

The t-test results in Table 10 shows that there is a significant difference in externalizing problem behavior ( $t= -6.886$ ;  $p<0.001$ ), internalizing problem behavior ( $t= -4.345$ ;  $p=0.001$ ), antisocial behavior ( $t= -4.170$ ;  $p=0.001$ ) and self-centered behavior ( $t= -4,673$ ;  $p=0.001$ ) on behalf of the experimental group ( $p<0.05$ ).

### The Difference between the Experimental Group Post-test/Follow-up Test Mean Scores in Social Skills and Problem Behavior Tests

The comparison of the post-test and follow-up mean scores of the children in the experimental group in Table 11 shows that there is a significant difference in social cooperation scores ( $t=1,858$ ;  $p=0,073$ ), social interaction scores ( $t=0.925$ ;  $p=0.362$ ) and social independence



scores ( $t=0,423$ ;  $p=0,675$ ) ( $p>0,05$ ). This means that the effects of the Life Skills Education program were lasting 12 weeks later.

**Table 11.** *Experimental group social skills (social cooperation, social interaction and social independence) post-test/follow-up results with n,  $\bar{X}$ , Ss and t values*

	<i>N</i>	$\bar{x}$	<i>Ss</i>	<i>t</i>	<i>p</i>
<b>Social cooperation</b>					
Post-test	31	43,74	,77	1,858	,073
Follow-up test	31	43,48	,81		
<b>Social interaction</b>					
Post-test	31	15,80	,79	0,925	,362
Follow-up test	31	15,58	1,14		
<b>Social independence</b>					
Post-test	31	31,41	1,87	0,423	,675
Follow-up test	31	31,32	1,53		

**Table 12.** *Experimental group problem behaviors (externalizing problem behavior, internalizing problem behavior, antisocial behavior, self-centered behavior) post-test/follow-up test results with n,  $\bar{X}$ , Ss and t values*

	<i>N</i>	$\bar{x}$	<i>Ss</i>	<i>t</i>	<i>p</i>
<b>Externalizing problem behavior</b>					
Post-test	31	16,51	1,17	-0,900	,374
Follow-up test	31	17,19	4,05		
<b>Internalizing problem behavior</b>					
Post-test	31	5,22	,95	-0,594	,557
Follow-up test	31	5,25	,51		
<b>Antisocial behavior</b>					
Post-test	31	3,06	,35	-1,161	,255
Follow-up test	31	3,19	,60		
<b>Self-centered behavior</b>					
Post-test	31	4,06	1,38	1,718	,096
Follow-up test	31	3,74	1,18		

The t-test results for the post-test and follow-up mean scores of the children in the experimental group in Table 12 shows that there is no significant difference in externalizing problem behavior scores ( $t= -0,900$ ;  $p=0,374$ ) internalizing problem behavior scores ( $t=-0,594$ ;  $p=0,557$ ) antisocial behavior scores ( $t= -1,161$ ;  $p=0,255$ ) and self-centered behavior scores ( $t=1,718$ ;  $p=0,096$ ) ( $p>0,05$ ). Although there seems to be small increase in the problem behaviors of the children who received the life skills program, it is not statistically significant.

## DISCUSSION and CONCLUSION

The current study aimed to test the effects of the Life Skills Program on 4-year-old preschoolers' social skills and problem behaviors. The results showed that the social skills (social cooperation, social interaction, social independence and social acceptance skills) of the children who received the Life Skills Program improved significantly while their problem behavior (externalizing problem behavior, internalizing problem behavior, antisocial behavior and self-centered behavior) scores reduced dramatically. In their experimental study, Baker-Henningham, Scott, Jones and Walker (2012) investigated the effects of Incredible Years Teacher Training intervention and they found significant reductions to behavior difficulties and significant increases in social skills and friendship skills. Similar to the Life Skills Program, it is an experimental and school-based program for lower and middle-income families with its low cost. It was found to reduce behavior problems and improve social skills both at home and school. Stoltz, Londen, Deković, Castro and Prinzie (2012) compared the results of two meta-

analyses on the effectiveness of school-based intervention programs for externalizing behavior problems at elementary schools and found that intervention programs helped to reduce the externalizing problem behavior for children-at-risk. They also revealed that intervention programs with additional components are more likely to be beneficial for younger children. Lösel and Beelmann (2003) presented a meta-analysis on the effects of social skills training on preventing antisocial behavior in children and adolescents. They included 135 comparisons between 16,723 treated and untreated youth. Their results showed that the majority of the studies they investigated proved the interventions and trainings are beneficial. They stated that the programs developed specifically for children-at-risk tend to be more effective compared to the programs with broader scopes and that cognitive-behavioral programs are more effective on antisocial behavior. Benítez et al., (2011), who examined the effects of Life Skills Education Program in Spain, obtained similar findings for supporting social skills and preventing problem behaviors among 4-year-old children. Their sample was made up of four-year-old children (n = 147) divided into a control group (n = 69) and an experimental group (n = 78). The Child Behavior Checklist—Teacher Report Form (CBCL-TRF) developed by the researchers and the Preschool and Kindergarten Behavior Scales (PKBS) completed by the teachers and parents were used for the data collection. They observed a dramatic and long-lasting increase in children's social skills while their problem behaviors reduced significantly. The Early Impact Program, developed by Larmar, Dadds and Shochet (2006) for 4 and 5-year-old children, aims to support teacher-student communication and self-control. It also helps children learn how to work in a positive way and manage prosocial behavior while encouraging parents to work on their attitudes, authority, parental values, beliefs, communication styles, establishing rules and reinforcing positive behavior. Medium and long-term improvements in problem behavior were reported in the classrooms that received the intervention, which further supports the long-lasting effects of programs in the early years.

Similar outcomes were attained in the studies in Turkey. Özbey (2009) investigated the effects of Social Skills and Problem Behavior Training for Preschoolers (60-72 months) and used Preschool and Kindergarten Behavior Scales (PKBS-2) for the data collection. She also found a significant difference in the scores favoring the experimental group. The follow-up test results proved the durability of change. Karaoğlu (2011) investigated the effects The First Step to Success (FSS) Early Intervention developed for 5 and 6-year-old preschoolers and on problem behavior, social skills and attention span on academic activities and obtained similar results supporting our findings. When the First Step to Success program was implemented at home and school, it helped to reduce problem behavior and externalizing problem behavior significantly while improving social skills, including cooperation, assertiveness and self-control compared to the control group. Günindi (2010), who studied the impact of social adaptation skills education program for 6-year-old preschoolers found that after the 12-week training the experimental children's social adaptation skills improved while their social dissonance reduced. The follow-up test results indicated that the improvement in social skills grew in subsequent weeks as well. Diken et al. (2011) observed the effects of First Steps to Success on children-at-risk with respect to problem behavior, social skills and academic performance. Findings revealed significant differences between the experimental and control group in social skills and problem behavior. The significant increase in social skills and decrease in problem behavior is in line with the results of the current study. Ekinçi (2006) studied the effects of Social Skills Training Program for Preschoolers with Parent Involvement on emotional and social skills and found that the experimental children scored higher than the control group children in interpersonal relationships, oral expression, listening, and self-control. In his study, Yukay (2006) probed the effects of social skills training program on interpersonal relationships of 18 children who were 6 years old. He similarly found that activities to foster interpersonal communication skills support peer relationships among children as in our study.

According to the results of the current study, the social skills (social cooperation, social interaction, social independence and social acceptance skills) of the children who participated in the Life Skills Program improved significantly while their problem behavior (externalizing problem behavior, internalizing problem behavior, antisocial behavior and self-centered behavior) scores reduced dramatically with its at least 12-week lasting effect. Future studies may develop different programs other than the Life Skills Program to support preschoolers who

have social incompetence and problem behavior. Researches may also work with larger samples to further test the effects of the Life Skills Program so more children could benefit from it. The comparison of the data collected from children with different economic, social and cultural backgrounds, children with special needs or children with different ages (ages 3, 4, and 5) would improve the validity and reliability of the program.

## REFERENCES

- Alisinanoğlu, F., & Özbey, S. (2009). Anaokulu ve anasınıfı davranış ölçeğinin geçerlilik ve güvenirlik çalışması. *Mesleki Eğitim Fakültesi Dergisi*, 1(173-198).
- Avcioğlu, H. (2005). Etkinliklerle sosyal beceri öğretimi (Vol. 2). Ankara: Kök yayınları.
- Bacanlı, H. (2008). Sosyal beceri eğitimi. Ankara: Asal yayınları.
- Bailey, D. B., & Wolery, M. (1992). *Teaching infants and preschoolers with disabilities* (Vol. 2. Baskı): Prentice Hall.
- Baker-Henningham, H., Scott, S., Jones, K., & Walker, S. (2012). Reducing child conduct problems and promoting social skills in a middle-income country: cluster randomised controlled trial. *The British Journal of Psychiatry*, 201(2), 101-108.
- Benítez, J. L., Fernández, M., Justicia, F., Fernández, E., & Justicia, A. (2011). Results of the Aprender a Convivir Program for development of social competence and prevention of antisocial behavior in four-year-old children. *School Psychology International*, 32(1), 3-19.
- Birkan, B. (2002). Çocuklarda davranış sorunları ve başa çıkma yolları. *Çoluk Çocuk Aylık Anne Baba Eğitimci Dergisi*, 17, 18-20.
- Bruder, M. B. (2010). Early childhood intervention: A promise to children and families for their future. *Exceptional children*, 76(3), 339-355.
- Caldarella, P., & Merrell, K. W. (1997). Common dimensions of social skills of children and adolescents: A taxonomy of positive behaviors. *School Psychology Review*(26), 264-278.
- Çifci, İ., & Sucuoğlu, B. (2004). *Bilişsel süreç yaklaşımıyla sosyal beceri öğretimi* (Vol. 4. Baskı). Ankara: Kök Yayıncılık.
- Diken, I. H., Cavkaytar, A., Batu, E. S., Bozkurt, F., & Kurtılmaz, Y. (2011). Implementation of Turkish Version of First Step to Success Program for Preventing Antisocial Behaviors. *Eğitim ve Bilim*, 36(161), 145.
- Doss, L., & Reichle, J. (1991). Replacing excess behavior with an initial communicative repertoire. In J. Y. J. Reichle (Ed.), *Implementing augmentative and alternative communication: Strategies for learners with severe disabilities* (pp. 215-237). Baltimore MD Paul Brooks.
- Duruoalp, E., & Aral, N. (2009). *Anasınıfına devam eden altı yaş çocuklarının sosyal uyum ve becerilerine oyun temelli sosyal beceri eğitiminin etkisinin incelenmesi: Çankırı örneği*. (Yayınlanmamış Doktora Tezi), Ankara Üniversitesi, Ankara.
- Ekinci, V., DENİZ. (2006). *Okul öncesi eğitim programındaki duyuşsal ve sosyal becerilere yönelik hedeflere uygun olarak hazırlanan aile katılımlı sosyal beceri eğitimi programının çocuklarda sosyal becerilerin gelişimine etkisi*. (Yayınlanmamış Doktora Tezi), Dokuz Eylül Üniversitesi, Eğitim Bilimleri Enstitüsü, İlköğretim Anabilim Dalı, Okul Öncesi Öğretmenliği Programı.
- Ergenekon, Y. (2012). Sosyal yeterlikle ilişkili kavramlar ve sosyal yeterliğin bileşenleri *Sosyal Yeterliklerin Geliştirilmesi: Sosyal Beceri Yetersizliği Gösteren Çocuklar İçin* (pp. 15-33). Ankara: Vize Yayıncılık.
- Fischer, M., Rolf, J. E., Hasazi, J. E., & Cummings, L. (1984). Follow-up of a preschool epidemiological sample: Cross-age continuities and predictions of later adjustment with internalizing and externalizing dimensions of behavior. *Child development*, 55(1), 137-150.
- Gewertz, C. (2003). Hand in hand. *Education Week*, 23(1), 38-42.
- Gimpel, G. A., & Holland, M. L. (2003). Emotional and behavioral problems of young children: Effective interventions. New York: Guilford Pres.
- Gresham, F. M., & Elliott, S. N. (1990). *Social skills rating system: MN*: American Guidance Service.
- Gresham, F. M., Sugai, G., & Horner, R. H. (2001). Interpreting outcomes of social skills training for students with high-incidence disabilities. *Exceptional children*, 67(3), 331-344.
- Günindi, Y. (2010). *Anasınıfına devam eden altı yaş çocuklarına uygulanan sosyal uyum beceri eğitimi programının çocukların sosyal uyum becerilerinin gelişimine etkisi*. (Yayınlanmamış Doktora Tezi), Gazi Üniversitesi, Ankara.
- Günindi, Y. (2011). Bağımsız anaokullarına ve anasınıflarına devam eden çocukların sosyal becerilerinin değerlendirilmesi. *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi*, 12(1), 133-144.
- Karaoğlu, M. (2011). *Başarıya ilk adım erken müdahale programının 5-6 yaş grubu çocuklarının problem davranışlarına, sosyal becerilerine ve akademik etkinliklerle ilgilenme sürelerine olan etkisi*. (Yayınlanmamış Doktora Tezi, ), Marmara Üniversitesi, Eğitim Bilimleri Enstitüsü,, İstanbul.

- Larmar, S., Dadds, M. R., & Shochet, I. (2006). Successes and challenges in preventing conduct problems in Australian preschool-aged children through the Early Impact (EI) Program. *Behaviour Change*, 23(2), 121-137.
- Lösel, F., & Beelmann, A. (2003). Effects of child skills training in preventing antisocial behavior: A systematic review of randomized evaluations. *The Annals of the American Academy of Political and Social Science*, 587(1), 84-109.
- Olweus, D., Block, J., & Radke-Yarrow, M. (1986). *Development of antisocial and prosocial behavior: Research, theories, and issues*. New York: Academic Press.
- Önder, A. (2003). Okul öncesi çocukları için eğitici drama uygulamaları. İstanbul: Morpa Kültür Yayınları.
- Özbey, S. (2009). *Anaokulu ve anasınıfı davranış ölçeği'nin (PKBS-2) geçerlik güvenirlik çalışması ve destekleyici eğitim programının etkisinin incelenmesi*. (Yayınlanmamış Doktora Tezi), Gazi Üniversitesi Eğitim Bilimleri Enstitüsü, Çocuk Gelişimi ve Eğitimi Anabilim Dalı, Okul Öncesi Eğitimi Bilim Dalı, Ankara.
- Reid, J. B. (1993). Prevention of conduct disorder before and after school entry: Relating interventions to developmental findings. *Development and psychopathology*, 5(1-2), 243-262.
- Rusby, J. C. (1999). *Investigation of an activity-based assessment of peer interactions to identify preschool-age children in need of social interventions*. (Ph.D Theses), University of Oregon.
- Senemoğlu, N. (1994). Okulöncesi eğitim programı hangi yeterlikleri kazandırmalıdır? *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 10(10), 21-30.
- Stoltz, S., Londen, M. v., Deković, M., Castro, B. O. d., & Prinzie, P. (2012). Effectiveness of individually delivered indicated school-based interventions on externalizing behavior. *International Journal of Behavioral Development*, 36(5), 381-388.
- Ünal, H. (2006). *Davranım bozukluğu tanısı alan ilköğretim öğrencilerine okullarda sunulan psikolojik danışmanlık hizmetlerinin incelenmesi*. (Yayınlanmamış Yüksek Lisans Tezi), Çukurova Üniversitesi, Sosyal Bilimler Enstitüsü.
- Walker, H. M., Kavanagh, K., Stiller, B., Golly, A., Severson, H. H., & Feil, E. G. (1998). First step to success: An early intervention approach for preventing school antisocial behavior. *Journal of emotional and behavioral disorders*, 6(2), 66-80.
- Yukay, M. (2006). *Okul öncesi dönemdeki çocukların kişilerarası ilişkilerini geliştirmeye yönelik hazırlanmış sosyal beceri eğitimi programının değerlendirilmesi*. Paper presented at the I. Uluslararası Okulöncesi Eğitim Kongresi.