PREVENTING PRESCHOOLERS' SOCIAL SKILL DEFICITS THROUGH A CHILD TRAINING PROGRAM

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DECLARATION OF ORIGINALITY

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ABSTRACT

Preventing Preschoolers' Social Skill Deficits Through a Child Training Program

Social skills gained in the preschool period affect important areas like peer relations, school success, and mental health in later years. Impact research on social skills training programs in Turkey is limited in terms of sample size and assessment tools. This study aimed to develop a researcher-led social skills training program for preschoolers and examine its effects on children's social competence, social and emotion understanding skills, social problem solving and play behaviors. In this randomized control, pretest-posttest study, preschools from Bakırköy municipality schools were randomly assigned to intervention and control groups. Intervention group received a 12-week program, which consisted of weekly, 40-minute researcher-led classroom sessions between February and May 2017. A total of 181 children (61 control, 120 intervention) whose ages ranged from 46 to 74 months, their mothers and teachers participated in the study. Before and after the program implementation, mothers and teachers completed behavior rating scales, and children were administered individual tests to obtain data on their social and emotional competence. Children in the intervention group were also observed in free play time. Results revealed that children in the intervention group showed more increase in social competence and prosocial responses to peer provocation between pre- and post-test compared to children in the control group. A downward trend in aggressive problem solutions was also observed in intervention group. Unexpectedly, intervention children showed more increase in anger-aggression scores between pre- and post-test compared to control group. Results have been discussed with respect to program content, delivery method and assessment tools along with study limitations.

ÖZET

Çocuk Eğitim Programı ile Okul Öncesi Çocuklarının Sosyal Beceri Eksikliklerinin Önlenmesi

Okul öncesi dönemde kazanılan sosyal becerilerin ileriki yıllarda akran ilişkileri, okul başarısı, ruh sağlığı gibi önemli alanlara etki ettiği bilinmektedir. Türkiye'deki okulöncesi sosyal beceri eğitim programı çalışmaları, katılımcı sayısı ve değerlendirme araçları açılarından sınırlıdır. Bu çalışmanın amacı, literatürdeki boşluğu gözeterek okul öncesi çocuklarına yönelik bir çocuk eğitim programı geliştirmek ve programın sosyal yetkinlik, sosyal beceriler, duygu anlama becerileri, sosyal problem çözme ve oyun davranışları alanlarındaki etkisini araştırmaktır. Öntest-sontest deseni kullanılan bu çalışmada, Bakırköy belediyesine bağlı anaokulları rastgele biçimde kontrol ve müdahale grubu olarak seçilmiştir. Müdahale grubuna Şubat ve Mayıs 2017 tarihleri arasında 12 haftalık program, haftada 1 defa 40 dakikalık oturumlar halinde araştırmacı tarafından sınıf ortamında uygulanmıştır. Araştırmaya, yaşları 46 ile 74 ay arasında değişen 181 çocuk (61'i kontrol grubu, 120'si müdahale grubu) ile çocukların anne ve öğretmenleri katılmıştır. Programın öncesi ve sonrasında, sosyal ve duygusal yetkinliği ölçmek amacıyla anne ve öğretmenlere davranış değerlendirme ölçekleri, çocuklara ise bireysel testler uygulanmıştır. Ayrıca müdahale grubunun oyun davranışları gözlemlenmiştir. Sonuçlara göre, müdahale grubunun öğretmenlerine göre sosyal yetkinliği ve akran kışkırtmasına karşısında olumlu sosyal tepkileri öntest ve sontest arasında kontrol grubuna göre belirgin biçimde artmıştır. Saldırgan problem çözme davranışlarında ise bir azalma eğilimi göze çarpmıştır. Beklenmeyen bir biçimde, müdahale grubu öntest ve sontest arasında kontrol grubuna göre daha yüksek kızgın-

saldırgan puanları almıştır. Bulgular, eğitim programının içeriği, kullandığı öğretim yöntemi, değerlendirme araçlarıyla ve çalışmanın sınırlılıklarıyla tartışılmıştır.

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ABREVIATIONS

AA: Anger-Aggression

AW: Anxiety-Withdrawal

CASEL: The Collaborative for Academic, Social, and Emotional Learning

CST-R: Challenging Situations Task-Revised

MTA: The Collaborative Multimodal Treatment Study of Children with Attention Deficit Hyperactivity Disorder

PKBS-2: Preschool and Kindergarten Behavior Scales, Second Edition

SC: Social Competence

SCBE-30: Social Competence and Behavior Evaluation Scale - 30

SEL: Social and Emotional Learning

TEC: Test of Emotion Comprehension

CHAPTER 1

INTRODUCTION

Preschool years constitute an important stage in early childhood as children spend more time with peers and engage in play activities with them (Rubin, Bukowski, & Parker, 2006). Research shows that social skills like helping and sharing, imitating peer's actions, turn taking, adapting own behaviors according to playmates are displayed starting by toddlerhood (Rubin et al., 2006). In preschool age, children also gain the "ability to share meaning through social pretend play and rough-and-tumble play, use speech forms that demonstrate an understanding of the listener's characteristics and spontaneously direct prosocial behaviors to peers" (Rubin, Bukowski, & Parker, 1998 as cited in Kemple, 2004, p.3). Children are now expected to understand social cues and interpret them accurately, adopt appropriate problem-solving goals and strategies for social situations (Denham, 2006).

Children who use a set of social skills in their interactions with peers in early childhood are more likely to acquire a wider range of skills as they grow up and become more socially competent (Rose-Krasnor & Denham, 2009). While children's display of positive social behaviors and skills may lead to better classroom adjustment, academic readiness and peer liking, failure to exhibit these socially appropriate behaviors may increase risk of peer rejection (Denham, Bassett, Zinsser, & Wyatt, 2014; Johnson, Ironsmith, Snow, & Poteat, 2000; Keane & Calkins, 2004; Ziv, 2013). Children who experience peer rejection in early years of school are prone to loneliness in late childhood and to anxious/depressed symptoms in adolescence (Fontaine, 2009). Arnold (1997) has also shown that teachers are less engaged with disruptive children in the classroom.

These findings point to the importance of socioemotional skills of young children in their adaptation to the preschool context. Thus, the application of school based social-emotional competence programs is crucial given that children spend a substantial amount of time in school or childcare settings (Pahl & Barrett, 2007). Numerous empirical research studies and meta-analyses demonstrated that social emotional learning (SEL) programs in schools lead to improvements on various well-being areas such as mental health, peer relations, and academic success (Beelman & Lösel, 2006; Corcoran, Cheung, Kim, & Xie, 2018; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Pahl & Barrett, 2010; Webster-Stratton & Reid, 2004). At the end of the effective SEL programs, children do not show improvements only in emotion management, empathy, and problem solving skills, "they also display responsible and respectful attitudes and behaviors about self, others, work, health, and citizenship" (Weisberg & O'Brien, 2004, p.95).

Given the importance of SEL in preschool settings, the goal of this study was to develop and evaluate the effectiveness of a researcher-led social skills program for preschoolers in Turkey. The literature review below first describes important concepts and issues, followed by a brief review of social skills programs for young children.

1.1 Social skills

Gresham (2016) mentioned the importance of social skills conceptualization. He defined the term of social skills and described its relation to social tasks in the following way:

> Social skills can be conceptualized as a specific class of behaviors that an individual exhibits in order to successfully complete a social task. Social

> tasks might include such things as peer group entry, having a conversation, making friends, or playing a game with peers (p. 320).

Calderella and Merrell (1997) developed a multidimensional description for the concept of social skills based on 21 empirical research studies on children and adolescents' social skills. Five dimensions of social skills are specified as peer relations, self-management, academic skills, compliance, and assertion skills. Relevant to this matter, another concept, social skill deficits were defined by Gresham and Elliott (1990) as failures to learn or perform social skills, primarily due to problem behaviors. Spence (2003) also argued that children's anxiety or anger level act to prevent an effective performance for social skills. When children and adolescents have difficulties in performing appropriate behaviors, they may turn towards unhealthy behaviors to meet their needs and wishes, such as aggressive behaviors to get approval from deviant peers.

Gresham (2016) labeled two different kinds of social skills deficits. The first type was characterized as acquisition/learning social skills deficits such that children do not know which behavioral sequence that they should follow to perform the skill or which social situation requires a specific social skill despite having adequate motivation. The second type of social skill deficit defined by Gresham was labeled as performance/motivational social skills deficits. In this situation, children may possess adequate knowledge on the skill and related behavioral process, yet they do not display these skills in social interactions. The distinction creates a clearer picture of the mechanism underlying social skills deficits and serves as a guide for the development and implementation of intervention programs for specific types of deficits.

Perren and Alsaker (2009) made a different kind of distinction between social skills deficits based on the focus of the skill: self-oriented and other oriented. The aim of their study was to clarify the relations among social skill deficits, peer victimization and internalizing behavior of preschoolers based on teachers' reports. They found that children, who fail to exhibit self-oriented social skills (e.g., assertive behaviors and social participation) are more likely to exhibit more depressive symptoms than their peers. According to these authors, children do not feel gratified in social relationships when they cannot join social interactions, or they cannot set limits or show leadership in their interactions with peers. On the other hand, children, who lack other-oriented social skills (e.g., prosocial, cooperative, non-aggressive behaviors), are more likely to experience depressive symptoms, especially if they receive negative reactions from their peers such as peer victimization.

1.2 Social competence

Social competence, another term associated with social skills, has various definitions in the literature. The term was described by Rubin and Rose-Krasnor (1992) as one's ability to meet her/his desires and needs in social interactions while sustaining positive relationships with the environment. Social competence requires the use of specific social skills such as initiating and maintaining interactions, resolving conflicts, making friendships (Guralnick & Neville, 1997). Spence (2003) argued that social competence is a broad concept which was shaped by the combination of various emotional, cognitive and environmental factors. Some of these important factors are emotion and self-regulation skills, interpersonal problem solving skills, thinking styles, perspective taking, models and teachers of prosocial skills and lastly, environmental conditions affecting social behavior.

Gresham (2016) considered social competence from a different angle. According to him, the primary characteristic of social competence is its reliance on the judgment of another person, such as a parent and teacher, about one's performance for a social task. After witnessing social behaviors for a number of times in a specific context like home or school, these judgments are created by those individuals.

Social competence is closely related to children's emotional competence (Denham, 2006). Specifically, emotional competence consists of three main components; emotional expressiveness, emotional knowledge and emotion regulation. With the help of these abilities in three domains, young children become successful at initiating and maintaining social relationships (Curby, Brown, Bassett, & Denham, 2015; Denham et al., 2003).

The first component of emotional competence, namely emotional expressiveness was defined by Kring, Smith and Neale (1994) as "the outward display of emotion, regardless of valence (positive or negative) or channel (facial, vocal, or gestural)" (p. 934). Emotional expressiveness influences how children are perceived by their peers and teachers. Children, who express more positive emotions than negative emotions, are regarded as more likable according to their peers (Arsenio, Cooperman, & Lover, 2000; Walter & LaFreniere, 2000). The second component, children's emotional knowledge defined as the ability to identify and interpret one's and others' emotions accurately, also shows significant improvement in the preschool period (Denham, 2006). It is expected that children comprehend the basic emotions from the face expressions and situations (Denham, 1986). In addition to that, children begin to understand that others' emotions can be different than one's emotions, and a person can feel multiple emotions at the same time (Denham, 2006).

Finally, the last component of emotional competence, emotion regulation, was defined by Thompson (1994) as “extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals” (p. 27-28). Preschool age is important because children acquire more skills to regulate both their emotions and emotion-related behaviors in these years (Yeates et al., 2007). Although children at this stage may still need adult support in regulating their emotions, they can also self-initiate emotion regulation strategies such as distraction (Thompson, 1994). It was found that emotion regulation is positively associated with social competence in children (Denham, 2003). Children who cannot regulate emotions effectively have difficulties about giving appropriate responses to social situations. These children with uncontrolled expressions of intense emotions are more likely to be perceived negatively by their social partners (Denham, 2006). Also, there is consistent evidence that emotion regulation deficits are associated with higher levels of internalizing and externalizing problems in children (Zeman, Cassano, Perry-Parrish, & Stegall, 2006).

A study with Turkish 7-years old children, demonstrated that deficits in emotion regulation and behavior regulation, which are intercorrelated abilities, separately predict externalizing behaviors (Batum & Yağmurlu, 2007). A study also showed that adaptive emotion regulation strategies may serve as protective factors against problem behaviors in the presence of a risk factor (Silk, Shaw, Forbes, Lane & Kovacs, 2006). Researchers of the study found that children who focus on positive emotions in a situation, which elicits negative emotions (being waited for a cookie or toy), have lower levels of internalizing problem behaviors. The effect of positive emotion display on internalizing problems are observed strongest in children with depressed mothers. Another study also showed that children who can use active

distraction -a healthy emotional regulation strategy- at kindergarten, face with less peer rejection in their middle childhood. The peer rejection they experience in that period predicts their antisocial behaviors in early adolescence years (Trentacosta & Shaw, 2009).

Social and emotional competence also relates to children's play skills and behaviors. A longitudinal study Howes and Matheson (1992) focused on play types and social behaviors exhibited in toddlerhood and preschool years. It was found that children who engaged in complex play forms in early ages display more prosocial and less withdrawal and aggressive behaviors in the following age periods according to teacher and observer ratings. The complexity of play is also associated with social competence because complex play such as reciprocal and pretend play is only possible if children exhibit adequate flexibility and sensitivity to their playmates' wishes. Also, complex play forms require advanced understanding of one's and other's role during an interaction in contrast to parallel and simple play, which do not involve role reversal.

Consistent with Gresham and Elliot's model of social behavior, Gagnon and Nagle (2004) found that children who use social emotional skills effectively display less aggressive behavior and more prosocial behavior during play with their peers. Additionally, children's nonsocial play, withdrawn and disruptive behaviors in play were found to be negatively associated with their social skills. Another research on preschool period also showed that children who are successful at self-control and interpersonal skills exhibit more positive behaviors during play (Fantuzzo, Mendez & Tighe, 1998).

1.3 Long term effects of socioemotional skills and problem behaviors

As can be expected, researchers examined how preschool socioemotional skills and behaviors are related to emotional well-being and problem symptoms in the following years. For example, a study demonstrated that social skills in early childhood are negatively related to internalizing and externalizing behaviors in late childhood and early adolescence years regardless of their behavior symptoms in the preschool years according to mother reports (Bornstein, Hahn, & Haynes, 2010). Some researchers also showed that behavioral problems and avoidance in social participation may have impacts on mental health along with the poor peer acceptance in later periods. For example, Gazelle and Ladd (2003) demonstrated that preschool children, who are socially anxious and engage in more solitary behaviors than group activities, were more likely to develop depressive symptoms through fourth grade if they also experienced peer exclusion in preschool years. Studies with older age groups also supported the findings with preschool population. A research study with third and sixth graders investigated the links of academic and social competence with depression throughout a year (Cole, 1996). According to self, parent, teacher and peer ratings, higher social competence predicted less depression for 6th graders regardless of their depression scores at the beginning.

A comprehensive study focused on the changes in different areas of development in a 5-year period (Guhn, Gadermann, Almas, Schonert-Reichl, & Hertzman, 2016). This study included more than 7000 children and investigated the association of social competence, emotional maturity and cognitive development in kindergarten with connectedness to peers, emotional well-being and academic achievement in 4th grade. It was found that all child variables measured in early childhood were correlated with all middle childhood variables. But the strongest

relationships were found between variables of the same competence area. Specifically, the more children were rated as socially competent, the more they were reported connected to peers (i.e., peer belonging and friendship intimacy) five years later. When children's emotional maturity rating increased, their emotional well-being (i.e., life satisfaction, optimistic attitude, self-content) also strongly increased.

As might be expected, another widely investigated relationship in the literature was between socioemotional skills at early childhood and academic success in later stages. In a study (Agostin & Bain, 1997), it was found that cooperation and assertion skills rated by kindergarten teachers was positively related with the scores of all SAT subtests, which are total reading, total math, listening and language at the end of the first grade. Results also showed that higher internalizing behaviors at kindergarten predicted lower scores on four subtests of SAT scores. Child externalizing behavior problem was only related to language scores in a negative direction. In a longitudinal study from kindergarten to eight grade, social skills of participants were rated by teachers (Caemmerer & Keith, 2015). A small and mostly indirect but significant relation between children's social skills and math as well as reading performance was observed. Another research found that children who show high levels of emotional competence at preschool, were evaluated better on classroom adjustment and academic readiness by their teachers at kindergarten (Denham, Bassett, Zinsser, & Wyatt, 2014). Researchers also focused on another variable which may serve as a vital determinant of academic achievement, namely, student-teacher relationship. Howes, Phillipsen, and Peisner-Feinberg (2000) examined the link between children's social skills and problem behaviors at two years of preschool and teacher-children relationship at kindergarten. It was found that children who were rated by their preschool teacher as sociable, were rated by

their kindergarten teachers as closer, less conflictual and less dependent in their teacher-student relationship. In contrary, children with higher scores on problem behavior were rated as less close, more conflictual and more dependent by their teachers.

In an extensive research, Jones, Greenberg, and Crowley (2015) showed that prosocial skills at kindergarten predict various outcomes in different areas at young adulthood and adulthood periods. Results revealed that higher prosocial skills at early childhood was related to earning a college degree, graduating high school timely, having stable employment at the age of 19 years and working in a fulltime job at 25 years age. A significant negative relationship was observed between social skills and number of years for repeating grades through high school and number of years in special education. In addition to these, children with low prosocial skills appeared to get public assistance and live in public houses more compared to their higher skilled peers. They are also more likely to get involved with police, stay in detention facility, appear in a court and be arrested in young adulthood. Lower prosocial skills related with higher frequency in use of marijuana and binge drinking in early adulthood. A significant negative association was also observed between social skills at kindergarten and number of years with medication for emotional or behavioral difficulties through high school.

1.4 Social and emotional learning

Given the important short- and long-term correlates of social and emotional competence for children's psychological outcomes, the Collaborative for Academic, Social, and Emotional Learning (CASEL; 2003), suggested five social and emotional competencies as the target areas of socioemotional learning (SEL) in schools (Zins &

Elias, 2007). These are self-awareness, social awareness, self-management, relationship skills and responsible decision making. These competencies can be reached only in a positive and safe learning atmosphere, in which a children's personal needs and problems are recognized and supported. While a supportive learning environment contributes to SEL skills, these skills also act to contribute to a positive learning atmosphere.

SEL perspective generally focuses on the improvement of socioemotional skills and the prevention of behavior difficulties rather than intervening with present behavior problems. The priority of SEL is to target all children's wellbeing through supporting their adaptive skills and behaviors (Zins & Elias, 2007).

According to Weisberg and O'Brien (2004), effective programs based on SEL approaches are designed and implemented with the aim of embracing all grades from preschool to high school, by setting learning objectives according to children's developmental needs and competencies. While they pay attention to age-related differences, they place importance to cultural factors and diversity in every single step of the programming. It is also expected that the acquired skills, attitudes and behaviors would be consolidated by the support of various figures in children' lives such as parents and teachers in diverse settings. Zins and Elias (2007) argued that the positive effects of SEL approach involves students, parents, educators and other members of the society in each stages of programming like planning, implementing and evaluation.

The preventive SEL programs are carried out in three forms, namely, in universal, selective and indicated approach. In the universal approach, the intervention program is applied to the entire population such as to all children at school or in a classroom. Selected prevention is aimed at individuals, who are at risk

of developing problematic behaviors such as a group of students with a high risk of behavior problems. Finally, indicated prevention is aimed at individuals, who already have experienced problematic behaviors such as students with a specific diagnosis (January, Casey, & Paulson, 2011).

Universal programs have some advantages compared to other prevention styles (January et al., 2011). These programs are easy and less costly to implement (Beelman & Lösel, 2006). Moreover, applying preventive programs for a specially selected group of children may cause stigmatizations by the peer group (January et al., 2011). Besides, children who are gathered for an intervention of a common problem can influence each other negatively, and thus current symptoms may increase (Dishion, McCord, & Poulin, 1999 as cited in January et al., 2011).

1.5 Effects of SEL interventions on child outcomes

In a meta-analysis, a total of 249 experimental and quasi-experimental studies on school-based psychosocial intervention programs were examined to identify the effects of those programs aimed at reducing aggressive and disruptive behavior (Wilson & Lipsey, 2007). To reach this goal, studies that embraced different approaches such as social skill training, social problem solving, or anger management were examined. They were implemented by different types of trainers in various durations and intensities. The target groups also changed according to the socioeconomic status (SES) and school grade. Children from pre-kindergarten to 12th grade received these trainings. It was found that most satisfactory results were obtained from universal and targeted interventions rather than special class/school interventions and multimodal programs.

The results also demonstrated that universal interventions led to more successful outcomes for children with higher risk profile and economic disadvantages. In selected interventions, children who already exhibit more problem behaviors benefited most. It was also seen that studies by researchers, who did not engage in the development and implementation of the program, were not significantly less effective than the studies with an intervening researcher.

Another meta-analysis was conducted by Durlak, Weissberg, Dymnicki, Taylor, and Schellinger (2011) examined the effects of 213 school-based social emotional learning programs applied from kindergarten through high school. These SEL programs showed small but significantly positive effects at post intervention. In 33 studies, data was collected at least 6 months after the intervention ends and intervention effects remained significant at follow-up. It was found that interventions resulted in improvement in four areas: social emotional skills, positive social behaviors, attitudes towards self and others, and academic performance. Children who attended the programs were also less likely to show conduct problems and emotional distress compared to children in control groups, who were not exposed to social-emotional skills training.

It was observed that some factors play an important role in the effectiveness of the programs (Durlak et al., 2011). Firstly, programs conducted by teachers versus non-school personnel and implemented in classroom only versus school-wide had impact on more areas. Only three areas, namely socioemotional learning skills, prosocial attitudes and conduct problems were affected when non-school personnel implemented the program. Furthermore, no difference was found between programs with a single component compared to multicomponent programs, in which classroom training is delivered along with school-wide changes or parent inclusion.

Also, SAFE principles for promoting skills moderated program outcomes (Durlak et al., 2011). Programs adopting SAFE principles (sequenced, active, focused and explicit) follow content in a meaningful sequence, use active forms of learning, adopt at least one component and aim to target specific skills rather than improving general condition of children. It was found that this type of programs created significant effects in six areas, namely social and emotional skills, attitudes toward self and others, positive social behaviors, conduct problems, emotional distress, and academic performance, whereas programs which fail to meet SAFE principles were beneficial only in terms of attitudes, conduct problems, and academic performance. Additionally, programs which could not be applied as they were intended due to various reasons elicited significant effects only at attitudes and conduct problems, whereas programs without implementation problems affected all the six domains.

A meta-analysis of 49 studies was done by Beelman and Lösel (2006) to examine the effects of child training programs to prevent antisocial behaviors and improve social competence in children from 3- to 15-year-olds. It was observed that the effect of a training program is greater when it is conducted by research staff and supervised trainers in comparison to teachers and other practitioners. Beelman and Lösel (2006) explains this finding with trainer's fidelity to the design of the program. The density of training programs did not create significant effect at post intervention and 3 months or late follow-up. Nevertheless, the highest effects were seen in most intense programs. It was found that programs which require child's active participation and experience like role-plays and activities are more successful than trainings given via lectures and discussions. In addition to these, it was seen that the

effects are higher when social competence training are applied to preschoolers than to older children (Beelman, Pfingsten, & Lösel, 1994; January et al., 2011).

Kavale and colleagues (1997) found that most effective results from interventions were obtained with anxious children and aggressive children benefit the least (as cited in Spence, 2003). In the meta-analysis of Beelman et. al. (1994), children, who can be labelled as 'at risk' because of challenging experiences in their lives, make the best progress in their study. Spence (2003) also mentioned that the teaching methods used in social skills training plays a role in the effectiveness of the programs. Reviews demonstrated that studies which adopted behavioral techniques, specifically, modelling, coaching, behavioral rehearsal, role play, feedback and reinforcement of skill elicited positive effects in social skills in a short time (Gresham, 1981, 1985; McIntosh, Vaughn, & Zaragoza, 1991 as cited in Spence, 2003).

Besides social and emotional outcomes, the effect of SEL intervention programs on academic achievement was also examined through the review of forty school-based programs implemented for elementary and secondary grades (Corcoran, Cheung, Kim, & Xie, 2018). The meta-analysis included only studies which adopted five socioemotional competency areas proposed by CASEL to create improvement in academic areas. Other inclusion criteria were the number of trainers not less than 2 and number of students for each condition not less than 15. In parallel with previous reviews, it was observed that SEL interventions had significant effects on reading and mathematics, with smaller but meaningful effects on science performance.

1.6 Social skills training in preschools: Limitations and opportunities

Although preschool children can utilize language for self-control and cognitive planning in the case of frustration, this ability is carried out more successfully and automatically when children progress to the elementary grades (Greenberg & Snell, 1997 as cited in Kress & Elias, 2007). For this reason, instruction methods that were developed and implemented for elementary school children may not be age-appropriate for preschoolers (Kress & Elias, 2007). According to a meta-analysis of Beelman et al. (1994), improvements in social-cognitive outcomes are found to be smaller when social skill trainings conducted with young children. Authors argued that due to the shortcomings in the cognitive development of young children, these children may benefit more from direct behavioral teaching techniques and strategies instead of cognitively based techniques.

The place of children in peer groups is more open to change at preschool than older education levels like middle school, where high interest in reputation and stronger cliques are observed (Ladd, 1983 as cited in Mize & Ladd, 1990). This difference demonstrates the importance of social skills learning at earlier age periods. Additionally, preschool stage is more eligible for social skills training compared to other developmental periods given that social competence lays the foundation for later academic competence (Mize & Ladd, 1990). Most of the time, the goals of social skills training are also easily compatible with preschools' regular curriculum which aims the acquisition of socially appropriate behaviors.

1.7 Some child training program studies in the world

A number of child training programs were developed with SAFE principles as recommended by CASEL. These programs have been applied in universal, selected

or indicated approach in previous research, and some of them included into the meta-analyses presented in the previous section.

One of these social skills training program, Incredible Years Dinosaur Social Skills and Problem-Solving Child Training Program, was developed for preschool children with externalization behaviors (Webster-Stratton, 1990). It was found that this treatment program reduced impulsiveness and attention problems besides externalizing behaviors of children (Webster-Stratton, Reid, & Hammond, 2001). After these promising results, a classroom based preventive curriculum version of the program, Classroom Social Skills Dinosaur Curriculum, was developed and implemented for one school year (Webster-Stratton & Reid, 2004). Even though various types of group leaders such as school counselors or psychologists can implement the program, it was originally designed to be implemented by teachers with 3-8 years old children 2-3 times a week in 20-30 minutes circle times in classroom (Incredible Years, 2013). The content of the lessons was delivered with the help of various animal puppets such as dinosaur and large child puppets. Video demonstrations, role-plays, game activities, homework and parent letters were also used in the program. The curriculum which consisted of different competencies such as understanding emotions, problem solving, anger management, social skills led to social and academic improvements in children (Webster-Stratton & Reid, 2004).

Fun FRIENDS, a universal program for 4- to 6-year-old children was developed by Pahl and Barrett (2010). Trainers delivered 1-hour long lessons for 9 weeks in classrooms based on various topics such as coping with feelings, building empathy, relaxation exercises, self-talk and social skills. Cognitive behavioral strategies were aimed to taught through play-based group activities. According to teacher reports, behavioral inhibition level of the children in the intervention group

decreased, while their social emotional skills got improved compared to those in the control group. Any difference between two groups was not observed in parent reports. 12 months follow up data which was obtained only from teachers for only intervention group, also showed improvements on anxiety, behavioral inhibition level and socioemotional competence.

Another universal program named I Can Problem Solve (ICPS) was developed for children from age 4 to 12 years. The goal of this program is to improve child's awareness and comprehension about own and others' emotions, thinking possible consequences of own actions and adopting alternative behaviors with the help of games, stories, puppets, and role-plays (Shure, 2001). The lessons were given at least 2-3 times per week for 3-5 month. The preschool and kindergarten version of the program was designed to be implemented by teachers with ten or less children (I Can Problem Solve, 2019).

The Promoting Alternative Thinking Strategies (PATHS) - a social skills promoting education program for children from preschool to 6th grade – was designed as lessons and activities which include reading, drawing, singing, telling stories, puppetry, science and math through 20-30 minutes sessions. The program was developed to be implemented by teachers and school counselors two or more days in a week for multi-years in preschool and kindergarten levels. But the duration and intensity can change according to schools' needs (The PATHS Curriculum, 2012).

1.8 Child training program studies in Turkey

There are several studies in Turkey which aimed to examine the effects of social skills training program on child well-being. Some of the researchers adapted well-

known child training curriculums such as the Incredible Years, the PATHS, or Life Skills and tested the effectiveness of these programs with Turkish samples (Arda & Ocak, 2012; Dereli, 2008; Dinçer & Güneysu, 1997; Kaya, 2016; Kayılı 2015). Some researchers developed and implemented their own training programs after they reviewed the literature on social skills training (Boz, Uludağ, & Tokuç, 2018; Durualp & Aral, 2010; Göktaş, 2015; Ömeroğlu et al., 2015; Özdil, 2008; Uysal & Kaya-Balkan, 2015).

When the outcomes were examined, it can be seen that many research promoted social problem solving skills (Dereli, 2008; Dinçer & Güneysu, 1997; Karayol & Temel, 2018; Kayılı, 2015; Özdil, 2008). After some trainings, also improvements in prosocial behaviors such as helping, sharing, joining to a group; cooperation, independence, interaction skills; compliance; positive self-concept and student-teacher relationship were observed mostly through ratings by teachers and sometimes individual assessments of child (Bilir-Seyhan, Ocak-Karabay, Arda-Tuncdemir, Greenberg, & Domitrovich, 2017; Kaya, 2016; Uysal & Kaya-Balkan, 2015; Ömeroğlu et al., 2015). Additionally, training programs lessened the aggressive behaviors, internalizing and externalizing problem symptoms (Kaya, 2016; Özdemir-Topaloğlu, 2013). Some studies investigated the effect of program on emotional skills in addition to social skills and behaviors at assessments (Bilir-Seyhan et al., 2017; Dereli, 2008; Ömeroğlu et al., 2015). These programs created improvements in terms of comprehension, expression, awareness and management of emotions in different levels.

Majority of the above mentioned studies used more than one instruction methods in the sessions like puppet shows, video demonstrations, games, storytelling, play activities, art, drama, and language activities. Relatively few of

them used homework for children. When the literature was reviewed, it was also found that some studies in Turkey examined the effect of family/parent inclusion to the training program (Boz et al., 2018; Göktaş, 2015; Uysal & Kaya-Balkan, 2015). These studies revealed that whether parents were included or not, child trainings have positive impact on various measures compared to no training group.

It was seen that a great majority of the social skills programs were implemented by researchers. Few of them included classroom teachers as trainers. Also, most of the programs were applied between 8-14 weeks. The shortest duration for programs was 8 weeks (Boz et al., 2018; Durualp & Aral, 2010), while the longest training lasted for 32 weeks (Kayılı, 2015). Another characteristic of the social skill training programs that varied across the programs was the intensity. Some programs were implemented twice a week (Kaya, 2016; Kayılı, 2015; Uysal & Kaya-Balkan, 2015), some of them in every day of week (Dinçer & Güneysu, 1997). Also, the length of sessions showed variance among programs. Most of them implemented between 30 minutes to 1 hour. The target age group also differed across programs. Some of them were conducted with a single age group such with 6-year-olds (Özdil, 2008), whereas others included children from broader age range such as 36- to 66-month old preschoolers (Ömeroğlu et al., 2015).

The assessment tools and informants used in these studies to test the effectiveness of the programs were limited. Some studies gathered data only from teachers through behavioral ratings (Aslan, 2008; Boz et al., 2018; Durualp & Aral, 2010; Kaya, 2016; Özdemir-Topaloğlu, 2013), whereas some studies (Karayol & Temel, 2018; Kayılı 2015) collected data from children only by using individual tests of emotion understanding, social problem solving. Only two study which implemented the PATHS program (Arda & Ocak, 2012; Bilir-Seyhan et al., 2017),

included behavioral observation in the classroom. Also, most of the studies did not include mother reports of child socioemotional competence.

1.9 The purpose and the hypotheses of the present study

As reviewed above, social skills programs conducted and evaluated with Turkish preschoolers differed in various aspects. Few of them did not use various teaching methods (Aslan, 2008; Karayol & Temel, 2018) and some of them did not include important dimensions of social and emotional competence in their curriculum (Boz et al., 2018; Şahin & Ömeroğlu, 2015). Most of the research studies were also conducted with small sample sizes. Also, many of them used assessment tools limited in number and type.

The present study adapted a social skills training program based on the summer treatment program of the Psychosocial treatment in The Collaborative Multimodal Treatment Study of Children with Attention Deficit Hyperactivity Disorder (MTA) (Wells et al., 2000). MTA study aimed to investigate the effectiveness of medication, psychosocial treatment and their combination for the treatment of ADHD. The psychosocial treatment consisted of three major components, which included parent training, school intervention, and summer treatment program. According to the study by Pelham et al. (2000), even though children only participated to the summer treatment program without any medication, they showed improvements on adult-directed defiance, peer relationships, academic productivity, rule following and self-esteem according to their parents. Of particular interest to the present study was this summer treatment program that implemented a social skills training. In this training, as a part of the morning meeting, a specific social skill was introduced each day with instruction, modeling, role-playing, and

practice used as teaching methods in sessions (Fabiano, Schatz, & Pelham, 2014). Children's display of the social skills discussed in the session was encouraged through various techniques (e.g., token economy, daily report card).

In light of the social skills training of the summer treatment program, the present study aimed to develop and implement a multidimensional child training program based on four teaching methods, namely: (1) instruction, (2) modelling, (3) role playing, and (4) practice for 4- and 5-year-old preschoolers by following the SAFE principles. This 12-week long program was applied in the classroom setting once a week by two psychology graduates. A total of 12 sessions consist of different skills related to social and emotional competence consistent with CASEL's socioemotional learning competency areas.

The study was designed to assess the program's effectiveness. First, children who receive the social skills training were expected to be rated as more socially competent by their mothers and teachers compared to the control group. Secondly, it was hypothesized that they would be rated as less angry-aggressive and anxious-withdrawal by their mothers and teachers in comparison to the control group. Third, it was expected that those children in the intervention group would show more improvement in emotion understanding compared to other peers in the control group. Additionally, it was expected that they would select more prosocial and fewer aggressive and avoidant behavior responses in the face of hypothetical peer provocation situations compared to the control group. Lastly, it was expected that intervention children would display more social skills such as helping, sharing etc. and engage in socially more complex play during free play compared to control children.

CHAPTER 2

METHOD

2.1 Participants

The study was conducted with 181 preschool children, who were enrolled to 4- or 5-year-old classrooms in Bakırköy municipality preschools. The intervention group consisted of 120 children from nine classrooms, and the control group consisted of 61 children from six classrooms. Randomization to intervention and control groups occurred at the school level. Out of six preschools ran by the Bakırköy municipality, two of them were randomly assigned to the intervention group, and two preschools were randomly assigned to the control group.

Demographic statistics of the final sample are presented in Table 1. At pretest, child age ranged between 46 and 74 months for the total sample. The mean age was 57 months (*SD* = 5.73) for the control group, and 59.7 months (*SD* = 7.24) for the intervention group. One-way analysis of variance (ANOVA) results showed that the intervention group was significantly older than the control group [$F(1,179) = 6.235$, $p < .05$]. Both groups did not differ in terms of the sex distribution of children [X^2 (1, N = 181) = .902, $p > .05$]. There were 29 girls (47.5%) and 32 boys (52.5%) in the control group, and 66 girls (55.0%) and 54 boys (45.0%) in the intervention group.

The mean age of mothers was 37.0 years (*SD* = 3.73) for the control group and 37.7 years (*SD* = 5.13) for the intervention group. The mean age of father was 39.8 years (*SD* = 4.31) for the control group and 40.6 years (*SD* = 5.78) for the intervention group. One-way ANOVA showed that there was no significant difference between two groups in terms of mother age [$F(1,173) = .990$, $p > .05$] and

father age [$F(1,171) = .834$, $p > .05$]. According to Chi-square analyses, the education levels of mothers in the control group were marginally significantly higher than the mothers' education levels in the intervention group [X^2 (1, N = 177) = 14.782, p =.097]. The percentage of mothers who had graduated from university or above was 68.4% in the control group, while the percentage was 47% in the intervention group. Also, the education levels of fathers in the control group were marginally significantly higher than the fathers' education levels in the intervention group [X^2 (1, N = 177) = 15.429, p =.080]. For fathers, the percentage of university or above graduates was 57.6% in the control group and 42.4% in the intervention group. The percentages of each education level according to control and intervention groups can be found in Table 1.

In the control group, the percentage of married of mothers was 95%, while the percentage of divorced or single mother was 5.0%. Similarly, in the intervention group, the percentage of married of mothers was 94.9%, while the percentage of divorced or single mother was 5.1% [X^2 (1, N = 177) = .003, p >.05]. The percentage of married of fathers was found as 93.3%, while the percentage of divorced fathers was 1.7% and single fathers was 5.0% in the control group. In the intervention group, the percentage of married of fathers was 94%, while the percentage of divorced fathers was 4.3%, single fathers was 0.9% and widow fathers was 0.9% [X^2 (1, N = 177) = .067, p >.05]. In the control group, 66.1% of mothers were full-time employed, while 13.6% of mothers were part-time employed and 20.3% of them were unemployed. In the intervention group, 68.1% of mothers were full-time employed, while 17.2% of mothers were part-time employed and 14.7% of them were unemployed [X^2 (1, N = 177) = .080, p >.05]. In the control group, 98.3% of the fathers were working full-time while 1.7% of them were working part-time. In the

intervention group, 90.7% of the fathers were full-time, while 8.5% of the fathers were part-time and 0.8% of the fathers were unemployed [X^2 (1, N = 177) = .144, p > .05]. When the percentages of income were examined through Chi-square analyses, it was observed that two groups had significantly different household income, [X^2 (5, N = 168) = .281, p < .05]. The control group had significantly higher income than the intervention group. The 71.4 percent of families in the control group had income level above than 5.000 TL per month, while 43.8% of intervention group endorsed this category.

Because mother education level, father education level and income level were found to be significantly correlated (r ranged from .58 to .62, p < .01), a family socioeconomic status (SES) score was formed by the Z-scores of these three measures. When the groups were compared based on SES, the control group was found to be have significantly higher SES than the intervention group [F(1,177) = 11.554, p < .01]. The mean SES was .31 (SD = .75) for the control group, while it was -.15 (SD = .87) for the intervention group. Two groups did not differ on the number of siblings they have [F(1,174) = .168, p = .07]. While mean number of siblings was 3.98 (SD = 1.14) for the total sample, it was 3.75 (SD = .74) for the control group and .73 (SD = .70) for the intervention group. A marginally significant difference was observed for the household size [F(1,174) = 3.330, p = .07]. While mean household size was 3.98 (SD = 1.14) for the total sample, it was 3.75 (SD = .75) for the control group and 4.08 (SD = 1.27) for the intervention group.

Table 1. Descriptives of Child and Family Demographics According to Groups

	Control	Intervention		
Demographic Variable (N = 181)	Mean (SD) or %	Mean (SD) or %	F/X^2	p
Child's pretest age (months)	57 (5.73)	59.7 (7.24)	6.235	.013*
Education level of mother			14.782	.097
Primary school drop out	-	2.6%		
Primary school graduate	1.7%	4.3%		
Middle school drop out	1.7%	1.7%		
Middle school graduate	5%	3.4%		
High school drop out	1.7%	0.9%		
High school graduate	8.3%	23.1%		
College graduate	11.7%	11.1%		
University drop out	1.7%	6.0%		
University graduate	56.7%	41%		
Postgraduate degree (master or doctorate)	11.7%	6%		
Education level of father			15.429	.080
Primary school drop out	-	0.8%		
Primary school graduate	1.7%	7.6%		
Middle school drop out	-	5.9%		
Middle school graduate	1.7%	2.5%		
High school drop out	6.8%	4.2%		
High school graduate	18.6%	22.9%		
College graduate	8.5%	7.6%		
University drop out	5.1%	5.9%		
University graduate	39%	35.6%		
Postgraduate degree (master or doctorate)	18.6%	6.8%		
Household income (TL)			.281	.021*
< 1.000	-	0.9%		
1.000-3.000	10.7%	17.0%		
3.001-5.000	17.9%	38.4%		
5.001-7.000	28.6%	22.3%		
7.001-10.000	35.7%	17.0%		
> 10.000	7.1%	4.5%		
SES	.31 (.75)	-.15 (.88)	11.554	.001**
Number of siblings	.78 (.74)	.73 (.70)	.168	.683
Household size	3.75 (.75)	4.08 (1.27)	3.330	.070

Note: $^{**}p < .01$, $^{*}p < .05$.

2.2 Intervention

A 12-week training program led by two psychology graduates one of them being the researcher was designed to prevent social skills deficits of children between ages of 4 and 6 years based on the summer program training of the Psychosocial treatment in MTA study (Wells et al., 2000).

In the present study, the main theme of the first four-week module was determined as specific basic social skills. The main theme of the second four-week module was the emotion management skills. The last four-week module focused on friendship and social problem solving skills (See Figure 1 for the curriculum). Training sessions were conducted once a week. Each session began with the overview of the classroom rules (i.e., listening to each other, raising hands to speak, waiting for our turn to speak and not pushing/hitting other). In a 40-minute circle time, first a specific skill was introduced to children, followed by the positive as well as negative examples of this skill demonstrated through activities such as puppet plays, role-plays, and story-telling (See Appendix A for the general session plan and sample activities). Next, children were asked to role play positive examples of the skill. In the remaining of the time, children played games in the presence of the trainers and were praised and given tokens for displaying the social skill of the session and classroom rules. When a class reached a certain number of tokens at the end of the session, they received snacks or played a joyful game such as bubble catching. Finally, children were encouraged to apply this particular skill of the week in free play and in their interactions with peers throughout the week. An informative poster of the skill of the week was present in the classrooms for the following week as a reminder. Also, an information letter about the skill and activity suggestions to practice at home were sent to parents each week.

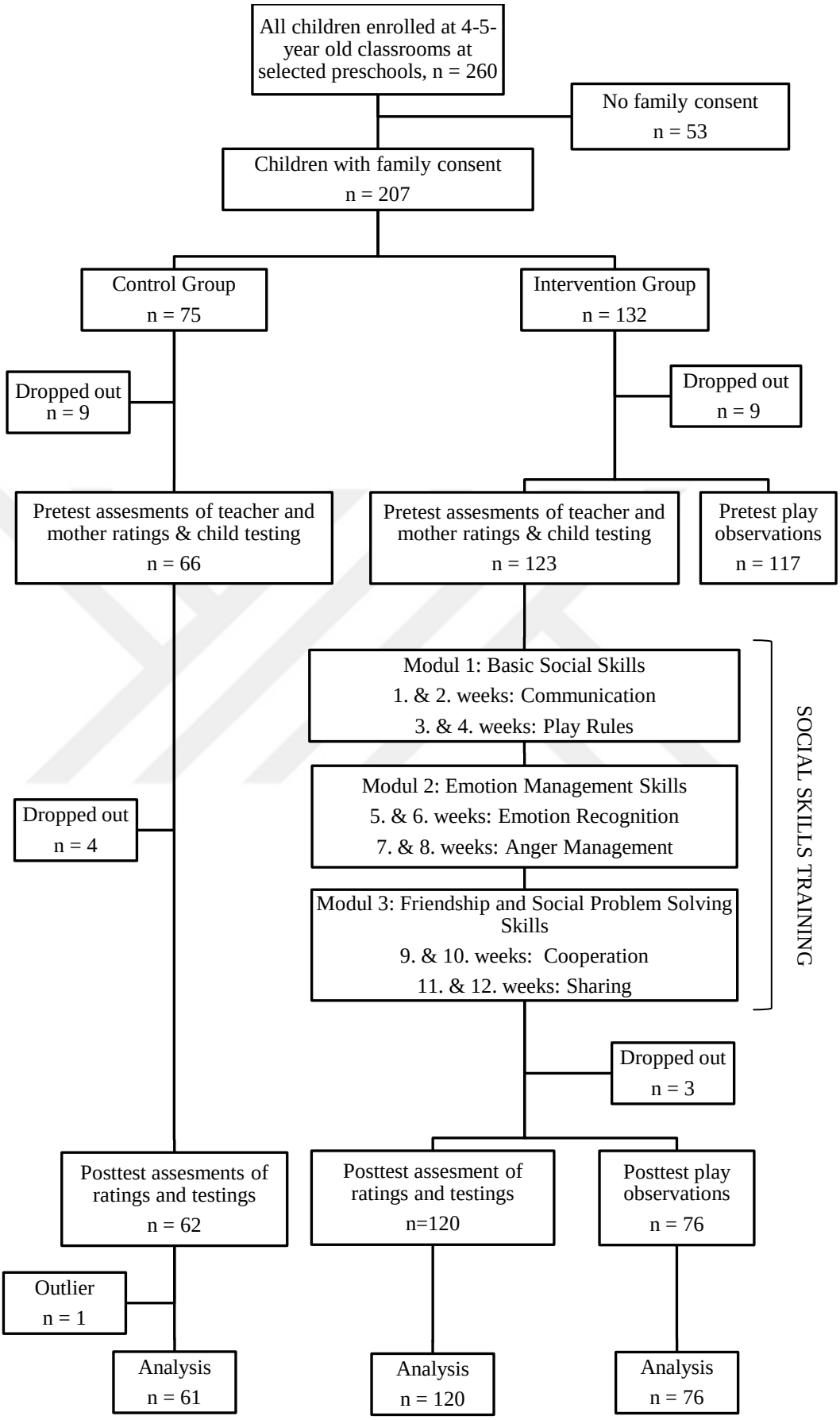

Figure 1. Procedure of the study with sample size information

2.3 Procedure

First, necessary permissions for the study was obtained from the Boğaziçi University Ethics Committee and Bakırköy municipality. Then, two preschools were randomly selected as the intervention schools, while another two were randomly selected as the control schools out of six preschools ran by the municipality. In the next stage, consent forms were sent to parents for each child in four preschools (See Appendix B and C).

A detailed view about the sample size of the control and intervention groups is shown in Figure 1. A total of 260 families (104 families in the control schools and 156 families in the intervention schools) were invited to participate in the study. Of those invited families, 75 families (70%) in the control schools and 132 families (83%) in the intervention schools in total gave consent to participate. After having consent of parents, all pretest assessments were done between January and mid-February 2017. From the mid-February to mid-May in 2017, the treatment group received social skills training program once a week throughout 12 weeks in their classrooms by two psychology graduates - one of them being the researcher. Pre- and posttest measures were not taken from children whose parents did not give consent for the research. Yet, these children were free to participate in the social skills games in the class. None of the families opposed to the inclusion of their child into the training session. The families of children with special needs (one being in the control school and two being in the intervention schools) did not give consent. Two children with special needs in the intervention group also did not participate to any session of the training, because even though they were enrolled in classes, they were not coming to school most of the time. Also, two dropouts in the intervention group did not participate to the training because they moved to another city. In this way, 152

children (130 children with consent and 22 children without consent) received the social skills training. After the social skills training program ended by May 2017, the same assessment tools were administered again. Dates of assessments and intervention are shown in Figure 2.

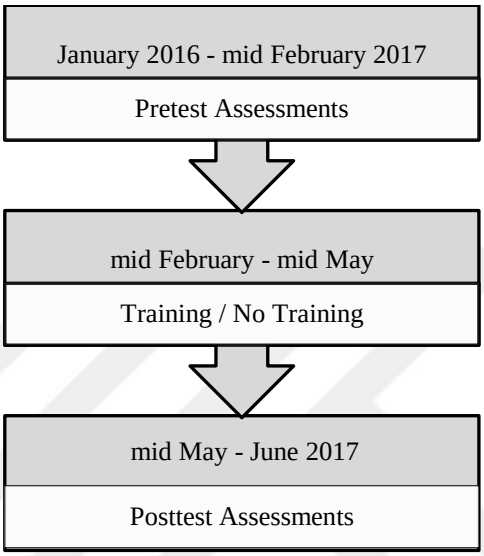

Figure 2. Dates of assessments and training

At pre- and posttest, child and family demographics form and socioemotional competence scales were sent to parents. Teachers also filled a classroom demographic form and socioemotional competence scales for their students. Children's emotion understanding and social problem solving skills were individually assessed by psychology graduate students. These child assessments were administered individually in the school psychologist's room at schools with standardized testing materials. For the observation of children's free play behaviors, the observers,17 undergraduate psychology students went through a training. In the training, they coded training videos of children's play according to the manual by Howes and Matheson (1992). They also conducted pilot observations of four

children in pairs at one preschool. After the interrater reliability was checked for each pair, students were distributed to different intervention schools. They observed each child in 30-minute free play during two classroom visits, which generally occurred on different days. Within that period, they wrote a progress note on their observations and sent it to the advisor of the research. These behavioral play observations were only conducted in the intervention group due to limited time and observer number.

In the present study, 18 families at the pretest phase, 7 families at the posttest phase dropped out of the study. For the peer play observation of intervention group, data also could not be obtained from 7 children at pretest and 31 children at posttest due to various reasons (not coming to school at observation day, sleeping during play time etc.) in addition to dropouts.

In this study, any data on demographics or pretest mother ratings could not be examined for dropouts due to their unfilled forms by the parents. Additionally, a combined teacher score of SC could be not aggregated for dropouts because PKBS Independence subscale was not correlated with other PKBS subscales and SCBE SC subscale. For this reason, SC Combined teacher scores of dropouts and remaining children were also could not be compared. TEC scores and CST behavioral responses of 19 dropouts, AA teacher scores of 17 dropouts were compared with the data of remaining 181 children. At the end of these comparisons, any statistically significant differences between the mean scores of children who dropped out of the study and who remained in the study were not found. The results of one-way ANOVAs for AA teacher scores, TEC scores and CST responses are presented in Table 2.

Table 2. Differences Between Dropouts and Remaining Children at Pretest

	Dropout		Remaining		Pretest ANOVA	
	M	*SD*	*M*	*SD*	*F*	*p*
AA teacher	1.67	.54	1.72	.63	2.383	.124
TEC	3.37	1.64	3.97	1.60	2.383	.124
CST						
Prosocial	2.42	2.01	2.35	1.85	.026	.871
Aggressive	1.16	1.43	1.01	1.50	.179	.673
Avoidant	2.00	1.70	2.04	1.53	.011	.916

Note. TEC = Test of Emotion. CST = Challenging Situation Task.
$^{**}p < .01$, $^{*}p < .05$, $^{+}p < .10$.

2.4 Teacher and classroom measures

Fifteen teachers participated in total. Six of them were in the control group and nine were in the intervention group. All teachers in the present study were female and worked full-time. In the control group, four out of six teachers were university graduates, while two of them were vocational high school graduates. In the intervention group, six out of nine teachers were university graduates, whereas two of them were vocational high school and one of them was regular high school graduates. The work experience of teachers varied from 2.5 years to 14 years. Two groups did not significantly differ in work experience [$F(1,14) = .617$, $p > .05$]. The average years of work experience was 7.8 years ($SD = 4.26$) for the control group and 6.2 years ($SD = 3.64$) for the intervention group. The classroom size varied from 6 to 21 children. Any significant difference between control and intervention groups was not found in terms of classroom size [$F(1,14) = .003$, $p > .05$], the mean was 17.0 children ($SD = 1.41$) for the control group and 16.9 children ($SD = 4.73$) for the intervention group. Lastly, the mean child-to-teacher ratio were 11.33 ($SD = 4.45$) for control and 14.33 ($SD = 5.79$) for intervention group [$F(1,14) = 1.147$, $p > .05$]. Demographic statistics of teachers and classrooms are presented in Table 3.

Table 3. Descriptives of Teacher and Classroom Demographics According to Groups

	Control		Intervention		Pretest ANOVA	
Demographic Variable (N = 15)	*M*	*SD*	*M*	*SD*	*F*	*p*
Work experience (years)	7.8	4.26	6.2	3.64	.617	.446
Classroom size	17.0	1.41	16.9	4.73	.003	.957
Number of girls	7.17	1.84	9.0	3.61	1.302	.274
Number of boys	9.83	1.72	7.89	2.32	3.065	.104
No of children with special needs	.17	.41	.22	.44	.060	.810
Child-to-teacher ratio	11.33	4.45	14.33	5.79	1.147	.304

Note: $^{**}p < .01$, $^{*}p < .05$.

2.5 Design

A randomized pretest-posttest control group design was used in the study. The independent variable was the training condition. Children's social competence evaluations, social skills, emotion understanding and social problem solving skills and play behaviors were determined as dependent variables. Various statistical analyses were conducted on the data with SPSS Version 23.

2.6 Measures

2.6.1 Child and parent demographics

General information about child such as age, gender, and sibling number as well as information about parents such as age, occupation, education and income level were assessed with a short demographical form (See Appendix D).

2.6.2 Classroom and teacher demographics

General Information related to the classroom characteristics such as age group of the classroom, the number of boys and girls, the number of children with a special

education need and teacher's qualification (e.g., education level, work experience) were assessed with a short demographical form (See Appendix E).

2.6.3 Parent and teacher evaluations of child socioemotional competence

LaFreniere and Dumas's (1996) Social Competence and Behavior Evaluation Scale, Short Form (SCBE-30) was used to assess the quantity of preschool age children's behavior problem symptoms and social skills. This 30-item scale comprises three 10-item subscales: social competence (SC), anger-aggression (AA) and anxiety-withdrawal (AW). The SC subscale measures child's positive characteristics such as cooperation and prosocial behaviors, the AA subscale measures externalizing problem symptoms such as opposition to adults and aggressiveness in peer relations, and the AW subscale measures internalizing problem symptoms such as anxious, depressed mood states and isolated behaviors. Items are rated on a 6-point Likert scale (1 = *never*; 2-3 = *sometimes*; 4-5 = *often*; 6 = *always*). LaFreniere and Dumas's (1996) found that the internal consistency reliability of SCBE-30 scales ranged from 0.80 to 0.92. Two-week long test-retest reliability of the scales ranged from 0.78 to 0.86. The Turkish adaptation of this scale was carried out by Çorapcı, Aksan, Arslan-Yalçın and Yağmurlu in 2010. The internal consistency as measured by Cronbach's Alpha was .88 for SC, .87 for AA and .84 for AW (Çorapçı et al., 2010). In the present study, the SCBE-30 was completed independently by mothers and classroom teachers (See Appendix F and G) Based on mother evaluations, Cronbach's alphas for the SC, AA and AW were respectively .67, .76, .63 at pretest and .74, .82, .64 at posttest. Based on teacher evaluations, Cronbach's alphas for the SC, AA and AW were respectively .85, .79, and .85 at pretest and .86, .88, and .86 at posttest.

In addition to SCBE-30, parents and teachers evaluated children's specific social skills using the Preschool and Kindergarten Behavior Scales - Second Edition (PKBS-2; Merrell, 2002). PKBS-2 was developed for the assessment of 3- to 6-year-old children's social skills and problem behaviors (See Appendix H). A 4-point Likert scale (0 = *never*; 1 = *rarely*; 2 = *sometimes*; 3 = *often*) is used for the 34-item social skills scale and 42-item problem behavior scale. The social skills scale, which was used in the present study, has 3 subscales: social cooperation, social interaction and social independence. Cronbach's alphas were .89 for social cooperation, .84 for social interaction, and .81 for social independence (Merrell, 2002). According to the Turkish adaptation study of PKBS-2 (Özbey, 2009), Cronbach's alphas for the total social skills scale and its subscales were .94, .92, .88, and .88, respectively. In the present study, based on mother evaluations, Cronbach's alphas for the total social skills scale and its cooperation, interaction and independence subscales were respectively .85, .81, .69, and .56, at pretest and .85, .82, .67, and .63 at posttest. Based on teacher evaluations, Cronbach's alphas for the total social skills scale and its subscales; cooperation, interaction and independence were .92, .84, .86, and .82, respectively at pretest and .92, .88, .85, and .76, respectively at posttest.

In the present study, mother pretest reports for the social competence subscale of the SCBE-30 and three subscales of PKBS-2 were found to be significantly positively correlated (r ranged from .39 to .59, $p < .01$). The same subscales were also found to be significantly positively correlated in teachers' pretest reports (r ranged from .46 to .81, $p < .01$). Positive correlations among these subscales were also observed for posttest reports of mothers (r ranged from .30 to .55, $p < .01$) and teachers (r ranged from .40 to .77, $p < .01$). To obtain more reliable measure of social competence, by averaging SC subscale of SCBE and three subscales of PKBS, a

social competence combined score was formed, one combined score for mothers and another combined score for teachers.

Additionally, mother and teacher scores on AW were found to be significantly positively correlated at pretest ($r = .28$, $p < .01$) and posttest ($r = .28$, $p < .01$). By averaging AW mother and AW teacher scores, an aggregated anxiety-withdrawal score was formed. On the other hand, any significant correlation was not found between mother and teacher scores of the AA at pre and post-test. Thus, mother and teacher scores have not been aggregated for AA subscales.

2.6.4 Child individual tests on social and emotional skills

2.6.4.1 Child emotion understanding skills

Test of Emotion Comprehension (TEC) was used to measure emotional understanding of children. This screening test was developed by Pons and Harris (2000) for children between 3 to11 years of age to assess nine components of emotional understanding. These include recognizing emotions, understanding mixed emotions, comprehending the influence of external causes on emotions, the role of desires and beliefs on emotions, the role of memory on emotions, morality and emotions, regulating emotional experience and distinguishing experienced versus expressed emotional states. The test consists of cartoon-like drawings that are accompanied by short scenarios read out loud by the researcher (See Appendix I for sample pictures and questions). In this test, the child was asked to point at one of the four face expressions that represented four different emotions for the right answer. TEC has separate versions for boys and girls, which have the same story content but differ in the gender of story characters. In the current study, these two versions were

used to match to the participant child's gender. The scale's validity was found acceptable in the study of Pons and Harris (2000). Additionally, high test-rest reliability of TEC was found in a study by Pons, Harris, & Doudin (2002) which compared 9 years old children's emotion comprehension scores after a teaching program on emotions. The results showed that test-retest correlations were .84 ($p < .01$) for the control and .64 ($p < .01$) for the intervention group at the end of the 3-months. In the present study, test-retest correlations over a 6-month interval were .31 ($p < .05$) for the control and .41 ($p < .01$) for the intervention group.

2.6.4.2 Child social problem solving skills

In the present study, the revised version of Denham, Bouril and Belouad's (1994) Challenging Situations Tasks was used to assess children's problem solving preferences in difficult peer situations. The original CST consists of three hypothetical provocation situations. CST-Revised (CST-R) has two parallel versions, and each version includes six peer provocations that includes three physical provocation and three social provocation. One of the two parallel versions of CST-R was adopted in the present study (See Appendix J for questions and sample pictures). The translation and the back translation of the items were done by the researcher and another clinical psychology graduate student, who are proficient in Turkish and English. In CST-R, the tester presented each scenario with a related picture and explained the situation briefly. Then, the child was presented pictures of facial expressions of four emotions: happy, sad, angry, and normal. Next, s/he was asked to choose one of them as his/her response for the situation. Next, four pictures that represent different behavioral responses (prosocial, aggressive, avoidant and dysregulated) were displayed randomly to the child. Child was asked to point to one

of these cards as her/his response for each situation. Only behavioral responses were examined in the analyses of the study.

A study by Denham et al. (2014) examined the mean inter-item correlation for the internal consistency of the emotional and behavioral response categories in CST. The mean interitem correlation value of dysregulated behavioral response was found below than .14. Also, 3 months test–retest correlations of the dysregulated scale found as.14 ($p < .025$). For these reasons, this category was excluded from the analyses of the study. But, in the Turkish adaptation study of CST, correlations among all behavioral response choices found as .49 and above (Kuyucu, 2012).

In the current study, the test-retest correlations of prosocial and dysregulated were found significant (r = .47, p < .01; $r = .42$, $p < .05$) for the control group. For this group, the test-retest correlations of aggressive was found marginally significant ($r = .25$, $p = .06$) and the test-retest correlations of avoidant categories was not found significant ($r = .31$, $p > .10$). For the intervention group, all test-retest correlations of prosocial, aggressive, avoidant, and dysregulated categories were found significant ($r = .51$, $r = .42$, $r = .31$, $p < .01$; $r = .26$, $p < .05$).

2.6.5 Behavioral observation of child during free play

Behavioral observations of children were done only for the intervention group. Every child was observed by an observer in a 30-minute free play with their classmates in their classroom. For each child, her/his social level of play and the social skills that s/he displayed were counted during twenty observation epochs (See Appendix K).

Howes Peer Play Scale (Howes & Matheson, 1992) were used to assess children's level of social interactions with their peers in free play. This scale contains seven play types, which are arranged according to the social complexity of child's

play. These play types are solitary *(child plays alone)*, parallel *(a peer plays within three feet of the child with the same types of object with no mutual awareness)*, parallel with regard ***(****parallel play is observed with eye contact and mutual awareness)****,*** simple social *(child and a peer are engaged in a turn-taking based interaction)*, reciprocal *(child and a peer are engaged in a turn-taking and role-reversal based interaction)*, pretend *(child and a peer are engaged in simple social play which includes sequentially meaningful pretend acts and complementary pretend roles)* and complex pretend play *(child and a peer engage in pretend play, but also talk about their pretend activity)****.***

Besides the level of peer play, the frequency of eight specific social skills were assessed in each observation epoch during free play time. The skills coded were asking for helping, sharing, cooperating, apologizing, comforting other, inviting other to play, being invited to play and joining into play.

The 20-second long epochs were not completed consecutively. Once a child's one epoch was completed, the observer coded child behaviors in the observation form in 10 seconds. Then another child's epoch was observed. After completing several children' first epochs, the scoring of the second epochs began. A set of ten epochs was coded during one play time observation. All twenty epochs of a child were completed by one observer. Interrater agreement (Kappa coefficients) found to be ranged from .70 to 1 for play measures at pilot observations during the training phase. Despite of the high interrater agreement at the training stage, any significant correlation was not found between SC teacher scores and play measures at pre- and posttest of the study.

CHAPTER 3

RESULTS

In this section, findings of descriptive and correlational analyses, ANOVA for the pretest differences between groups on demographic and outcome variables, and mixed analysis of covariance for the intervention effect are presented.

3.1 Data screening

Except for socioemotional competence by mothers at posttest, missing items in all measures were replaced with their respective mean values given that missing items were less than 5% of the total ratings. Then, to determine outliers, participants who had -/+ 3 or above Z-scores were identified for each measure. Eighteen outliers were detected. Fifteen outliers with an extreme score on one variable and two outliers with extreme scores on two variables in total were included into analyses. One child from control group who had Z-scores above than -/+3 in five subscales at pre and in all six subscales at posttest according to teacher evaluations was excluded.

In the next step, normality of the data was investigated. It was found that, all dependent measures had acceptable skewness and kurtosis values. The main statistical analyses were conducted with 181 children's data. Skewness and kurtosis values are presented in Table 4 for the pretest, in Table 5 for the posttest child measures.

Table 4. Descriptive Analyses of Child Measures at Pretest

					Control		Intervention	
	Mean	Std. Dev.	Skewness	Kurtosis	Min.	Max.	Min.	Max.
SC Comb Teacher	3.36	.40	-1.78	3.43	2.47	3.75	1.65	3.75
AA Teacher	1.72	.63	1.65	4.41	1.00	5.00	1.00	4.10
SC Comb Mother	3.12	.30	-.50	.50	2.30	3.68	2.11	3.68
AA Mother	2.41	.65	.61	-.27	1.60	4.30	1.30	4.30
AW Aggregated	1.74	.51	1.95	5.48	1.10	2.45	1.00	4.15
TEC	3.97	1.60	.16	-.31	0.00	8.00	0.00	7.00
CST Prosocial	2.35	1.85	.38	-1.03	0.00	6.00	0.00	6.00
CST Aggressive	1.01	1.50	1.55	1.55	0.00	5.00	0.00	6.00
CST Dysregulated	.61	1.06	2.23	5.42	0.00	6.00	0.00	4.00
CST Avoidant	2.04	1.53	.72	-.16	0.00	6.00	0.00	6.00

Note. SC Comb represents combined mean score of SCBE SC, PKBS Cooperation, PKBS Interaction and PKBS Independence. AW Aggregated represents combined mean score of SCBE AW mother and teacher ratings. TEC = Test of Emotion. CST = Challenging Situation Task.

Table 5. Descriptive Analyses of Child Measures at Posttest

					Control		Intervention	
	Mean	Std. Dev.	Skewness	Kurtosis	Min.	Max.	Min.	Max.
SC Comb Teacher	3.42	.34	-1.88	4.35	2.73	3.75	1.80	3.75
AA Teacher	1.75	.82	1.55	2.19	1.00	4.80	1.00	4.80
SC Comb Mother	3.15	.29	-.25	-.20	2.60	3.73	2.40	3.73
AA Mother	2.39	.69	.72	.45	1.10	3.80	1.30	4.70
AW Aggregated	1.69	.52	1.27	1.54	1.00	2.85	1.00	3.10
TEC	4.81	1.61	-.13	-.50	1.00	8.00	1.00	8.00
CST Prosocial	2.90	1.82	.04	-1.03	0.00	6.00	0.00	6.00
CST Aggressive	1.00	1.67	1.82	2.33	0.00	6.00	0.00	6.00
CST Dysregulated	.26	.59	2.18	3.38	0.00	2.00	0.00	2.00
CST Avoidant	1.83	1.50	.53	-.42	0.00	6.00	0.00	6.00

Note. SC Comb represents combined mean score of SCBE SC, PKBS Cooperation, PKBS Interaction and PKBS Independence. AW Aggregated represents combined mean score of SCBE AW mother and teacher ratings. TEC = Test of Emotion. CST = Challenging Situation Task.

3.2 Descriptive analyses

3.2.1 Child measures

Descriptive statistics of all child measures for both pre- and posttest are presented in Table 6. This table also presents the one-way ANOVA for pretest measures to show whether there were baseline differences between the intervention and control groups at pretest. Findings showed that the intervention and control groups differed significantly in two of the dependent variables at pretest. The intervention group obtained lower scores on teacher SC Combined score, [$F(1,180) = 7.782$, $p < .01$]. Additionally, this group scored higher than the control group on teacher AA subscale, [$F(1,180) = 5.112$, $p < .05$.

Table 6. Differences Between Control and Intervention Groups at Pretest

	Control		Intervention		Pretest ANOVA	
	M	*SD*	*M*	*SD*	*F*	*p*
SC Comb Teacher	3.47	.29	3.30	.44	7.782	.006**
AA Teacher	1.58	.65	1.80	.62	5.112	.025*
SC Comb Mother	3.12	.31	3.11	.31	.004	.951
AA Mother	2.47	.62	2.37	.67	.635	.426
AW Aggregated	1.64	.33	1.79	.58	3.621	.059+
TEC	3.76	1.74	4.15	1.56	1.183	.278
CST						
Prosocial	2.57	2.17	2.32	1.62	.753	.387
Aggressive	.95	1.48	.97	1.48	.005	.944
Dysregulated	.72	1.22	.33	.64	.975	.325
Avoidant	1.75	1.67	2.20	1.43	3.275	.072+

Note. SC Comb represents combined mean score of SCBE SC, PKBS Cooperation, PKBS Interaction and PKBS Independence. AW Aggregated represents combined mean score of SCBE AW mother and teacher ratings. TEC = Test of Emotion. CST = Challenging Situation Task.
$^{**}p < .01$, $^{*}p < .05$, $^{+}p < .10$.

3.3 Relationships between dependent measures at pre and posttest

At pretest, teacher ratings of combined SC were only significantly and negatively related with teacher ratings of AA and AW aggregated scores. Mother ratings of combined SC were significantly and negatively correlated with mother ratings of

AA, as well as AW Aggregated score. According to pretest findings, AW Aggregated score was also positively correlated with mother ratings of AA. Children's ratings on the TEC were significantly and positively associated with children's ratings on the CST-Prosocial response, as well as with mother ratings of SC and negatively associated with CST-Aggressive and CST-Dysregulated. CST-Prosocial responses were significantly and negatively related with children's aggressive, dysregulated and avoidant responses. Avoidant responses were also found to be negatively related with aggressive and dysregulated responses. Correlations among pretest dependent measures are shown in Table 7.

At the posttest, SC Combined teacher score was significantly correlated with SC Combined mother score. SC Combined teacher score was negatively correlated with mother and teacher of AA scores, as well as AW Aggregated score. SC Combined mother score was found to be negatively correlated with mother AA score and AW Aggregated score. Finally, AW Aggregated score was correlated significantly and positively with mother and teacher ratings of AA.

Posttest TEC score was significantly and positively correlated with CST-Prosocial responses and negatively correlated with CST-Aggressive responses, as well as with mother score of AA. Correlations among the CST responses were also significant. CST-Prosocial responses were negatively correlated with CST-Aggressive and Avoidant responses. CST-Aggressive and CST-Avoidant responses were also negatively correlated. Correlations among posttest dependent measures are shown in Table 8.

Table 7. Correlations Among Pretest Dependent Measures

	1	2	3	4	5	6	7	8	9	10
1. SC Comb Teacher	–	-.25**	.11	-.08	-.51**	.08	.14	-.11	-.10	.00
2. AA Teacher		–	-.07	.13	.06	.02	.01	.06	.08	-.13
3. SC Comb Mother			–	-.27**	-.17*	.19*	.09	-.04	-.04	-.04
4. AA Mother				–	.15*	-.07	-.03	-.01	-.02	.05
5. AW Aggregated					–	-.11	-.05	.11	.00	-.04
6. TEC						–	.32**	-.25**	-.19**	-.01
7. CST Prosocial							–	-.49**	-.39**	-.46**
8. CST Aggressive								–	-.06	-.35**
9. CST Dysregulated									1	-.16*
10. CST Avoidant										–

Note. SC Comb represents combined mean score of SCBE SC, PKBS Cooperation, PKBS Interaction and PKBS Independence. AW Aggregated represents combined mean score of SCBE AW mother and teacher ratings. TEC = Test of Emotion. CST = Challenging Situation Task.
** $p < .01$, * $p < .05$.

Table 8. Correlations Among Posttest Dependent Measures

	1	2	3	4	5	6	7	8	9	10
1. SC Comb Teacher	–	-.39**	.24**	-.16*	-.44**	.11	.12	-.07	-.03	-.06
2. AA Teacher		–	-.11	.11	.29**	.12	.04	-.10	.00	.07
3. SC Comb Mother			–	-.42**	-.26**	.10	.03	-.06	-.03	.04
4. AA Mother				–	.24**	-.19*	.04	.02	.09	-.10
5. AW Aggregated					–	.07	.06	-.04	.10	-.07
6. TEC						–	.19*	-.20*	-.01	.00
7. CST Prosocial							–	-.61**	-.13	-.47**
8. CST Aggressive								–	-.09	-.33**
9. CST Dysregulated									–	-.15
10. CST Avoidant										–

Note. SC Comb represents combined mean score of SCBE SC, PKBS Cooperation, PKBS Interaction and PKBS Independence. AW Aggregated represents combined mean score of SCBE AW mother and teacher ratings. TEC = Test of Emotion. CST = Challenging Situation Task.
** $p < .01$, * $p < .05$.

3.4 Relationships between demographic variables and dependent measures at pretest

Correlations between demographic variables and pretest dependent measures are shown in Table 9. Correlational results revealed that child age at pretest was significantly and positively correlated with combined teacher scores of SC. Older children also had higher scores on AA pretest measures according to teacher evaluations and higher TEC emotion comprehension scores, higher CST-Prosocial response scores and lower CST-Aggressive and CST-Dysregulated response scores.

In terms of child sex, girls obtained significantly lower scores on teacher scores of AA. Any significant relationship between SES and dependent measures was not found at pretest. Finally, mother and father age were significantly and positively related with CST-Aggressive responses scores.

Table 9. Correlations Between Demographic Variables and Pretest Dependent Measures

	Pretest Age (months)	Sex	SES
SC Comb Teacher	.27**	.12	.11
AA Teacher	.15*	-.19*	-.10
SC Comb Mother	.10	.10	.08
AA Mother	.03	-.06	-.09
AW Aggregated	-.14	.13	-.02
TEC	.32**	-.01	.01
CST			
Prosocial	.28**	.06	-.01
Aggressive	-.16*	-.15	.09
Dysregulated	-.15*	.09	.10
Avoidant	-.07	.02	-.14

Note. Child sex is coded as 0 = boy and 1 = girl.
SC Comb represents combined mean score of SCBE SC, PKBS Cooperation, PKBS Interaction and PKBS Independence. AW Aggregated represents combined mean score of SCBE AW mother and teacher ratings. TEC = Test of Emotion. CST = Challenging Situation Task.

3.5 Relationships between demographic variables and dependent measures at posttest

Posttest correlations between demographic variables and dependent variables are shown in Table 10. Child age was significantly and positively correlated with SC

Combined teacher score and AA teacher score. Child age also showed a significant and positive relation with TEC emotion comprehension scores, CST- Prosocial response scores, and a negative relation with CST-Aggressive response scores. As Table 10 shows, AW scores of girls were higher than AW scores of boys. Furthermore, girls gave more prosocial and less aggressive responses than their male peers on CST. Lastly, as SES increased, mother scores on AA decreased.

Table 10. Correlations Between Demographic Variables and Posttest Dependent Measures

	Pretest Age (months)	Sex	SES
SC Comb Teacher	.20**	.13	.13
AA Teacher	.26**	-.08	-.12
SC Comb Mother	.13	.11	.13
AA Mother	-.03	-.00	-.25**
AW Aggregated	.03	.17*	-.13
TEC	.32**	.01	.05
CST			
Prosocial	.16*	.21**	.00
Aggressive	-.19*	-.22**	.14
Dysregulated	.01	.13	-.04
Avoidant	.01	-.06	-.15

Note. Child sex is coded as 0 = boy and 1 = girl.
SC Comb represents combined mean score of SCBE SC, PKBS Cooperation, PKBS Interaction and PKBS Independence. AW Aggregated represents combined mean score of SCBE AW mother and teacher ratings. TEC = Test of Emotion. CST = Challenging Situation Task.

3.6 Intervention effect on dependent measures

The interaction effects between time and group on dependent measures are presented in the Table 11. 2 (Time) x 2 (Group) mixed analysis of covariance (ANCOVA) was conducted to examine the effect of the interaction for each dependent measure controlling for child age and family SES. The between subjects variable was training condition (control-intervention), while the within subjects variable was assessment time (pretest-posttest). Because there were significant differences between control and intervention groups on pretest SC Combined and AA teacher scores, the pretest

Table 11. The Effect of the Program on Dependent Measures

	Pretest		Post		Total		Paired samples t-test		Pre		Post		Total		Paired samples t-test	
	M	*SD*	*M*	*SD*	*M*	*SD*	*t*	*p*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*t*	*p*
SC Comb Teacher	3.47	.29	3.48	.26	3.48	.28	-.441	.661	3.30	.44	3.39	.38	3.35	.41	-3.149	.002**
AA Teacher	1.58	.65	1.56	.71	1.57	.68	.264	.792	1.80	.62	1.85	.86	1.82	.74	-.713	.477
SC Comb Mother	3.12	.31	3.14	.28	3.13	.29	-.871	.387	3.11	.31	3.15	.30	3.14	.30	-1.793	.076+
AA Mother	2.47	.62	2.25	.62	2.36	.62	3.365	.001**	2.37	.67	2.47	.72	2.43	.69	-1.602	.112
AW Aggregated	1.64	.33	1.55	.42	1.60	.37	1.859	.068+	1.79	.58	1.77	.55	1.78	.58	.562	.575
TEC	3.76	1.74	4.27	1.62	4.02	1.66	-1.916	.061+	4.15	1.56	5.10	1.54	4.59	1.54	-5.777	.000**
CST																
Prosocial	2.57	2.17	2.70	1.87	2.60	2.01	-.448	.656	2.32	1.62	3.02	1.79	2.65	1.73	-4.193	.000**
Aggressive	.95	1.48	1.36	1.91	1.21	1.73	-1.461	.150	.97	1.48	.79	1.49	.89	1.48	1.165	.247
Dysregulated	.75	1.25	.35	.65	.53	.93	2.546	.014*	.51	.92	.22	.57	.39	.77	3.025	.003**
Avoidant	1.75	1.67	1.61	1.44	1.68	1.52	.499	.620	2.20	1.43	1.96	1.54	2.08	1.50	1.351	.180

Note. SC Comb represents combined mean score of SCBE SC, PKBS Cooperation, PKBS Interaction and PKBS Independence. AW Aggregated represents combined mean score of SCBE AW mother and teacher ratings. TEC = Test of Emotion. CST = Challenging Situation Task.
$^{**}p < .01$, $^{*}p < .05$, $^{+}p < .10$.

scores of the other informant, mothers' scores, were used as covariates in addition to child age and SES for relevant measures.

3.6.1 The effect of the program on social competence combined teacher score

The first hypothesis in the present study was that the intervention group would improve more on SC Combined teacher scores after the implementation of the program as compared to the control group. In the analysis, pretest SC Combined mother scores were also controlled in addition to SES and child age covariates because the control group had higher scores on SC Combined teacher than the intervention group at pretest.

Teacher ratings of social competence for control and intervention groups are shown in Figure 3. ANCOVA results showed a significant Time x Group interaction effect [$F(1, 176) = 4.945$, $p < .05$]. The intervention group was rated as significantly more socially competent by their teachers in comparison to the control group from pre- to posttest. A significant main effect was found for the group [$F(1, 176) = 8.593$, $p < .05$]. A marginal significant effect was found for time [$F(1, 176) = 3.241$, $p = .07$]. According to the paired t-test results, SC Combined teacher scores of the intervention group at pretest ($M = 3.30$, $SD = .44$) increased significantly at posttest ($M = 3.39$, $SD = .38$, $t(119) = -3.149$, $p = .002$). The increase seen in the SC Combined teacher scores of the control group from pretest ($M = 3.47$, $SD = .29$) to posttest ($M = 3.48$, $SD = .26$) was not statistically significant, $t(60) = -.441$, $p = .661$. Also according to independent samples t-test, SC Combined teacher scores of the control group was found to be not significantly higher than the intervention group at posttest $t(179) = 1.673$, $p = .096$.

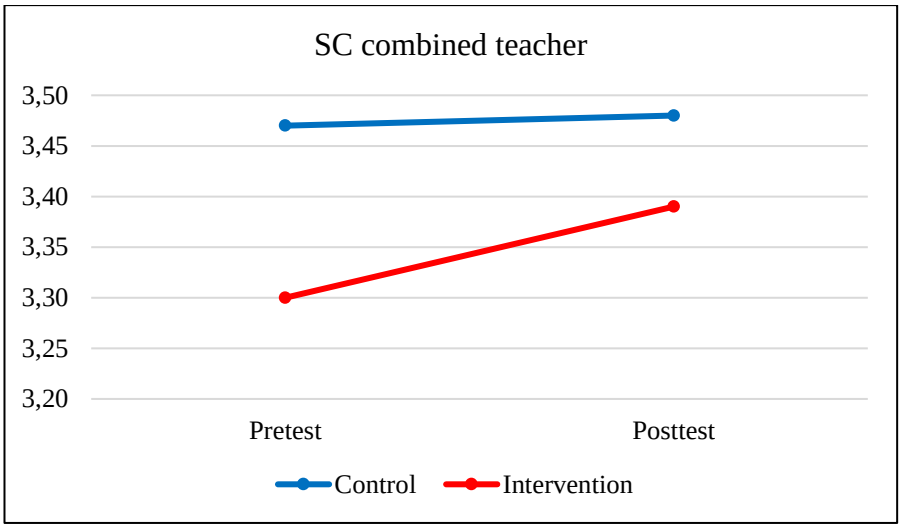

Figure 3. Teacher ratings of social competence for control and intervention groups

3.6.2 The effect of the program on anger-aggression teacher score

Another hypothesis in this study was that the intervention group would obtain lower scores on AA teacher subscale after the implementation of the program as compared to the control group. In the analysis, pretest AA mother scores were also controlled in addition to SES and child age covariates because the intervention group had higher scores on AA teacher than the control group at pretest.

ANCOVA results showed no significant Time x Group interaction effect [$F(1, 176) = .019$, $p > .05$]. On the other hand, a significant main effect for the time was found [$F(1, 176) = 5.717$, $p < .05$]. A significant difference between pre- and posttest was found when combined across groups such that scores of AA teacher increased over time. Also, the main effect for the group was marginally significant [$F(1, 176) = 3.112$, $p = .08$]. The intervention group had higher AA teacher scores than control group across time. Additionally, according to the independent samples t-test, AA teacher scores of the intervention group was significantly higher than the control group at posttest, $t(158) = -1.901$, $p = .059$.

3.6.3 The effect of the program on social competence combined mother score

It was also hypothesized that the intervention group would obtain higher SC Combined mother scores after the implementation of the program as compared to the control group. In the analysis, only SES and child age covariates were controlled.

ANCOVA results showed no significant Time x Group interaction effect [$F(1, 156) = .344$, $p > .05$]. Also, any significant main effects for the time [$F(1, 156) = .087$, $p > .05$] and the group [$F(3, 156) = .344$, $p > .05$] were not found. Also according to independent samples t-test, there was no significant difference between groups at posttest, $t(158) = -.201$, $p = .841$.

3.6.4 The effect of the program on anger-aggression mother score

Another hypothesis in the present study was that the intervention group would obtain lower scores on AA mother ratings after the implementation of the program as compared to the control group. In the analysis of AA mother scores, only SES and child age covariates were controlled.

Mother ratings of anger-aggression for control and intervention groups are shown in Figure 4. ANCOVA results revealed a significant Time x Group interaction effect [$F(1, 156) = 7.181$, $p < .05$]. Any significant main effects for the group [$F(1, 156) = .022$, $p > .05$] and for the time [$F(1, 156) = .697$, $p > .05$] were not found. According to the paired t-test results, AA mother scores of the control group at pretest ($M = 2.47$, $SD = .62$) decreased significantly at posttest ($M = 2.25$, $SD = .62$), $t(55) = 3.365$, $p = .001$. Mother scores of the intervention group from pretest ($M = 2.37$, $SD = .67$) to posttest ($M = 2.47$, $SD = .72$) did not differ significantly, $t(103) = -1.602$, $p = .112$. According to the independent samples t-test, AA mother scores of

the intervention group was not statistically significantly, albeit marginally higher than the control group at posttest, $t(158) = -1.901$, $p = .059$.

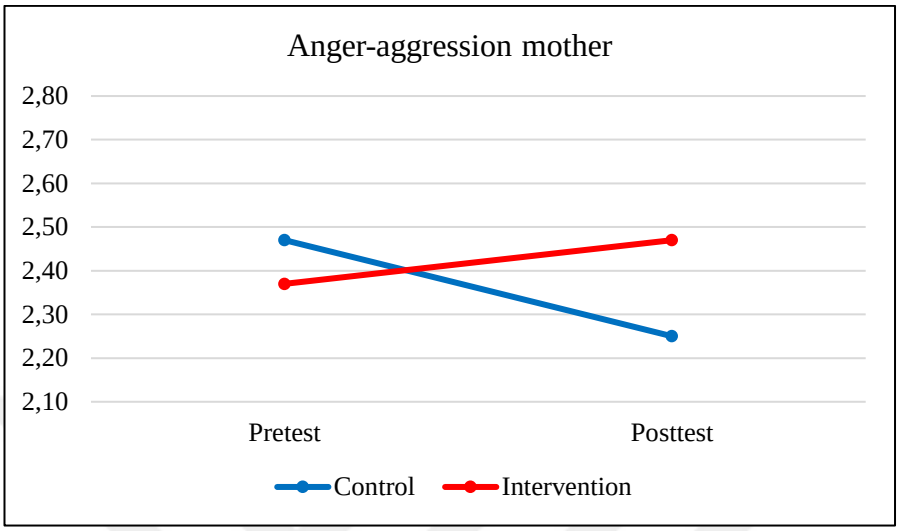

Figure 4. Mother ratings of anger-aggression for control and intervention groups

3.6.5 The effect of the program on anxiety-withdrawal aggregated score

The present study hypothesized that the intervention group would obtain lower scores on AW after the implementation of the program as compared to the control group. In the analysis of AW aggregated scores, only SES and child age covariates were controlled.

The results revealed no significant Time x Group interaction effect [$F(1, 177) = .011$, $p > .05$]. Significant main effects for the time [$F(1, 177) = 6.176$, $p < .05$] and the group [$F(1, 177) = 6.209$, $p < .05$] were found. AW aggregated scores were lower at posttest compared to pretest across both groups. Also, intervention group had higher AW aggregated scores than control group across time. Additionally, according to the independent samples t-test, AW aggregated scores of the intervention group was significantly higher than the control group at posttest, $t(153.56) = -2.894$, $p = .004$.

3.6.6 The effect of the program on test of emotion comprehension score

The present study also hypothesized that the intervention group would obtain higher scores on emotion comprehension after the implementation of the program as compared to the control group. In the analysis of TEC scores, only SES and child age covariates were controlled.

The results showed no significant Time x Group interaction effect [$F(1, 156) = 2.633$, $p > .05$]. No significant main effect for the time was found [$F(1, 156) = 1.496$, $p > .05$]. A significant main effect for the group was observed [$F(1, 156) = 4.976$, $p < .05$]. Children in the intervention group had higher TEC scores than children in the control group across time. According to the paired t-test results, TEC scores of the intervention group at pretest ($M = 4.15$, $SD = 1.56$) increased significantly at posttest ($M = 5.10$, $SD = 1.54$), $t(104) = -5.777$, $p = .000$. The increase in the TEC scores of the control group from pretest ($M = 3.76$, $SD = 1.74$) to posttest ($M = 4.27$, $SD = 1.62$) was marginally significant, $t(54) = -1.916$, $p = .061$. Also, according to independent samples t-test, the TEC scores of the intervention group was significantly higher than the control group at posttest $t(160) = -3.351$, $p = .001$.

3.6.7 The effect of the program on CST prosocial responses

One of the hypotheses in the present study was that the intervention group would give more prosocial responses in CST after the implementation of the program as compared to the control group. In the analysis of prosocial responses, only SES and child age covariates were controlled.

Prosocial response ratings for control and intervention groups are shown in Figure 5. ANCOVA results showed a significant Time x Group interaction effect [$F(1, 157) = 5.018$, $p < .05$]. The intervention group gave more prosocial responses

in comparison to the control group from pre- to posttest. A marginally significant main effect for the time was found [$F(1, 157) = 3.653$, $p = .06$]. Prosocial responses were higher at posttest compared to pretest across both groups. A significant main effect for the group was not found [$F(1, 157) = .040$, $p > .05$]. According to the paired t-test results, prosocial responses of the intervention group at pretest ($M = 2.32$, $SD = 1.62$) increased significantly at posttest ($M = 3.02$, $SD = 1.79$), $t(104) = -4.193$, $p = .000$. The increase in the prosocial response of the control group from pretest ($M = 2.57$, $SD = 2.17$) to posttest ($M = 2.70$, $SD = 1.87$) was not statistically significant, $t(55) = -.448$, $p = .656$. Also according to independent samples t-test, there was no significant difference between groups at posttest, $t(161) = -1.214$, $p = .227$.

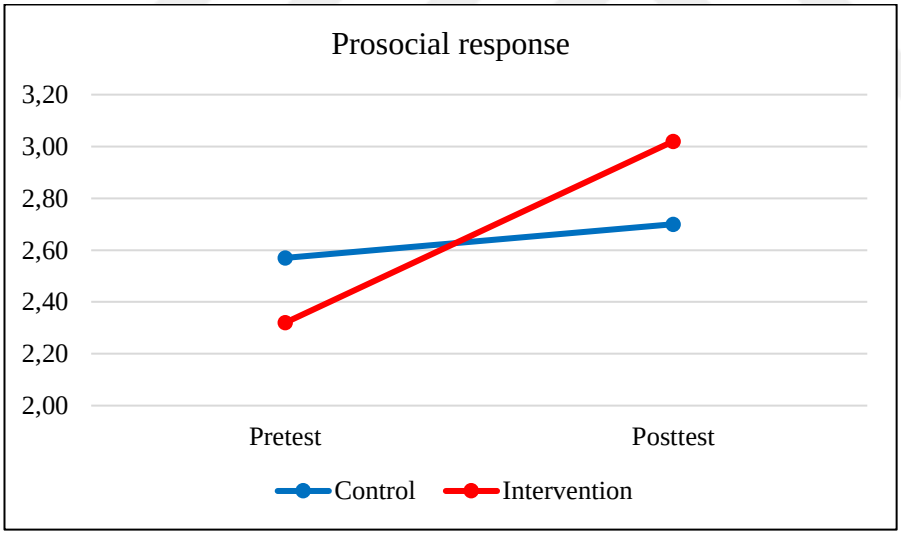

Figure 5. Prosocial response ratings for control and intervention groups

3.6.8 The effect of the program on CST aggressive responses

It was also hypothesized that the intervention group would give less aggressive responses in CST after the implementation of the program as compared to the control

group. In the analysis of aggressive responses, only SES and child age covariates were controlled.

According to the ANCOVA results, the Time x Group interaction effect was marginally significant, [$F(1, 157) = 3.265$, $p = .07$]. The intervention group gave less aggressive responses in comparison to the control group from pre- to posttest. Significant main effects for time [$F(1, 157) = .152$, $p > .05$] and group [$F(1, 157) = .322$, $p > .05$] were not detected either. According to independent samples t-test, the aggressive responses of the intervention group was significantly lower than the control group at posttest $t(92.25) = 2.119$, $p = .037$.

3.6.9 The effect of the program on CST dysregulated responses

In this study, it was also hypothesized that the intervention group would give lesser dysregulated responses in CST after the implementation of the program as compared to the control group. In the analysis of dysregulated responses, only SES and child age covariates were controlled.

The results showed that no significant Time x Group interaction effect [$F(1, 155) = .001$, $p > .05$]. However, a significant main effect for the time was found [$F(1, 155) = 6.224$, $p < .05$]. Dysregulated responses were lower at posttest compared to pretest across both groups. Any significant main effect for the group was not found [$F(1, 155) = 1.578$, $p > .05$]. Also according to independent samples t-test, there was no significant difference between at posttest, $t(161) = 1.194$, $p = .234$.

3.6.10 The effect of the program on CST avoidant responses

Another hypothesis on CST was that the intervention group would give less avoidant responses after the implementation of the program as compared to the control group.

In the analysis of avoidant responses, only SES and child age covariates were controlled.

ANCOVA results showed no significant Time x Group interaction effect [$F(1, 157) = .221$, $p > .05$]. No significant main effect for the time [$F(1, 157) = .770$, $p > .05$] and for the group was found [$F(1, 157) = 2.513$, $p > .05$]. Also according to independent samples t-test, there was no significant difference between groups at posttest, $t(161) = -1.490$, $p = .138$.

3.7 Supplementary analyses on play observation data

Play observation data was collected at pre- and posttest assessment points only for the intervention group. Therefore, the analysis was conducted with 76 children out of 120. The frequency scores of each coding category in 20 epochs was converted into percentage scores except for social skills. For example, if a child displayed pretend play in 5 out of 20 epochs, the percentage score was calculated as 25%. The standardized skewness and kurtosis values of all play measures were found to be beyond accepted limits, except for simple social and pretend play measures at pre- and posttest. In the measures with high skewness and kurtosis values, the distributions were positively skewed. For this reason, log transformation was done for them as it is recommended by Field (2009). After the transformation, the skewness and kurtosis values of these measures remained within acceptable limits. Pretest descriptive values for child play measures are presented in Table 12. Posttest descriptive values for child play measures are presented in Table 13.

Table 12. Descriptive Analyses of Child Play Measures at Pretest

	Mean	Std. Dev.	Skewness	Kurtosis	Min.	Max.
Social skills	.66	.27	-.54	.23	0.00	1.23
Unoccupied	.31	.42	.68	-1.38	0.00	1.20
Onlooker	.43	.53	.68	-1.04	0.00	1.75
Solitary	.87	.58	-.52	-1.10	0.00	1.79
Parallel	.40	.56	.79	-1.12	0.00	1.56
Parallel with regard	.84	.53	-.51	-.92	0.00	1.71
Simple social	36.97	19.97	.64	-.15	5.00	85.00
Reciprocal	.18	.40	2.04	2.99	0.00	1.61
Pretend	20.46	15.43	.65	-.05	0.00	65.00
Complex pretend	.35	.49	.83	-1.05	0.00	1.41

Table 13. Descriptive Analyses of Child Play Measures at Posttest

	Mean	Std. Dev.	Skewness	Kurtosis	Min.	Max.
Social skills	.57	.31	-.57	-.65	0.00	1.08
Unoccupied	.31	.46	1.00	-.61	0.00	1.41
Onlooker	.51	.53	.34	-1.31	0.00	1.75
Solitary	.76	.54	-.50	-1.37	0.00	1.49
Parallel	.68	.51	-.20	-1.17	0.00	1.61
Parallel with regard	.55	.52	.07	-1.66	0.00	1.56
Simple social	39.80	17.50	.24	-.56	5.00	80.00
Reciprocal	.21	.37	1.29	-.10	0.00	1.20
Pretend	26.18	17.26	.40	-.63	0.00	70.00
Complex pretend	.09	.26	2.73	5.90	0.00	1.04

According to the paired t-test results, the frequency of parallel play at pretest (M = 4.74, SD=7.86) increased significantly at posttest (M = 7.53, SD = 9.20), $t(75)$ = -3.411, p = .001, while the frequency of parallel with regard play at pretest (M = 8.64, SD = 9.65) decreased significantly at posttest (M = 5.33, SD = 6.90), $t(75)$ = 3.221, p = .002. Also, the frequency of pretend play at pretest (M = 21.30, SD = 16.98) increased significantly at posttest (M = 26.49, SD = 18.07), $t(75)$ = -2.616, p =

.011, while the frequency of complex pretend play at pretest (M = .35, SD = .49) decreased significantly at posttest (M = .09, SD = .26), $t(75)$ = 4.322, p = .000. Differences between pre- and posttest scores for intervention group are presented in Table 14.

Table 14. Differences between Pre and Posttest Scores on Child Play Measures for Intervention Group

	Pre		Post		Paired samples t-test	
	M	*SD*	*M*	*SD*	*t*	*p*
Social skills	4.49	4.20	3.48	2.74	1.742	.086^{+}
Unoccupied	2.73	4.56	2.92	5.46	.059	.953
Onlooker	.43	.53	.51	.53	-1.132	.261
Solitary	11.43	13.00	9.22	8.39	1.371	.174
Parallel	4.74	7.86	7.53	9.20	-3.411	.001**
Parallel with regard	8.64	9.65	5.33	6.90	3.221	.002**
Simple social	41.04	19.67	39.61	17.91	-1.341	.184
Reciprocal	.18	.40	.21	.37	-.407	.685
Pretend	21.30	16.98	26.49	18.07	-2.616	.011*
Complex pretend	.35	.49	.09	.26	4.322	.000**

Note: $^{**}p < .01$, $^{*}p < .05$, $^{+}p < .10$.

CHAPTER 4

DISCUSSION

This study aimed to develop a multidimensional social skills training program for preschoolers by modeling the MTA study's social skills program structure (Fabiano, Schatz, & Pelham, 2014) and examine the effects of this program on preventing preschoolers' social skills deficits. The training was geared towards increasing preschoolers' social competence, emotion understanding and problem solving skills in peer provocation situations. The training was also expected to reduce preschoolers' externalizing and internalizing symptoms. As expected, the training had a positive effect on children's social competence, albeit only by teacher ratings and by children's own ratings to peer provocations. Significant and non-significant treatment effects are discussed below.

4.1 Interpretations of findings

The findings of the present study revealed that the social skills training program had positive impacts on diverse child outcomes as expected and in line with various studies in the literature (Webster-Stratton & Reid, 2004; Barrett, 2010; The PATHS Curriculum, 2012). First, as expected, children who participated in this program were rated as more socially competent by their teachers and gave more prosocial solutions to hypothetical peer conflict situations. In the case of teacher ratings of social competence, children in the control group had higher social competence ratings prior to the implementation of the training. Yet, in the absence of the training program, control children maintained their level of social competence between pre- and posttest. On the other hand, children in the intervention group, who started out

behind the control group, made significant improvement over the course of training and caught up with control group children at posttest but did not surpass them. In the case of social problem solving skills in socially challenging situations, both groups did not differ significantly at pretest. Results also revealed that intervention children's prosocial responses increased significantly from pretest to posttest. Although prosocial responses of intervention group were lower than control at pretest, it exceeded the control group at posttest.

In addition to these improvements, a downward trend was observed in intervention children's preference of aggressive responses in peer provocation. When paired t-test results were examined, aggressive responses of the control group at pretest (M = 0.95, SD = 1.48) did not change significantly at posttest (M = 1.36, SD = 1.91), $t(55) = -1.461$, $p = .150$. It should be mentioned that the interaction effect was only marginally significant. The downward trend in the intervention group led to a statistically significant difference between the two groups only at posttest. This interaction effect detected in the present study needs to be replicated in future research with a larger sample, even though this study is ahead of many studies in Turkey in terms of sample size, its participant number remained limited in comparison to social skill training studies compared to previous studies conducted outside of Turkey (Taylor, Oberle, Durlak, & Weissberg, 2017).

It was seen that the current training program could not provide effectiveness in preventing social skill deficits at maximum degree. Specifically, any significant changes for avoidant responses in the case of peer conflict, for social competence mothers, anxiety-withdrawal aggregated scores, for anger-aggression evaluations by teachers and for direct emotion understanding skills were not observed in the study.

An unexpected result pertained to preschoolers' anger-aggression ratings of mothers. When we look closer to this effect, we can say that it mostly originated from the significant decrease of control group's AA scores from pre to posttest due to unknown reasons. Even though an increase was seen for the intervention group on this measure, this change is not meaningful.

Even though different assessment tools and procedure were adopted in the current study, observation of children during their play time could not be actualized as it was planned at the very beginning. Only intervention group was observed for a short time -close to 7 minutes per child in total- at pre and posttest due to lack of time and limited number of observers. Findings of this data were presented as additional information. A downtrend in social skills, increase in parallel and pretend play, decrease in parallel with regard and complex pretend play were observed at the last assessments. These findings can be explained by various reasons; short observation time, lack of time gap for skill transference to real life, the ineffectiveness of the program and also the increase in the selectiveness of preschoolers to display social skills with age. It is important to mention that; even though the interrater reliability obtained in the training phase was satisfactory, the insignificant correlations between play measures and SC Combined teacher score at pre- and posttest brings questionability for the validity of the findings. In addition to that, the relatively small sample size and the highly skewed measures make it difficult to explain the meaning of results. Also, without control and intervention group comparison, these findings cannot be fully explanatory about the effectiveness of social skill training program. This limitation becomes crucial when the disadvantages of behavior ratings and advantages of direct observations were taken considered.

Although there are varying findings on the effect of duration, intensity and multimodality of trainings, a general opinion supports the intense and long trainings which contain the involvement of parents (Durlak, 1997; Weisberg & O'Brien, 2004; Zins & Elias, 2007). For example, according to the meta-analysis by Durlak et al. (2011), the mean number of sessions is 40.8 for SEL interventions. The present study was implemented relatively for a moderate time period -12 weeks- and in a low intensity -40 minutes in a week- without any involvements of parents except family letters. The family letters which contained information about the session of the week and suggested some social skill activities for home were sent by school administration in a printed way. Unfortunately, whether these letters reached to families or families read and implement the activities with their children is unknown. Additionally, even though informative posters for the social skill which was taught in the training session were hanged on in the classroom, any request was not made from teachers to encourage these social skills in other school activities. These characteristics might place the effectives of the program in a limited level.

According to Durlak (1997), even though early childhood education programs promote different areas of child well-being, adopt different perspectives and target academic skills or play and social skills, there are common elements that lead to best results. These are competent trainers in terms of knowledge and experience, low trainer-child ratio for the equal benefit, at least 1-year long program and supporting parents through trainings special to them. From this perspective, some practical factors also might have lessened the effectiveness of the training sessions in the present study. One of these factors were the classroom sizes in the preschools. As it was mentioned above, the number of children in the classrooms at the intervention preschools ranged from 6 to 21. Seven out of nine classrooms contained 17 children.

In the study, the crowded classrooms brought some difficulties for each child's active participation to the training activities. This point is important especially, when the literature, which shows that active teaching methods such as puppet, role-plays etc. increase the effectiveness of training programs, were considered. Crowded classrooms also created some problems related to classroom management during session. Even though the trainers had psychology background, worked with different children groups before this study and conducted sessions under the guidance of the advisor, they were inexperienced as trainers of such large groups. This inexperience might have influence on the effectiveness of classroom management especially in play activities which allows children to move in the classroom. In this study, trainings were given by the researcher and another psychology graduate with the presence of the classroom teacher who sits at her desk during the session. In some classrooms, teachers helped trainers to maintain classroom management by warning children when the trainers had difficulties to manage these children, while some teachers did not intervene at all. Also, different classrooms received the training at different times of the day. The sessions might be much efficacious if they were conducted in morning hours instead of after lunch when the children are more tired and less motivated. Besides the limitations related to duration and modality, the findings of the study can also be explained by the content of the program.

Even though the training program was designed to comprise different aspects of socioemotional competence through distinct modules, it might fail to address some competency areas adequately. For instance, the program contained sessions on communication skills such as initiating conversations, asking to play etc. which might be helpful for shy children. But there was not any explicit activity aimed to teach anxiety regulation. But in this respect, it is very interesting that children who

received the training did not show significant improvement on emotion understanding skills. Because, in addition to emotion management sessions, emotions were discussed through various puppet, role-plays nearly in all sessions.

Another noteworthy point with assessments in this study was the lack of follow up study which could not be conducted due to limited resources such as time, assessors. Durlak (2010) emphasized the importance of assessments at multiple time points for the effectiveness of socioemotional interventions. The stability of significant effects and unseen effects at posttest might show themselves after several months or maybe a year later when 5-years-olds were first graders of primary school. Also, posttest assessments were conducted immediate after the program. It would be beneficial to give a time gap to children for the internalization of training's components and transference this knowledge to their behaviors.

In the present study neither for SC ratings nor for AA ratings, a congruence was found between mother and teacher who are primary witnesses of preschoolers' social and emotional development except for posttest ratings of SC, showing low correlation (r = .24). Disagreement among different informants on child outcomes have been detected in various studies (Achenbach, McConaughy, & Howell, 1987). According to Gresham (2016), informants show agreement much easier on external problem behaviors due to its observable characteristics in comparison to other internalizing behavior. But, even evaluations on externalizing behavior problems do not reach similar levels.

Winsler and Wallace (2002) specified the factors that may play role in the lack of agreement between mothers and teachers. Firstly, a child may behave differently in dissimilar contexts. The inconsistency between mother and teacher reports in the present study, may be related to the difference between children's

behaviors with the family at home and the behaviors with the peers and teachers at the school setting. In this study, children in the intervention group showed improvement on CST-Prosocial responses but not on mother scores of SC. This can be explained by the difference between knowing and acting the appropriate behavior in parallel with the *acquisition/learning* and *performance/motivational* social skills deficits model by Gresham (2016). Children in the intervention group might have knowledge about the healthy behavioral responses in the face of a peer conflict, but maybe they have not reflected this knowledge to their actions in real life, especially at home yet. Relevant to this issue, Brown et al. (1983) mentioned that preschool age children as young learners, experience difficulties more than older children in performing learned skills across different contexts. Their capacity to generalize the knowledge from learning setting to another one may be limited (as cited in Mize & Ladd, 1990). For this reason, these children should be supported and guided to carry the learned skills to a novel context (Mize & Ladd, 1990). Another point related to disagreements between raters mentioned by Winsler and Wallace (2002) was the number of children observed by mother and teachers. While generally mothers evaluate only their own child, teachers rate all children in their classroom which allows comparison to peers. Authors also mentioned the effects of variables dependent to informants. According to Gresham (2016), the behavior ratings by mothers and teachers were based on their subjective perceptions which may also affected by their personal values, beliefs, attitude to life etc. Also, behavioral rating tool contains some limitations like not measuring the improvements in a short period of time sensitively. Therefore, adopting other data collection techniques were important to make truer inferences about child's socioemotional skills.

In the present study, associations between demographical characteristics of children and dependent measures were also examined beside the effectiveness of the program. First demographical variable which was found to be significantly correlated with various child outcomes was the child age. Teachers' ratings of social competence and anger-aggression; child's emotion comprehension scores and prosocial responses were positively related with age. In contrary, aggressive response preferences decreased as child grows up. These relationships were observed at both pre and post assessments.

Another demographic variable, child's sex was associated with different child outcomes at pre and posttest. At the beginning of the study, it was only observed that anger-aggression teacher scores were higher for boys. Approximately 3 months later, anxiety withdrawal scores and prosocial behavioral responses of girls were higher than their male peers. Additionally, they gave less aggressive responses in a hypothetical peer provocation situation compared to boys. Another research on the social competence and problem behaviors of 48-60 months old Turkish preschoolers (Gür et al., 2015) supports the findings of present study through using SCBE-30. The sample of the research consisted of 847 children from different socioeconomic status. It was observed that girls are more socially competent than boys, while boys are angry and aggressive than their female peers according to teacher evaluations. Although any significant difference was not found for anxiety-introversion variable, an upward tendency for girls was observed.

When the cooccurrence of different child outcomes were investigated, emotion comprehension skills and prosocial responses were observed to be positively correlated. This finding is meaningful because it is known that the social and emotional skills are interrelated abilities which supports each other. Even though it

was not specifically hypothesized at the beginning of the study, it might not be nonsensical to think that children's who have high scores on SC gave more prosocial responses, like children who scored on teacher ratings of AA would also give aggressive solutions. Similarly, children who seen as anxious withdrawal would select avoidant response. In contrast to these assumptions, any meaningful congruence was not found between ratings of teachers or mother and children's responses in challenging situations with peers at pre and posttest measurements.

4.2 Strengths and limitations of the study and future directions

This study is distinguished from other studies on social skill training in Turkey in many aspects. Most prominent difference is the larger sample size which consist of 181 children with their mothers and 15 preschool teachers. This study also presents a training program which follows scientifically proven teaching principles and methods. Durlak (1997) mentioned that many effective training programs adopt social learning foundations and exhibit common characteristics. In effective programs, a skill was defined and explained with its importance in a clear way. Using modelling for the exhibition of skills effectively is another element of these programs. The trainers encourage student to practice the skill and give feedback to them using positive reinforcements. The training curriculum of these programs follow a gradual pattern in teaching basic and complex skills. The present program which adopted SAFE principles -sequenced, active, focused and explicit- (Durlak, et. al, 2011), comprises different skills and behaviors of social and emotional competence in accordance with the CASEL’s guideline on SEL.

Researchers on SEL defends that effective approaches are the ones which are planned and applied with the aim of recognizing the developmental needs of youth.

One of the important points on this issue, is the teaching method of the training. Because preschool age children may not benefit from teaching approaches which requires higher cognitive complexity, behavioral teaching methods are regarded as more suitable for them. At this point, Mize and Ladd (1990) developed a social skill training curriculum based on a model which combines both behavioral and social-cognitive approaches. While they determine goals and activities in the curriculum, they attached great importance the age appropriateness. They obtained improvements in social skills use, friendlier social problem solving strategies and more peer acceptance after the training program. In parallel with these suggestions, in the present study, the training program was designed on four teaching techniques mostly rely on behavioral approach which are instruction, modeling, role play and practice. Sessions followed a general pattern which includes instruction of skill, related behaviors and the importance of this skill, modelling the skill, encouraging children for the role play of the skill and creating opportunities to practice this skill through various games and activities. This procedure is very relevant to Kress and Elias's (2007) mention to the importance of combining different teaching methods for effective SEL. Kress and Elias (2007) argued that successful programs include the direct instruction of socioemotional skills and practicing these skills in different situations supporting instant feedback from trainer. But beside adopting behavioral techniques, as compatible with cognitive-social approach, children's reasoning on appropriate social goal and relevant behaviors and on effects of the behavior for self and others were encouraged through directing basic questions and feedback to children in the sessions. The general content of the present program also advanced from more basic skills to complex ones. Also, the use of trainers outside of the school instead of teachers prevented the possibility of questions on fidelity of the

implementation. In addition to these, the outcomes of the study were assessed through different tools and techniques with using multiinformants unlike most of the studies in Turkey.

Besides the strengths, the study contains some weaknesses. As it was explained above, the training program in this study was limited to classroom-based teaching which was given in 40 minutes a week. The learning of social and emotional skills might not be expanded to home due to lack of family component in the program such as parent training, parent homework etc.

It is accepted that child, family, parent and teacher related numerous factors have strong relationship with social and emotional skills of children (Brophy-Herb, Lee, Nievar, & Stolak, 2007). These factors can be temperament (Kılıç & Güngör-Aytar, 2017), attachment security and parenting styles (Rispoli, McGoey, Koziol, & Schreiber, 2013), parental psychopathology (Winsler & Wallace, 2002), positive/negative behaviors of teacher and supportiveness level of classroom climate (Brophy-Herb et al., 2007). In addition to these factors, critical life events, such as parental divorce, serious illness etc. may affect children's socioemotional functioning and problematic behaviors at present and in the following periods (Colletti et al., 2008; Jurma, 2015). These types of information were not measured in the study that may blur the effects of the intervention.

A methodological problem must be mentioned for this study is the nonequivalence of the experimental and control groups regarding age and SES-in despite of randomization process. Along with the significant differences on some dependent measures, it was also seen that intervention group was significantly older and had lower family socioeconomic status than the control group. Even though child age and SES variables were determined as covariates in all analyses, it would be

much preferred to evaluate intervention effect with equivalent groups. It is also important to recognize that; SES is an important predictor of socioemotional competence compared low- and middle-income groups. In the present study, even it can be said that both groups belong to middle class, there is a significant difference between groups. While the intervention group can be defined as lower-middle income group, control group can be defined as upper-middle class. In the present study, moreover both of groups were coming from a district with high socioeconomic status in İstanbul. Conducting a study with a sample from one of the highly educated and relatively wealthy districts of İstanbul and Turkey make it difficult to generalize the findings to populations with lower SES and rural background. Also, the intervention group was significantly disadvantaged on social competence and anger-aggression evaluations by teachers at the beginning of the study in comparison to the control group.

Future studies on social skill training, may have a larger picture of the program effectiveness by combining different types of data derive from various informants such as child, parents, teachers and peers with using different assessment tools like behavioral observations, direct assessments, behavioral ratings, sociometric measures at multiple time points. Also, social skill training would increase the generalization of the skills if they carefully involve other figures in children's lives such as parents and teachers and implemented in adequate dosages with equal classroom sizes.

CHAPTER 5

CONCLUSION

This study aimed to develop a multidimensional child social skills training for preschoolers and examine its effects on preventing social skills deficits with different assessment tool and techniques. For this reason, a social skills training program was prepared and implemented for 12 weeks as 40 minutes a week in two preschools of Bakırköy municipality. At the end of the study, improvements in various areas are compared for training and control group who are also enrolled at another two municipality preschools. The study targeted changes specifically in social competence, externalizing and internalizing problem behaviors, emotion understanding, social problem solving skills, play related skills and behaviors. At the end of the study, children who participated in this program were rated as more socially competent by their teachers and gave more prosocial solutions to hypothetical peer conflict from pre- to posttest. In addition to these improvements, a downward trend was observed in aggressive responses in peer provocation. It was also seen that present program could not reach the aimed effectiveness in preventing social skill deficits. Specifically, avoidant responses in peer conflict scenario, social competence mother evaluations, anxiety-withdrawal aggregated scores, anger-aggression evaluations by teachers, direct emotion understanding skills did not show improvement. When the play measures were examined, downtrend in social skills, increase in parallel play and pretend play, decrease in parallel with regard play and complex pretend play were found. The study which differs from other studies in Turkey with its sample size and assessment tools by demonstrating promising but limited outcomes emphasized the importance of the efforts to skill generalization

through a teacher and family involvement and appropriate duration and intensity of the program. Also, this study showed that the integration of various data from different informants obtained via different assessment tools and techniques is essential for more reliable conclusions.

APPENDIX A

SESSION PLAN AND SAMPLE ACTIVITIES

GENERAL PLAN OF TRAINING SESSIONS

1. A skill is introduced.
2. The skill is defined, and its importance is discussed.
3. Positive and negative behaviors examples are demonstrated by trainers through roleplays or puppet show. These examples can be given through stories.
4. Children form positive behavior examples and demonstrates through role-plays or puppet shows.
5. A game in which children need to display the skill is played.

Materials:

- Pictures of positive and negative behaviors
- Glue
- Right-Wrong cards
- Music player
- Green cardboard
- Red cardboard
- Yellow cardboard
- Puppets
- Colorful stones
- Toy microphone

İLETİŞİM BECERİLERİ

Aktivite: Tanışma Oyunu

Eğitmen 1: "Çocuklar, birbirimizi daha yakından tanıyalım istiyoruz. Şimdi ben müziği açacağım. Müzikle beraber hep beraber dans etmeye başlayacağız. Müziği durdurduğum zaman herkes yerinde donacak. Ben size soru soracağım ve siz de yanınızda duran arkadaşınızdan bu sorunun cevabını öğreneceksiniz. İsterseniz bir deneme yapalım. Şimdi müziği açıyorum, haydi hep beraber dans etmeye başlıyoruz!"

Eğitmen 1: (Müziği durdurur.) "Şimdi hepimiz en yakınımızda olan arkadaşımızın en sevdiği rengi öğrenelim!" (Eğitmen 2 çocukların aralarında dolaşıp soru sormaları için teşvik eder.)

(Müzik tekrar açılır.)

Eğitmen 2: (Müziği durdurur). "Şimdi hepimiz en yakınımızda olan arkadaşımızın en sevdiği yemeği öğrenelim!"

(Müzik tekrar açılır).

Eğitmen 1: (Müziği durdurur.) "Şimdi hepimiz en yakınımızda olan arkadaşımızın en sevdiği oyunu öğrenelim!"

Eğitmen 2: "Peki çocuklar, X arkadaşımızın en sevdiği rengi kim söylemek ister?"
"Y arkadaşımızın en sevdiği yemek neymiş?"
"Z arkadaşımızın en sevdiği oyunu hatırlayan var mı?"

Eğitmen 2: "Evet çocuklar, bu oyun sayesinde birbirimizin farklı özelliklerini öğrenmiş olduk!"

OYUN KURALLARI

Aktivite: Halka atma Oyunu

Eğitmen 1: *"Şimdi de çocuklar sizlerle halka atmaca oyunu oynayacağız. Oyunumuzun kurallarını hatırlatayım. Önce iki gruba ayılacağız ve size kolyeler dağıtacağız. Aynı grubunuzdaki arkadaşlarınızla arka arkaya sıraya gireceksiniz. Sonra her grup bu halkaları atacak. Halkayı atan arkadaşımız halkayı yerden alıp arkasındaki arkadaşına verip sıranın en arkasına geçecek. Bakalım en çok halkayı hangi grup atacak?"* (İlk grubu belirlemek için eğitmen 1 sayışma tekniğini kullanır.)

Eğitmen 2: (Oyun bittikten sonra) "Çocuklar hangi grubun önce başlayacağına sayışarak karar verdik. Oyunun kurallarına uyduğumuz için hem daha çabuk sıraya girdik, hem de kimin hangi sırada olduğu belli olduğu için oyuna daha çok vakit kaldı. Hep beraber eğlenmiş olduk."

DUYGU TANIMA

Aktivite: Duygu torbası

Eğitmen, çeşitli duygu ifadelerini anlatan resimleri keser ve onları bir torbanın içine koyar. Çocuklar yerde daire kurup oturur. Kurada çıkan çocuk kalkıp liderin elinde tuttuğu torbanın içinden bir resim seçer ve gördüğü duyguyu, ayakta-halkanın ortasında, oturan arkadaşlarına anlatır. Arkadaşlarına surat mimikleriyle bu duyguyu gösterir veya bu duyguyu hissettiği bir anısını paylaşır.

ÖFKE KONTROLÜ

Aktivite: Kaplumbağa Tekniği

(Öncesinde eğitmenler kaplumbağa resimlerini tahtaya yapıştırırlar. Eğitmen 1 kaplumbağa tekniğini elindeki kuklayla çocuklara anlatır.)

Eğitmen 1: "Çocuklar şimdi sizi kaplumbağa ile tanıştıracağım. Kaplumbağanın sakinleşmek için çok özel bir tekniği var. Şimdi bu gizli tekniği sizinle paylaşacak." (Eline kaplumbağa resimlerini alır.)

Kaplumbağa: "Merhaba çocuklar. Bir keresinde okulda arkadaşım kafama top fırlatmıştı. Üzülüp sinirlenmiştim. Kendi kendime durmam gerek diye düşündüm. Kabuğuma işte böyle çekildim (der ve kukla kabuğuna çekilir.) 3 kere derin nefes aldım. Kendi kendime düşündüm ve tekrar ettim. "Sakin olabilirim ve bu probleme bir çözüm bulabilirim." Sonra sakinleştim ve kabuğumdan çıktım. İşte bu kadar kolay bir teknik buldum. Hepiniz gizli tekniğimi uygulayabilirsiniz çocuklar." (Bu konuşmayı, kaplumbağanın hareketlerini, çocukların da yapabileceği şekilde canlandırır.)

Eğitmen 2: "Haydi çocuklar şimdi de kaplumbağanın tekniğini sizinle deneyelim."

(Çocuklar kabuklarına çekilirler grup olarak ve birlikte 3 kere derin nefes alırlar.)

İŞ BİRLİĞİ

Olumlu Davranış Örneği Kukla Gösterisi

Eğitmen 1: "Tavşan ve köpeğin şimdi size bir gösterisi var. Bu gösterimizde iş yaparken birbirlerine nasıl davrandığına dikkat edin."

Tavşan: "Merhaba köpek."

Köpek: "Merhaba tavşan." (Üzgün bir şekilde merhaba der.)

Tavşan: "Ne oldu? Üzgün duruyorsun biraz, yolunda gitmeyen bir şeyler mi var?"

Köpek: “Aslında evet, bugün oyun oynamak için dışarıya çıkmıştım. Bir de ne göreyim? Yerlerde bir sürü çöp var. Doğaya iyi bakamadığımız için çok üzüldüm. Sonra çöpleri teker teker toplamaya başladım. Ama yerlerde o kadar çok çöp vardı ki yarısını bile toplayamadan çok yorulduğumu hissettim.”

Tavşan: “Tek başına çöpleri toplamaya çalıştığın için çok yorulmuşsun. İstersen gel beraber toplayalım çöpleri. Böylece kısa sürede her yeri temizlemiş oluruz.”

Köpek: (İstekle) “Ahhh, çok iyi düşündün gerçekten. Hadi o zaman temizlemeye başlayalım.”

(Ortalık temizlenir ve birlikte şarkı söyleyerek kemikleri temizlerken eğlenirler.)

Köpek: “Ellerine sağlık tavşan. Dediğin gibi çok kısa sürede her yeri temizledik. Sen yardım etmeseydin etrafı tamamen temizleyemezdim. Üstelik birlikte yaptığımız için hem temizlemiş hem de eğlenmiş olduk. Çok teşekkür ederim.”

Tavşan: “Ben de sana çok teşekkür ederim. Sen olmasaydın ben de çok yorulurdum. İş birliği yapınca hem çok yorulmadık hem de kısa zamanda her yeri temizledik.”

Köpek: “Kendimize ödül verelim mi tavşan? Beraber top oynayalım olur mu?”

Tavşan: (Sevinçle) “Çok güzel olur köpek. Hadi oynayalım.”

Köpek: “Tamam bekle biraz burada, ben topumu alıp hemen geliyorum.”

Tavşan: “Tamam, bekliyorum seni köpek.”

Tavşan: Evet çocuklar, sizce iş birliği yaparken birbirimize nasıl davrandık? (Çocukların cevapları dinlenir.)

- Birbirimize yardım ettik.
- Kısa zamanda işlerimizi bitirdik.
- Birbirimize yardım edince daha az yorulmuş olduk.
- Birlikte iş yaparken eğlendik.
- İşlerimizi bitirdikten sonra birbirimize teşekkür ettik.

PAYLAŞMA

Olumsuz Davranış Örneği Canlandırma

Eğitmen 1: “Merhaba H., nasılsın?”

Eğitmen 2: “İyiyim teşekkür ederim İ. Sen?”

Eğitmen 1: “Ben de iyiyim. Ne yapıyorsun?”

Eğitmen 2: “Arabayla oynuyorum.”

Eğitmen 1: “Ben de senle oynayabilir miyim?”

Eğitmen 2: “Hayır olmaz. Bu arabayı sadece ben süreceğim!”

Eğitmen 1: (Eğitmen 1 üzgündür.) “Ama bu araba sınıfın oyuncağı paylaşarak oynamalıyız. Hem öğretmenimiz de paylaşarak oynayın dedi.”

(Eğitmen 2 umursamaz.)

Eğitmen 1: “O zaman ben de başka oyuncakla oynayayım.”

Eğitmen 2: “Çocuklar biz birbirimizi nasıl davrandık?”
“Ben oyuncağımı paylaştım mı? Bu nasıl bir davranıştı?”
“Ben paylaşmayınca İ. öğretmen nasıl hissetti?”
“Peki İ. öğretmen ne yaptı ben paylaşmayınca?”

Eğitmen 2: “Hadi devam edelim gösterimize, bakalım neler olacak?”

(Bir süre oynadıktan sonra Eğitmen 2 izin almadan Eğitmen 1’in elinden oyuncağını alır. Eğitmen 1 üzgün ve kızgındır)

Eğitmen 2: “Çocuklar ben nasıl davrandım?”
“İ. öğretmen nasıl hissetti?”
“İ. öğretmen ne yapmalı sizce?” (Kaplumbağa tekniği hatırlatılır.)

Eğitmen 2: “Hadi devam edelim, bakalım İ. öğretmeniniz ne yapacak?

Eğitmen 1: “H. bu yaptığın hiç doğru değil, elimden çekmemelisin oyuncağı. Hem kendi oyuncağını paylaşmıyorsun hem de benim oyuncağımı izinsiz alıyorsun. Ya bu oyuncağı sırayla oynayalım ya da bana arabayı ver sen bunla oyna.”

Eğitmen 2: “Tamam, özür dilerim. O zaman al sen arabayla oyna, ben de bunla.”

Eğitmen 1: “Tamam.”

Çocuklarla Canlandırma Örneği

Eğitmen 1 anlatır. Canlandırma için üç çocuk seçilir. İki çocuk birlikte oynamaya başlar, üçüncü çocuğun oyuncağı yoktur. Çocukların oyuna katılma/çağırması, oyuncakları paylaşmayı teklif etmesi beklenir.

APPENDIX B

CONSENT FORM FOR PARENTS, INTERVENTION GROUP

KATILIMCI BİLGİ VE ONAM FORMU

Araştırmayı destekleyen kurum, bölüm: Boğaziçi Üniversitesi, Psikoloji Bölümü
Araştırmanın adı: Çocuk Eğitim Programı ile Okul Öncesi Çocuklarının Sosyal Beceri Eksikliklerinin Önlenmesi
Araştırmacının adı: Merve İpek Şentürk
Proje Danışmanı: Doç. Dr. Feyza Çorapçı
E-posta: feyza.corapci@boun.edu.tr
Telefonu: 212 359 7323

Sayın Veli,

Okul öncesi dönem çocukların fiziksel, sosyal, duygusal ve bilişsel açıdan sağlıklı gelişebilmeleri için kritik öneme sahiptir. Bu dönemde edinilen sosyal ve duygusal beceriler, çocukların yetişkinler ve akranlarıyla olumlu sosyal ilişkiler kurabilmelerini ve duygularını ortamın koşullarına uygun şekilde ifade edebilmelerini destekler. Temeli aile ortamında atılan bu becerilerin geliştirilmesinde okul öncesi eğitim kurumlarının önemi büyüktür.

Bu kapsamda, Boğaziçi Üniversitesi Psikoloji Bölümünde geliştirmiş olduğumuz bir sosyal beceri eğitim programını Bakırköy kreşlerinde uygulamayı amaçlamaktayız.

- Bu programın temel hedefi, 4-6 yaş grubu çocuklarına yardımlaşma, paylaşma, anlaşmazlıklara çözüm bulma, duyguları tanıma ve ortamın koşullarına göre duygularını uygun ifade edebilme gibi beceriler kazandırmaktır.
- Programın süresi üç ay olacaktır ve 2017 Şubat-Nisan ayları arasında toplam on iki hafta süresince gerçekleştirilmesi planlanmaktadır. Bu programı uygulamada eğitim almış Boğaziçi Üniversitesi psikoloji bölümü öğrenci ve mezunları haftada bir gün kreş sınıfında çocuklar ile çember saati yaparak belli bir sosyal beceriyi tanıtacak ve bu beceriyi doğru kullanmanın örneklerini çeşitli kukla gösterileri ile keyifli grup oyunlarıyla çocuklara gösterecektir. Daha sonra hafta içerisindeki serbest oyun ve etkileşimlerde sınıf öğretmenleri çocukların o hafta ele alınan sosyal beceriyi sergilemelerini teşvik edecektir.
- Uygulamayı planladığımız bu sosyal beceri programının etkinliğini değerlendirmek için, hem programa başlamadan önce Ocak-Şubat 2017 döneminde hem de programı uyguladıktan sonra Mayıs-Haziran 2017 döneminde birer değerlendirme yapıp çocukların problem çözme becerilerinin ve akran ilişkilerinin zaman içinde ne kadar geliştiğini belirlemeyi amaçlıyoruz.

Uygulayacağımız programın etkisini anlamamıza yardımcı olmanız için sizi ve çocuğunuzu projemize katılmaya davet ediyoruz. Onay verdiğiniz takdirde araştırma grubumuzdan öğrenciler çocuğunuzla kreşte bireysel olarak oyun niteliğinde faaliyetler yaparak (örneğin resimlere bakma, hikâye dinleme) çocuğunuzun duyguları tanıma ve problem çözme gibi konulardaki yetkinliğini ölçecek. Ayrıca sınıflarda serbest oyun saatleri sırasında gözlem yaparak çocukların akranlarıyla nasıl oynadıklarını değerlendireceğiz. Son olarak, veliler ve öğretmenlerden çocukların sosyal becerilerine ilişkin 30 kısa madde içeren bir anket doldurmalarını rica edeceğiz. Toplanan tüm verilerde çocuğunuzun bilgilerinin gizliliği esas tutulmaktadır. Katıldığınız takdirde çalışmanın herhangi bir aşamasında sebep göstermeden onayınızı çekme hakkına da sahipsiniz.

Bu araştırma bilimsel bir amaçla yapılmaktadır ve katılımcı bilgilerinin gizliliği esas tutulmaktadır. Katılımcılardan toplanan veriler sadece araştırmacılar tarafından görülebilecek, katılımcıların isimleri kendilerinden alınan verilerle eşleştirilmeyecek ve toplanan veriler bireysel olarak değil, toplu olarak değerlendirilip yayınlanacaktır.

Yapmak istediğimiz araştırmanın size risk getirmesi beklenmemektedir. Bu çalışma Boğaziçi Üniversitesi etik kurulu tarafından onaylanmıştır. Araştırma projesi hakkında ek bilgi almak ya da araştırmayla ilgili sorularınızı yöneltmek istediğiniz takdirde lütfen yukarıda iletişim bilgileri yazılı olan Boğaziçi Üniversitesi öğretim üyesi Doç. Dr. Feyza Çorapçı ile temasa geçiniz. Elinizde bulunması için bu onam formunun bir kopyası size verilecektir.

Yukarıda verdiğimiz bilgiler ışığında bize yardımcı olmayı ve bu projeye katılmayı kabul ediyorsanız, bu formu imzalayıp çocuğunuzun sınıf öğretmenine geri yollamanızı rica ediyoruz.

Adres ve telefon numaranız değişirse, bize haber vermenizi rica ederiz.

Bana anlatılanları ve yukarıda yazılanları anladım. Formun bir örneğini aldım / almak istemiyorum (bu durumda araştırmacı bu kopyayı saklar).

Çocuğum _____ ’in bu araştırma projesine katılmasına

onay veriyorum ☐ onay vermiyorum ☐

Velinin Adı: _____

Velinin İmzası: _____

Tarih (gün/ay/yıl): _____/_____/_____

APPENDIX C

CONSENT FORM FOR PARENTS, CONTROL GROUP

KATILIMCI BİLGİ VE ONAM FORMU

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Çocukların sosyal becerilerinin ve akran ilişkilerinin zaman içinde ne kadar geliştiğini belirlemek amacı ile hem Ocak-Şubat döneminde hem de kreşte geçirdikleri ilk senenin sonunda doğru Mayıs-Haziran döneminde birer değerlendirme yapmayı planlıyoruz.

Onay verdiğiniz takdirde, bu değerlendirmelerde çocuğunuzla kreşte bireysel olarak oyun niteliğinde faaliyetler yaparak (örneğin resimlere bakma, hikâye dinleme) çocuğunuzun duyguları tanıma, paylaşma, yardımlaşma, anlaşmazlık yaşanan durumlarda problem çözme gibi sosyal becerileri gelişimini değerlendireceğiz. Ayrıca, sınıflarda serbest oyun saatleri sırasında gözlem yaparak çocukların akranlarıyla ne sıklıkta ve nasıl oynadıklarını belirleyeceğiz. Son olarak, veliler ve öğretmenlerden çocukların sosyal becerilerine ilişkin 30 kısa madde içeren bir anket doldurmalarını rica edeceğiz. Toplanan tüm verilerde çocuğunuzun bilgilerinin gizliliği esas tutulmaktadır. Katıldığınız takdirde çalışmanın herhangi bir aşamasında sebep göstermeden onayınızı çekme hakkına da sahipsiniz.

Yapılacak değerlendirmeler ile çocukların sene içerisinde hangi sosyal becerileri edindiklerini ve hangi becerileri edinmede güçlük yaşadıklarını belirleyebileceğiz.

Bu araştırma bilimsel bir amaçla yapılmaktadır ve katılımcı bilgilerinin gizliliği esas tutulmaktadır. Katılımcılardan toplanan veriler sadece araştırmacılar tarafından görülebilecek, katılımcıların isimleri kendilerinden alınan verilerle eşleştirilmeyecek ve toplanan veriler bireysel olarak değil, toplu olarak değerlendirilip yayınlanacaktır.

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Çocuğum _____ 'in bu araştırma projesine katılmasına

onay veriyorum ☐ onay vermiyorum ☐

Velinin Adı: _____

Velinin İmzası: _____

Tarih (gün/ay/yıl): _____/_____/_____

APPENDIX D

CHILD AND FAMILY INFORMATION FORM

Questionnaire Date: Day_____ Month_____ Year_____

Your Child's:

1. Name Surname: _____

2. Birth Date: Day____ Month_____ Year_____

3. Sex: Boy____ Girl____

4. Preschool/childcare center entry date: Month_____ Year_____

5. Name of the current preschool/childcare center: _____

6. How many siblings s/he has? _____

7. Please order all individuals who always live at home with the child:

Name	Relationship to the child (brother, grandmother etc.)	Age

Questions about child's parents

	Mother	Father
Birth Date	___/___/_____ Day Month Year	___/___/_____ Day Month Year
Job		
Employment Status	1. Unemployed ☐ 2. Full-time (40 hours a week) ☐ 3. Part-time (less than 40 hours a week) ☐	1. Unemployed ☐ 2. Full-Time (40 hours a week) ☐ 3. Part-time (less than 40 hours a week) ☐
Marital Status	1. Married ☐ 2. Single, Divorced ☐ 3. Remarried ☐ 4. Widow ☐	1. Married ☐ 2. Single, Divorced ☐ 3. Remarried ☐ 4. Widow ☐
Education	(Please circle the number of appropriate option) 1. Primary school drop out 2. Primary school graduate 3. Middle school drop out 4. Middle school graduate 5. High school drop out 6. High school graduate 7. College graduate 8. University drop out 9. University graduate 10. Postgraduate degree (master or doctorate)	(Please circle the number of appropriate option) 1. Primary school drop out 2. Primary school graduate 3. Middle school drop out 4. Middle school graduate 5. High school drop out 6. High school graduate 7. College graduate 8. University drop out 9. University graduate 10. Postgraduate degree (master or doctorate)
Household Income (per month)	1. Less than 1.000 TL ☐ 2. 1.000 - 3.000 TL ☐ 3. 3.001 - 5000 TL ☐ 4. 5.001 - 7.000 TL ☐ 5. 7.001 - 10.000 TL ☐ 6. More than 10.000 TL ☐	

APPENDIX E

TEACHER AND CLASSSROOOM INFORMATION FORM

Preschool name: _____

Teacher name: _____

Questionnaire Date: Day_____ Month_____ Year_____

Which age group do you teach now? _____

(Please indicate the age group as months)

Your class:
- ☐ Full day
- ☐ Half day

How many children are there in your class? _____

- Number of girls: _____
- Number of boys: _____

Is there any child with a special education need?
- ☐ Yes (If yes, the number of children with special education need): _____
- ☐ No

Is there any child with a behavior problem (hyperactive, defiant, aggressive etc.) in your class?
- ☐ Yes
- ☐ No

How many adults are there in your classroom during the activities in a day?

-Total number of teachers _____

-Total number of assistant/trainee teacher _____

-How many days in a week do assistant/trainee teachers participate in classroom activities? _____

Education level:

- ☐ High school graduate
- ☐ Vocational high school graduate (Your major: _____)
- ☐ University graduate (Your major: _____)
- ☐ Other: _____

For how many years have you been working as a teacher except for internships? ___

APPENDIX F

SOCIAL COMPETENCE BEHAVIOR EVALUATION - SHORT

FORM, PARENT-REPORT VERSION

There are some statements listed below concerning emotional states and behaviors of a child. Considering the indicated frequency scale and based on your observations, please rate how often the given statements are applicable to your child. This behavior is:

NEVER (1) SOMETIMES (2 or 3) FREQUENTLY (4 or 5) ALWAYS (6) applicable to my child.

	NEVER	SOMETIMES		FREQ.		ALWAYS
	1	2 or 3		4 or 5		6
1. Maintains neutral facial expression	1	2	3	4	5	6
2. Comforts or assists another child in difficulty	1	2	3	4	5	6
3. Easily frustrated	1	2	3	4	5	6
4. Gets angry when interrupted	1	2	3	4	5	6
5. Irritable, get mad easily	1	2	3	4	5	6
6. Helps with everyday tasks (setting/clearing table)	1	2	3	4	5	6
7. Timid, afraid (avoids new situations)	1	2	3	4	5	6
8. Sad, unhappy, or depressed	1	2	3	4	5	6
9. Inhibited or uneasy in group	1	2	3	4	5	6
10. Screams or yells easily	1	2	3	4	5	6
11. Works easily in a group	1	2	3	4	5	6
12. Inactive, watches the other children play	1	2	3	4	5	6

	NEVER	SOMETIMES		FREQ.		ALWAYS
	1	2 or 3		4 or 5		6
13. Negotiates solutions to conflicts	1	2	3	4	5	6
14. Remains apart, isolated from the group	1	2	3	4	5	6
15. Takes other children's point into account	1	2	3	4	5	6
16. Hits, bites, or kicks other children	1	2	3	4	5	6
17. Cooperates with other children in group activities	1	2	3	4	5	6
18. Gets into conflict with other children	1	2	3	4	5	6
19. Tired	1	2	3	4	5	6
20. Takes care of toys	1	2	3	4	5	6
21. Doesn't talk or interact during group activities	1	2	3	4	5	6
22. Attentive toward younger children	1	2	3	4	5	6
23. Goes unnoticed in a group	1	2	3	4	5	6
24. Forces other children to do things they don't want to	1	2	3	4	5	6
25. Hits parents or destroys things when angry with parents	1	2	3	4	5	6
26. Worries	1	2	3	4	5	6
27. Accepts compromises when reasons are given	1	2	3	4	5	6
28. Opposes parents' suggestions	1	2	3	4	5	6
29. Defiant when reprimanded	1	2	3	4	5	6
30. Takes pleasure in own accomplishments	1	2	3	4	5	6

APPENDIX G

SOCIAL COMPETENCE BEHAVIOR EVALUATION - SHORT

FORM, TEACHER-REPORT VERSION

There are some statements listed below concerning emotional states and behaviors of a child. Considering the indicated frequency scale and based on your observations, please rate how often the given statements are applicable to your student. This behavior is:

NEVER (1) SOMETIMES (2 or 3) FREQUENTLY (4 or 5)
ALWAYS (6) applicable to my student.

	NEVER	SOMETIMES		FREQ.		ALWAYS
	1	2 or 3		4 or 5		6
1. Maintains neutral facial expression	1	2	3	4	5	6
2. Comforts or assists another child in difficulty	1	2	3	4	5	6
3. Easily frustrated	1	2	3	4	5	6
4. Gets angry when interrupted	1	2	3	4	5	6
5. Irritable, get mad easily	1	2	3	4	5	6
6. Helps with everyday tasks (distribute snacks)	1	2	3	4	5	6
7. Timid, afraid (avoids new situations)	1	2	3	4	5	6
8. Sad, unhappy, or depressed	1	2	3	4	5	6
9. Inhibited or uneasy in group	1	2	3	4	5	6
10. Screams or yells easily	1	2	3	4	5	6
11. Works easily in a group	1	2	3	4	5	6
12. Inactive, watches the other children play	1	2	3	4	5	6

	NEVER	SOMETIMES		FREQ.		ALWAYS
	1	2 or 3		4 or 5		6
13. Negotiates solutions to conflicts	1	2	3	4	5	6
14. Remains apart, isolated from the group	1	2	3	4	5	6
15. Takes other children's point into account	1	2	3	4	5	6
16. Hits, bites, or kicks other children	1	2	3	4	5	6
17. Cooperates with other children in group activities	1	2	3	4	5	6
18. Gets into conflict with other children	1	2	3	4	5	6
19. Tired	1	2	3	4	5	6
20. Takes care of toys	1	2	3	4	5	6
21. Doesn't talk or interact during group activities	1	2	3	4	5	6
22. Attentive toward younger children	1	2	3	4	5	6
23. Goes unnoticed in a group	1	2	3	4	5	6
24. Forces other children to do things they don't want to	1	2	3	4	5	6
25. Hits teacher or destroys things when angry with teacher	1	2	3	4	5	6
26. Worries	1	2	3	4	5	6
27. Accepts compromises when reasons are given	1	2	3	4	5	6
28. Opposes teacher's suggestions	1	2	3	4	5	6
29. Defiant when reprimanded	1	2	3	4	5	6
30. Takes pleasure in own accomplishments	1	2	3	4	5	6

APPENDIX H

PRESCHOOL AND KINDERGARTEN BEHAVIOR SCALES - SECOND EDITION, SOCIAL SKILLS SCALE

Please rate your child/student on each of the items in this rating form. Ratings should be based on your observations of this child's behavior during the past three months. The rating points after each item appear in the following format:

Never	Rarely	Sometimes	Often
0	1	2	3

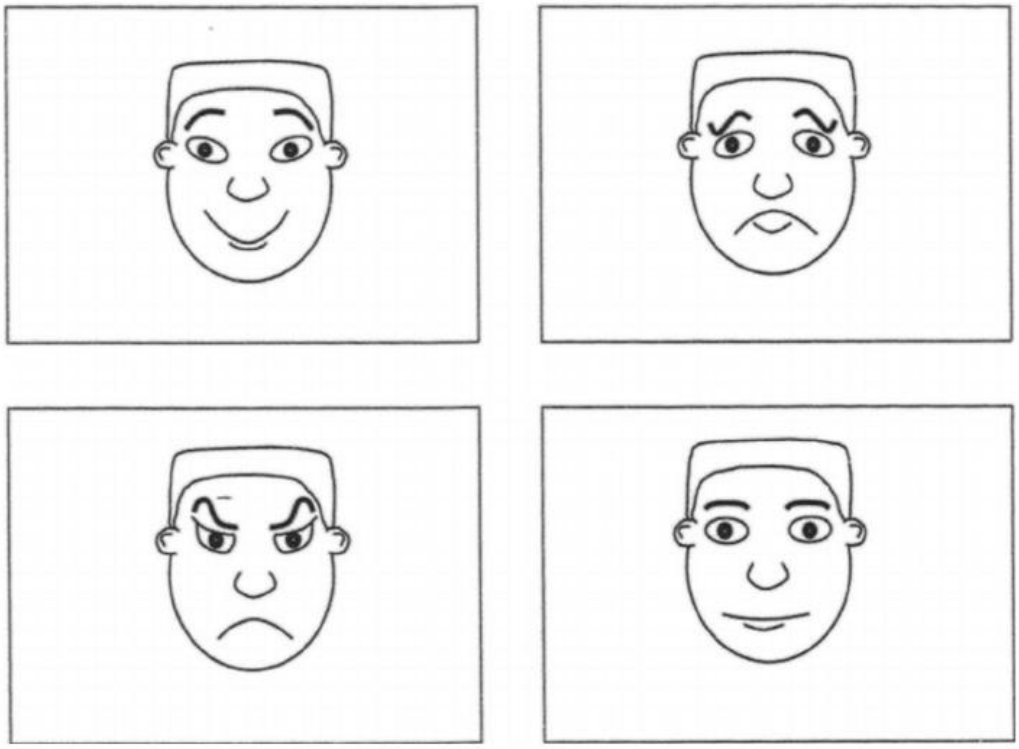
*** Please complete all items, and do not circle between numbers.

		Never	Rarely	Sometimes	Often
1	Works or plays independently	0	1	2	3
2	Is cooperative	0	1	2	3
3	Smiles and laughs with other children	0	1	2	3
4	Plays with several different children	0	1	2	3
5	Tries to understand another child's behavior ("Why are you crying?")	0	1	2	3
6	Is accepted and liked by other children	0	1	2	3
7	Follows instructions from adults	0	1	2	3
8	Attempts new tasks before asking for help	0	1	2	3
9	Makes friends easily	0	1	2	3
10	Shows self-control	0	1	2	3
11	Is invited by other children to play	0	1	2	3
12	Uses free time in an acceptable way	0	1	2	3
13	Is able to separate from parent without extreme distress	0	1	2	3
14	Participates in family or classroom discussions	0	1	2	3
15	Asks for help from adults when needed	0	1	2	3

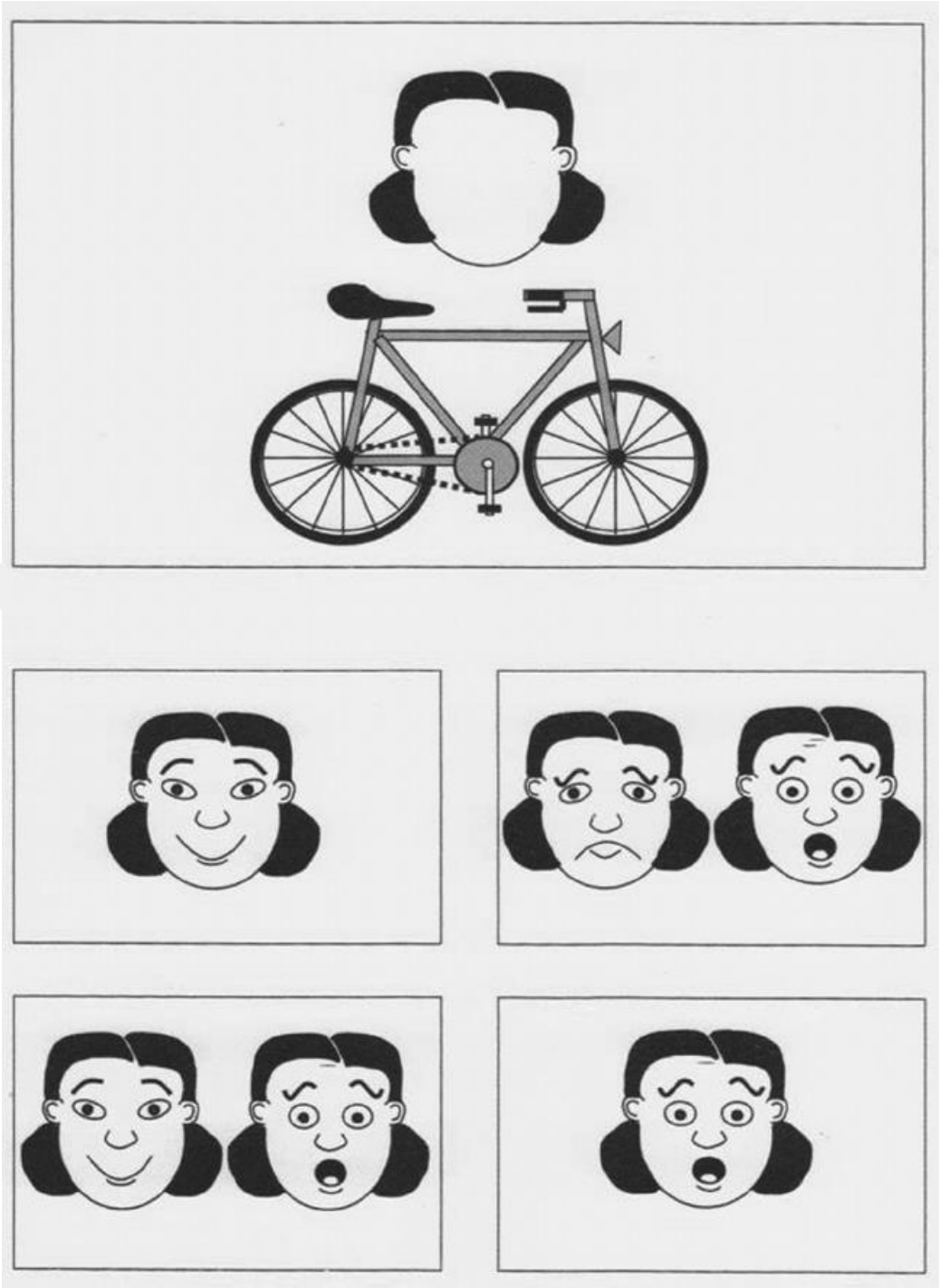
		Never	Rarely	Sometimes	Often
16	Sits and listens when stories are being read	0	1	2	3
17	Stands up for other children's rights ("That's his!")	0	1	2	3
18	Adapts well to different environments	0	1	2	3
19	Has skills or abilities that are admired by peers	0	1	2	3
20	Comforts other children who are upset	0	1	2	3
21	Invites other children to play	0	1	2	3
22	Cleans up his/her messes when asked	0	1	2	3
23	Follows rules	0	1	2	3
24	Seeks comfort from an adult when hurt	0	1	2	3
25	Shares toys and other belongings	0	1	2	3
26	Stands up for his/her rights	0	1	2	3
27	Apologizes for accidental behavior that may upset others	0	1	2	3
28	Gives in or compromises with peers when appropriate	0	1	2	3
29	Accepts decisions made by adults	0	1	2	3
30	Takes turns with toys and other objects	0	1	2	3
31	Is confident in social situations	0	1	2	3
32	Responds appropriately when corrected	0	1	2	3
33	Is sensitive to adult problems ("Are you sad?")	0	1	2	3
34	Shows affection for other children	0	1	2	3

APPENDIX I

SAMPLE TEC PICTURES AND QUESTIONS



Male version, simple emotion identification. (The questions asked to the child are: Look at these four pictures. Point which feels sad).

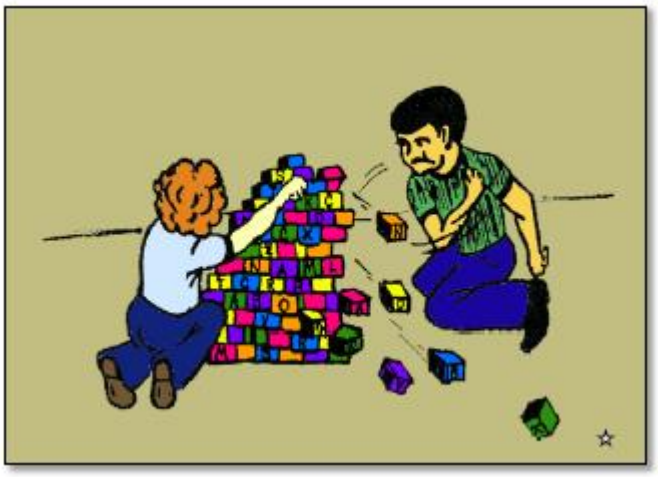


Female version, mixed emotions comprehension (Questions: This child, whose name is Zeynep, is looking at the beautiful bike that she just received for her birthday. At the same time, she thinks that she could fall and hurt, as she is not yet able to drive it. Can you point the picture that shows how Zeynep feels? She is happy, sad and frightened, happy and frightened or frightened?).

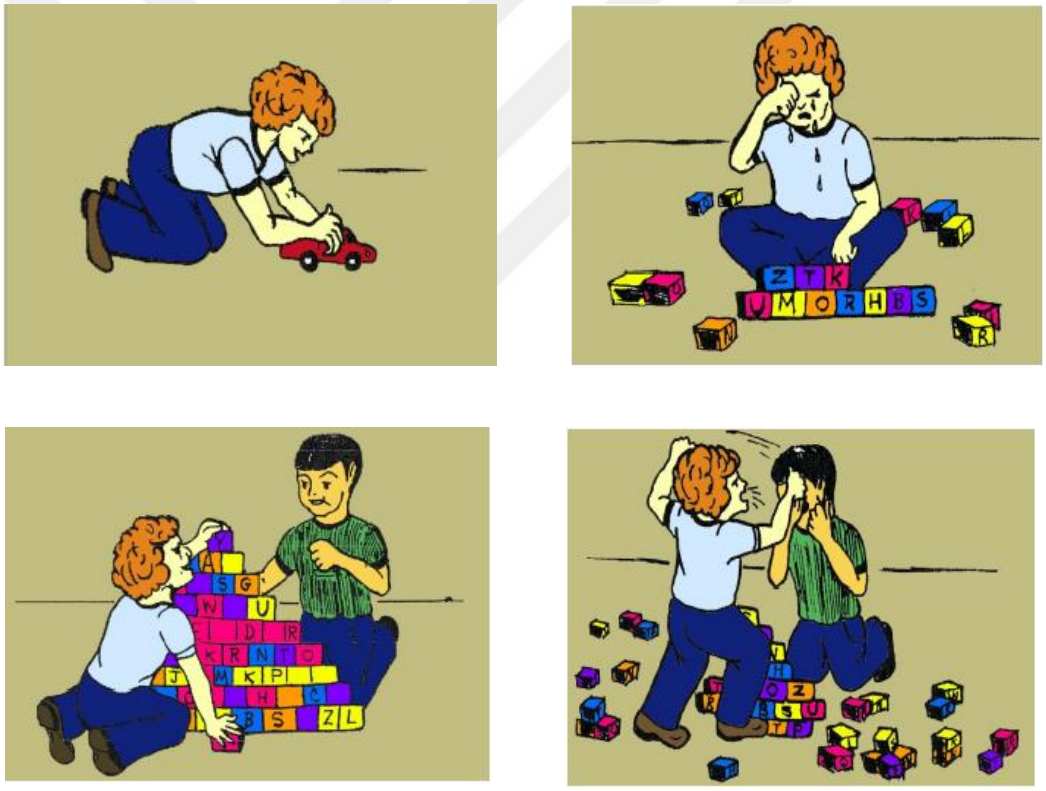
APPENDIX J

CST-R QUESTIONS AND SAMPLE PICTURES

	Scenario	Behavioral choices
Physical provocation	Mary/John was building a very tall tower of blocks. Bobby knocked it down.	1a. Prosocial: Ask Bobby to build another tower with you 1b. Aggressive: Hit Bobby or yell at him 1c. Dysregulated: Cry 1d. Avoidant: Go find something else to play with
	Mary/John is having a good time playing in the sandbox when Bobby hits her/him.	2a. Prosocial: Tell him it's not a nice thing to do 2b. Aggressive: Hit him 2c. Dysregulated: Cry 2d. Avoidant: Go play somewhere else
	Mary/John was kicking a soccer ball. Bobby came and took the soccer ball.	3a. Prosocial: Ask Bobby to play with you 3b. Aggressive: Grab the ball back or yell at him 3c. Dysregulated: Cry 3d. Avoidant: Go play with something else
Social provocation	Mary/John asked Bobby to play with her/him. But Bobby said that he doesn't want to play with Mary/John. He is going to play with Tom.	4a. Prosocial: Ask if you can play with Tom too 4b. Aggressive: Push Bobby and say "you're not my friend." 4c. Dysregulated: Cry 4d. Avoidant: Go play with somebody else
	Mary/John drew a picture of a dog. Bobby saw it and said "It doesn't look like a dog. It looks like an ugly monster!" and started laughing.	5a. Prosocial: Say to Bobby, "That's Ok, I like my picture." 5b. Aggressive: Hit Bobby or yell at him 5c. Dysregulated: Cry 5d. Avoidant: Stop drawing and go find something else to do
	Mary/John woke up from naptime sucking his/her thumb. Bobby saw and said, "Only babies suck their thumbs!"	6a. Prosocial: Tell Bobby, "It's okay to suck your thumb at naptime." 6b. Aggressive: Tell Bobby, "No, you're a baby!" or hit him 6c. Dysregulated: Cry 6d. Avoidant: Ignore Bobby

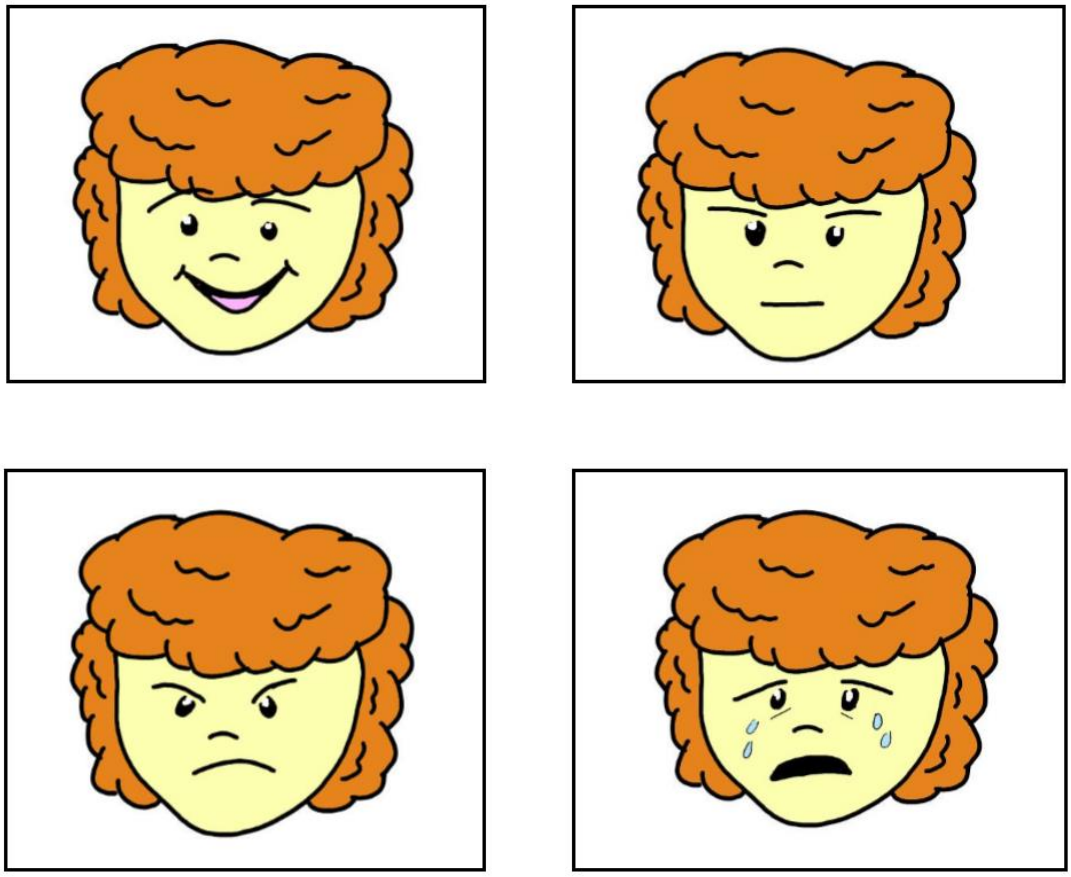


Sample situation picture (Block story)



Sample behavior pictures

(aggressive, avoidant/passive, dysregulated/crying and prosocial/socially competent)



Emotion Pictures (happy, normal, angry and sad)

APPENDIX K

CHILD OBSERVATION FORM

Child ID: _____ Classroom : _____ Teacher/Child Ratio : _____
Date : _____ Hour :_____ Observer:_____

	E	E	E	E	E	E	E	E	E	E
NONPLAY										
Unoccupied										
Onlooker										
SOCIAL PLAY										
Solitary										
Parallel										
Parallel with Regard										
Simple Social										
Reciprocal										
Pretend										
Complex Pretend										
SOCIAL										
Ask for help										
Share										
Cooperation										
Apology										
Comfort other										
Invite										
Invited										
Join										

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