The Effect of Story Telling-Based and Play-Based Social Skills Training on Social Skills of Kindergarten Children: An Experimental Study *

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Abstract

This study was conducted with the purpose of examining the social skills of kindergarten children who participated in story telling-based social skills training and play-based social skills training and with no intervention. The study involved three different groups and a total of 120 children including Experiment-I, Experiment-II, and Control group. The study relied on an experimental design with pretest-posttest-permanence test control group, Experiment-I group participated in story telling-based social skills training called “Ready to Learn” which was developed by Brigman, Lane, and Lane (1994) and adapted to Turkish by Aksoy (2014). Experiment-II group participated in play-based social skills training called “Fun FRIENDS” which was developed by Barrett (2007a, 2007b) and adapted to Turkish by Aksoy (2014). Both “story telling-based social skills training” and “play-based social skills training” were implemented over twelve weeks during two-hour sessions weekly. No intervention was made for children in the Control group. In the study, the “Social Skills Assessment Scale-Teacher Form” developed for preschool children by Aksoy (2014), was used in order to evaluate children’s social skills. As a result of the current study, children who participated in story telling-based social skills training were found to be at a significantly higher level in dimensions of “communication”, “adaptation”, “prosocial behaviours” and in terms of total social skills compared to children who haven’t had any intervention. Children who participated in play-based social skills training were detected to be at a significantly higher level in dimensions of “communication”, “adaptation”, “self-control”, “prosocial behaviours”, “assertiveness” and in terms of total social skills compared to children who haven’t had any intervention. Accordingly, suggestions were presented for developing children’s social skills through systematic and organized trainings and for improving teachers’ knowledge and experience on preparing and practicing qualified activities equipped with enriched content to support social skills.

Keywords

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**Introduction**

The modern age has witnessed the expansion of the nuclear family structure; a transformed social and economic order has emerged and forced both mothers and fathers to work outside the home environment. In addition, a cascading effect of media on human lives, such as television and computers, has begun to rise. Further, a significant portion of unborn babies have been exposed to the harmful impacts of alcohol and drugs due to addictive mothers, and a considerable increase has been detected in the quantities of mentally-disabled and attention-disordered children reach new day (Knoff, 2001; Weiss, 2013). On the other hand, there has been a significant decline in the contribution of family as the very first institution of any child’s socialization process. The type of skills as well as behaviors mandated in social life cannot then thoroughly be attributed to the child in his/her family circle. Since the socialization process cannot be ascribed to the family circle, the responsibility for children’s socialization is transferred to the schools. It thus becomes imperative for schools to execute certain practices aimed at developing children’s social competencies and correcting problematic behaviors. Most of the times schools assign priority honing academic skills and preparing students for professional life while ignoring the attempts to improve children’s social relations (Gathercoal & Crowell, 2000; Rocha Decker, 2004). Another significant factor in the emergence of individuals with lower social skills is the rapid transformation in life conditions due to globalization which have driven families to favor individualistic attitudes in their child-raising practices and forced educational institutes to focus on programs that promote academic success as a priority (Özbey, 2009). The combined effect has thus greatly increased the number of children with behavioral problems and impaired social skills, thereby triggering myriad challenges ranging from social life to academic life (Warger & Rutherford, 1996). Within that context, there is now a rising need to conduct study about practices focusing on social skills.

Social skills are learned socially-acceptable behaviors enabling an individual to effectively communicate with others thus avoiding unapproved reactions of other people (Gresham & Elliott, 1990). In other terms, these are the kind of skills that allow an individual to behave in a way to be useful for himself or herself as well as others and such skills enable these behaviors to receive social approval (Dowrick, 1986). Children with social skill deficits are likely to face short-term and long-term adverse effects in life and these adverse effects may be viewed as the harbingers of serious problems awaiting in the future. Social skills are the type of skills allowing an individual to receive peer approval, increase his or her academic competency, develop positive self-perception, bettered self-respect and prevent pathological problems (Elliott, Sheridan, & Gresham, 1989; Gresham & Elliott, 1987; Sharma, Goswami, & Gupta, 2016). Indeed, children with social skill deficits are generally the kind of children excluded by their peers. Excluded and rejected children play alone or communicate with peers in a restricted manner. Hence they are deprived of the chances to develop experience-based social interaction skills and learn age-appropriate social skills. In addition, children who are constantly excluded and rejected, begin to practice impaired interpersonal relations, experience connection gaps with others and are exposed to social isolation (Coie, 1990; Darwish, Esquivel, Houtz, & Alfonso, 2001; Knight & Hughes, 1995; Lawhon & Lawhon, 2000). After all, those children exposed to peer rejection and social isolation may start to develop feelings of loneliness, insecurity and quick-tempered reactions. Thus children that experience difficulty in peer-communication and social interaction are under the risk of undeveloped social-emotional progress and maintain a low academic performance level (Boivin, Hymel, & Bukowski, 1995; Engle, McElwain, & Lasky, 2011; Lodder, Goossens, Scholte, Engels, & Verhagen, 2016; Mahyuddin & Elias, 2010; Parker & Asher, 1987).

Not only are social skills effective in social acceptance and social interaction, but they also booster a child’s school readiness, listening-speaking skills, and academic motivation. Children endowed with communication skills, with a friendly, sensible and cooperative attitude have higher chances of making new friends and correspondingly achieving better academic performance. As opposed to that, children with social skill deficits are more likely to experience academic failure, aggression, criminal tendency, asocial personality traits, short or long-term behavioral problems (Agostin & Bain, 1997; Gagnon & Nagle, 2004; Gresham, 2016; Lawhon & Lawhon, 2000; Montroy,
Bowles, Skibbe, & Foster, 2014; Sharma et al., 2016; Weiss, 2013; Yang, Tsai, Kim, Cho, & Laffey, 2006; Zins, Bloodworth, Weissberg, & Walberg, 2004). Upon identifying social skill deficits, it is imperative to focus on corrective measurements against any social skill impairment. At this stage, it is of vital importance to apply effective strategies and conduct an early intervention. It has been suggested that the most appropriate period for social skill development interventions is the preschool period (Coie, Dodge, & Kupersmidt, 1990; Walker, 2004). In recent years, there has been a considerable emphasis on social skills training. The fundamental assumption behind this argument is that interpersonal problems triggered due to weak social skills lead to myriad critical issues in the forthcoming years such as crime involvement, drug abuse, and depression. This could be prevented if social skills were better effectuated during childhood years (Segrin & Giverts, 2003). In line with this argument, it is claimed that preschool period intervention programs practiced to improve social skills could not only hone proper interpersonal skills and socially-acceptable behaviors but also prevent some destructive and negative actions such as aggression and anti-social behaviors (Fabes, Gaertner, & Popp, 2006). In parallel with this argument, Hawkins, Kosterman, Catalano, Hill, and Abbott (2008) identified that in the childhood period; social-development aimed interventions could instill positive effects, even fifteen years after the termination of intervention, on children's social competencies, financial growth, academic achievement, sexual health and mental development. Based on this premise, as also emphasized by Aksoy and Baran (2010), it is of vital significance to conduct studies aimed at bettering and developing the social skills of preschool age children.

Indeed, social skills development studies applied to preschool age children demonstrated that this educational program elevated the degree of positive developments such as peer acceptance; interpersonal skills; independent learning skills; listening-verbal expression skills; assertiveness and cooperative skills; perspective-taking skills; social-problem solving skills; feelings interpreting skills; self-control and adaptive skills; academic and social-emotional skills; understanding others' emotions; ideas and behaviors; and developing tolerance skills (Avcioğlu, 2004; Bierman et al., 2008; Choi, 2002; Çimen, 2009; Daemi & Farnia, 2013; De Haas-Warner, 1991; Dereli, 2008; Durualp & Aral, 2010; Ekinci Vural, 2006; Esteban, Sidera, Serrano, Amado, & Rostan, 2010; Gregoriadis, Grammatikopoulos, & Zachopoulou, 2013; Guglielmo & Tryon, 2001; Kamaraj, 2004; Kurt, 2007; Lobo & Winsler, 2006; Okur, 2008; Özdemir Topaloğlu, 2013; Patterson & Bigler, 2006; Uysal & Kaya Balkan, 2015; Walsh et al., 2006). These educated program also prevent negative developments such as self-control problems, introversion withdrawal, maladjusted and aggressive behaviors, internal and external behavioral problems, and anti-social behaviors (Beelmann & Lösel, 2006; Han, Catron, Weiss, & Marciel, 2005; Pickens, 2009; Rahedi, Fathiazar, Hasseini Nasab, Maghaddam, & Kaini, 2017; Webster Stratton, Reid, & Hammond, 2001). In studies aimed at developing preschool age children's social skills, it is identified that a range of methods and techniques have been applied, thereby proving that in order to improve the target skills it is of significant importance to select the effective and applicable methods. Relevant studies in this context have utilized various application methods and techniques such as the collaborative approach, family inclusion, role-playing, role-modeling, story reading/telling, peer-teaching, drama and play activities.

A review of relevant literature posited that there is a limited range of studies examining the effects of story-based (Baş, 2011; Daemi & Farnia, 2013; Esteban et al., 2010; Guglielmo & Tryon, 2001) and play-based (Durualp & Aral, 2010; Lobo & Winsler, 2006; Walsh et al., 2006) social skills training. Stories are the sources that have written elements in their expressions, as well as they have visual elements accompanied by pictures/drawings inside them. Stories serve as an effective learning tool for the children in the preschool age group, who are in the period of enlarging their vocabularies and discovering new meanings. A child involving in story listening/story telling activities also establish interactions with the characters in the stories and are involved in the event adventures that are addressed in the stories, at the same time they can acquire many social skills and behaviors related to social life and experience an enjoyable learning experience within a natural flow thanks to the fact that they are introduced to stories which are penned by this manner (DeGeorge, 1998; Eades, 2006; Fletcher & Reese, 2005; Justice & Kaderavek, 2002; Neda, Ashkan, Siros, & Taher, 2013; Sever, 2003; Villares,
Brigman, & Peluso, 2008; Zhang, 2011). In addition to this, play is also a learning tool, which provides important contributions to meeting the needs of having fun, moving, and learning and which is suitable for the nature of the preschool children. While children experience the processes such as observing, trying, distinguishing, and repeating during a play, they also have the opportunity to learn several social skills such as experiencing different feelings, finding a solution applicable to a problem, trying new things, coping with anger, adapting to new conditions, and fulfilling the responsibilities given to them, experiencing them in person (Aksoy & Baran, 2014; Anderson McNamee & Bailey, 2010; Ashiabi, 2007; Bergen, 2009; Charlesworth, 2011; Jackman, 2011; Mistrett ve Bickart, 2009; Sevinç, 2009; Spodek & Saracho, 1998; Tahmores, 2011; Tuğrul, 2012; Yörükoğlu, 2006). In this line, it is expected that the information and findings to be set forth by a study conducted on story-based and play-based social skills training in preschool period would contribute to the literature from theory to practice. On the other hand, bearing in mind that children are endowed with different intelligence domains, dissimilar interests, and a variety of developmental characteristics, it becomes evident that there is an urgent need for social skills training programs integrating a large assortment of teaching methods and techniques. It is worth noticing that there have not been any identified studies that examined dissimilar methods and techniques in a comparative way. Based on this, it is foreseen that a study aimed at measuring the effects of story telling-based and play-based social skills training on social skills would lead the way to identifying different learning strategies, to revealing effective practices and to highlighting functional processes in social skills training.

The purpose of the study

The main purpose of the current study is to examine the social skills of kindergarten children who participated in story telling-based social skills training and play-based social skills training and with no intervention. To address this main purpose, the below-listed questions have been posed for answers in this study:

**RQ1.** Is there a difference between the social skills related to the “communication” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

**RQ2.** Is there a difference between the social skills related to the “adaptation” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

**RQ3.** Is there a difference between the social skills related to the “self-control” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

**RQ4.** Is there a difference between the social skills related to the “prosocial behaviors” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

**RQ5.** Is there a difference between the social skills related to the “assertiveness” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

**RQ6.** Is there a difference between the social skills related to the “total” of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

**RQ7.** Do the effects of story telling-based social skills training and play-based social skills training on social skills of kindergarten children show permanence?
Method

Research Design

In this study, a pretest-posttest-permanence test control-grouped experimental design has been utilized. Within this context, 3x3, split-plot factorial (mixed) design (Experiment-I, Experiment-II and Control group x Pretest, Posttest and Permanence test) has been employed. In mixed designs, there exist at least two variables of which the effect on a dependent variable is examined. One variable defines different experimental process conditions that are forged by unbiased groups, and the second one delineates iterative measurements of the subjects at different times (Büyüköztürk, 2007). In this study, the inter-group variable compared Experiment-I (participated in story telling-based social skills training), Experiment-II (participated in play-based social skills training) and Control (non-intervened) groups, whereas inner-group variable compared pretest, posttest, and permanence tests.

Study Group

This study was carried out on children who live with their married parents and who have not received any disabilities, and who have not received social skills training earlier. Two experiment groups and one control group for the purpose of this study were selected from different schools In this direction, schools was selected among the schools included kindergarten classes in Ministry of National Education [MoNE] affiliated elementary schools located in a city center within the Middle Black Sea Region of Turkey. The selected schools featured identical socio-cultural environments and served students from middle-class socio-economic backgrounds with half-day education. In these schools, a simple random sampling method was employed, and one school was selected as the Experiment-I group, another school as the Experiment-II group and an additional school as the control group. In this study, to prevent potential data losses and extend the quantity of the study group, the analysis was conducted between two different classes for each experiment group. The study began with a total of 130 children, with 43 children in the story group, 45 children in the playgroup, and 42 children in the control group. In accordance with the data obtained from teachers, some students were not integrated into the data pool; these included children with fragmented family structures, children with disabilities and children with absenteeism records during the research application. In the end, the study group included a total of 120 children, 40 children from the Experiment-I group, 40 children from Experiment-II group and 40 children from the control group. In this study, the Experiment-I group included 55% (n=22) girls and 45% (n=18) boys; the Experiment-II group included 65% (n=26) girls and 35% (n=14) boys; the control group included 45% (n=18) girls and 55% (n=22) boys. The mean age of children in the Experiment-I group and control group was 62 months, and the mean age of children was 63 months in the Experiment-II group.

Data Collection Tool

In this study, the “Social Skills Assessment Scale-Teacher Form” (SOSAS-TF) developed by Aksoy (2014) was used to evaluate the social skills of preschool children. This scale consists of five dimensions including “communication” (12 items), “adaptation” (9 items), “self-control” (9 items), “prosocial behaviors” (9 items) and “assertiveness” (5 items) and in total 44 items. 30 items in the scale have positive statements and 14 have negative statements, and for negatively-stated items inverse scoring has been performed. Items in the scale have been scored by the teacher according to the frequency of children’s display, and the scores were ranged as “never” (1 score), “seldom” (2 score), “sometimes” (3 score), “often” (4 score) or “always” (5 score) as pera 5-point Likert rating system. The probable score to obtain from the total of the scale varies from 44 to 220. A high score on dimensions and total of the scale indicated a high level of social skills on the relevant dimensions and total.

Communication dimension sets forth the condition of exhibiting behaviors aiming at expressing the situations with him/her and his/her environment properly, being aware of the feelings of his/her own and others, using verbal and non-verbal elements effectively in communication. It covers the skills such as gives right answers to the questions about other’s feelings, expresses his/her feelings clearly in the face of an event or situation, arranges his/her gesture and facial expressions for situation in appropriate way while talking, and makes eye contact with the listener while talking. Besides,
adaptation dimension expresses a child’s advanced adjustment to his or her environment and following of the rules required in his/her environment. It represents the skills such as follows the given instructions, following the rules in his/her environment, and waits his/her turn in the situations that require to move in turn. Further, self-control dimension addresses exhibiting the behavior lacking of coping with negative situations in a desired manner and the behavior lacking of the purpose of avoiding aggressive/damaging movements. It covers the skills such as shows aggressive behaviors when s/he gets angry, responding in the same manner when others pushes/hits him/her, responds in the same way when others pushed/hit, and damages the objects in his/her class/room. Besides, prosocial behaviors dimension addresses exhibiting the skills related to behaving warmly and sensitively to the persons around him/her and being kind with others. It covers the skills such as appreciates the success of others, expresses his/her love by hugging or saying his/her love, helps voluntarily someone to whom s/he feels that needs help. Assertiveness dimension sets forth the situation of exhibiting behaviors colliding with the characteristics related to being open to new ideas/differences and being extrovert. It represents the skills such as abstains from joining to other children’s play, has difficulty in making new friends, and is shy and withdrawn. Accordingly, self-control and assertiveness dimensions contain the items that are subjected to reverse scoring in the scale. Each dimension of the scale gives an idea about the social skills exhibited by the children in the scope of the relevant dimension, and their total gives an idea about the social skills exhibited in general (Aksoy, 2014).

In order to measure construct validity of the scale, an exploratory factor analysis (EFA) was conducted and all items in the scale had factor load values in between .46 and .74. Each item, together with other items, had common factor variances denoting variances’ explanatory power of the scale’s total variance which varied between .42 and .69. It was detected that five factors in the scale explained 54.57% of total variance. Item-total correlation analysis conducted to identify the discernment power of scale items revealed that all scale items had .001 level of significant relationship with the scale’s total score. Analysis of independent group’s t-test, regarding the difference between mean item scores of the 27% sub-super groups, per scale dimensions and total score revealed that mean scores of the super-group were significantly higher than the mean scores of sub-group (for 44 items and 5 dimensions p<.001). As each dimension’s relationship with one another and total score was measured, it was seen that “communication” (r=.878, p<.001), “adaptation” (r=.817, p<.001) “self-control” (r=.702, p<.001), “prosocial behaviors” (r=.856, p<.001) and “assertiveness” (r=.623, p<.001) dimensions had a significant and positive relationship with the total score and also with one another (r>30, p<.001). In that view, correlations of the scale items ranged between .37 and .78. These findings indicate that the scale maintained internal consistency, and in terms of social skill items, it had a discerning power on children.

To measure the reliability of the scale’s dimensions and total score, Cronbach Alpha (α) reliability coefficient was analyzed. It was identified that the “communication” (α=.89), “adaptation” (α=.90), “self-control” (α=.86), and “prosocial behaviors” (α=.87) dimensions and total score were strongly reliable and the “assertiveness” (α=.76) dimension was significantly reliable. The scale’s test-retest reliability was also investigated. Pearson correlation analysis revealed that the scale’s “communication” (r=.817, p<.001), “adaptation” (r=.858, p<.001), “self-control” (r=.752, p<.001), “prosocial behaviors” (r=.853 and p<.001) and “assertiveness” dimension (r=.634, p<.001) and total (r=.886, p<.001) of two sets of scores maintained a positive and mostly high level of significant relationship with each other. At this stage Cronbach Alpha reliability coefficient and findings of test-retest reliability analysis evidenced overall reliability of the scale.

Data Collection Process

In this experimental design, study was carried out on two experiment groups and one control group. The Experiment-I group participated in “Story Telling-Based Social Skills Training Program”, and the Experiment-II group participated in “Play-Based Social Skills Training Program”. The control group received no extra intervention and children in this group continued attending preschool education provided within the context of Ministry of National Education (2013).
“Story Telling-Based Social Skills Training Program” is a training program called “Ready to Learn” developed by Brigman et al. (1994) and adapted to Turkish and rearranged for Turkish children by Aksoy (2014). This is a classroom program for children aged four to seven and is designed to promote the learning skills and social skills needed for school success. The program includes the use of “Big Book” for read-aloud stories, teacher and student storytelling, art, dramatic play, puppets, singing, participating instruction on comprehension through understanding the story structure, practice with listening and participating, and social collaborative activities with much discussions and interaction. This program is built around a series of stories and it teaches children four important learning skills and social skills such as paying attention, listening and comprehension, asking key questions to clarify comprehension, and encouraging self and others (including working cooperatively and forming empathy). Once the children are introduced to the learning process and social skills presented in the stories of this program, they are given time to apply the skills through five teacher strategies which involve reading, speaking, and listening. These strategies are: modeling, coaching, and cueing; student story-telling; student story retelling; positive peer reporting; and encouragement council.

After reading each story in the story telling-based social skills training, frequently discussions are held on the story plot, main characters portrayed, feelings of the story’s characters and the final action in the story. The content of stories read to children in this story telling-based social skills training features characters that appropriately solve problems, engage in positive behavior, are helpful, share with others, and in possessing such personal traits the characters were honored, appreciated and succeeded in achieving their objectives in these scenarios. At this point, certain experiences of characters such as staying alone at home, rejection by friends to play together, helping others, asking for help, achieving something difficult enabled the children to share emotions such as fear, worry, excitement, sadness, and joy. In addition, in the story telling-based social skills training program, after reading the stories particular to each session and answering story-relevant questions, children draw pictures based on the context of a story in that session. Also, in the story telling-based social skills training audio CDs are listened and organized activities such as designing with art materials are practiced so as to develop social skills and behaviors. Besides, in the framework of story telling-based social skills training, there are some activities organized under the title of “the encouragement council”, “the encouragement box” and “star of the week”. Within the scope of “The encouragement council”, children alternately explain one quality they liked in a friend, one accomplishment they managed in class, and something they did to make someone feel good and children’s views and ideas on these matters were then shared. According to “the encouragement box”, in each session each child was asked to share the name of a friend whose valued words/behaviors were recognized and to explain those words or behaviors, and accordingly children who performed approved skills and behaviors would be awarded a “smiley face” on the board. In all sessions related to “star of the week”, a “star” is awarded to one boy and one girl, and children are asked to tell what they like or appreciate in their “star” peers (Aksoy, 2014; Brigman et al., 1994).

“Play-Based Social Skills Training Program” is a training program called “Fun FRIENDS” developed by Barrett (2007a, 2007b) and adapted to Turkish and rearranged for Turkish children by Aksoy (2014). This program was developed to help guide the social and emotional development of children aged four to seven by using fun, play-based group activities. There are a number of different play-based activities that are evidence-based and help teach skills such as smiling and making eye contact when communicating; speaking with a bold and confident tone; talking about and understanding their feelings and others’ feelings; helping other people (such as family members, peers and teachers); using relaxation techniques to loosen their body and mind under stress; approaching peer groups and making friends; trying new things; applying problem solving strategies; and identifying negative thoughts and turning them into positive ideas.

In some sessions of play-based social skills training, children are talked about what they can do (cuddling a soft toy, talking to someone they love, bathing, going to a calm place, drinking a glass of water, taking
a walk, talking to mum or dad, listening to some nice music, playing a fun games etc.) when they feel sad, angry and worried as well as practice-based multiple activities were conducted. Besides, in the play-based social skills training program, a number of cognitive-behavioral skills linked to the social-emotional learning domain are provided. Hence, activities focus on developing certain skills like cognitive problem-solving skills that allow coping with interpersonal problems and also consequential skills of understanding body clues, overcoming negative situations through breath control and muscle relaxation, recognizing feelings and overwhelming unpleasant feelings, and focusing the attention. In the play-based social skills training program, there are worksheets consist of depicting koala characters and through these worksheets, activities involving emotions, thoughts and behaviors towards different events and situations, are carried out. At this stage, in line with the objective of a session, during each week, children are asked about the koalas' feelings on a particular event (starting school, staying alone, inability to making friends, staying in the dark and so on), the reason for this feeling, what to do to make koala feel better, how they would feel if they were this koala, and in what other conditions they would feel like that. In this case, children are given a chance to express themselves and create ideas for potential situations. The content of the training includes several activities dealing with different skills such as singing songs, drawing, playing, and making up a story. Also, play-based social skills training has activities in which children are free to walk in class while music is on and follow the instructions once the music stops. Within the scope of this training, processes are operated to teach children how to make new friends, what to do to join their friends’ plays and how to behave when they encounter a strange environment and so forth (Aksoy, 2014; Barrett, 2007a, 2007b; Pahl & Barrett, 2007).

In the applications in both of the experiment groups, cards carrying the names of the children were attached on their collars by the researcher until their names were learned and attention was paid to address the children with their names during the application, thinking that it is important to appeal to the children with their names in terms of their self-esteem and thus social skills. It was preferred that children would choose a card from a bag, which was in the shape of a picture, image, or pattern and prepared in parallel with the content of the activity, and would be matches based on the cards, with the aim of creating an alternative for inability to involve in a group or always matching with the same child in the plays conducted in matches in pairs or small groups. It was ensured that the children in both of the training groups were supported with verbal or symbol reinforcements for their social skills and behaviors such as listening carefully, thanking, helping, waiting for turn, and answering questions exhibited by the children in desired direction during the application. It was taken into consideration to select the music loved and enjoyed by the children and to start the activities when their attention was attracted during the dynamic play activities taking part in the applications conducted in the training groups.

In the interim meetings held within the context of story telling-based social skills training and play-based social skills training and in the bulletins sent to parents in line with sessions’ objectives, parents were informed that in the face of children’s negative behaviors they should avoid punishment and prefer talking with them. In preventing aggressive behaviors, the kind of activities that met a child’s need for physical movement mattered enormously, and to stop unapproved behaviors parents were obliged to display decisive and consistent actions. Interim meetings with parents were made at the school (at the end of the fifth and tenth sessions) in order to promote parents to fulfill the parent approaches and to carry out family involvement activities, which were included in the bulletins that were sent home. In addition, one more meeting with the parents in both of the experiment groups was made at the end of the training and the parents were informed that the process of training conducted by the researcher ended. In this scope, examples from the activities conducted during the applications and photographs from the applications displayed with the children were explained to the parents through a PowerPoint presentation. At this stage, ensuring the continuity of the training provided and increasing the awareness of the parents in this subject were also given importance.
Prior to the application, one-to-one interviews were conducted with administrators and teachers employed in the schools within the study group. Interviewees were informed about the purpose, context and length of the study. In order to avoid disrupting teachers’ existing training program, days to apply with Experiment-I and Experiment-II groups were scheduled in coordination with teachers and the applications process were continued each week on the same day. Two weeks prior to conducting the main application within the scope of study, there searcher spent three full days with the children in each experiment group in order to facilitate children’s adaptation to the process and to provide researcher’s familiarization with the environment. During this process, independently from the social skills training context, in the classroom the researcher performed activities such as singing songs, finger plays, drawing pictures with children and also supported some of the activities conducted by the teacher. One week prior to conducting the main application within the scope of the study, parents of the children in Experiment-I and Experiment-II groups were called to a meeting at the school and informed about the importance and context of the application and expectations from parents during the application process. To this end, parents were notified about the weekly length of the program, application days, and the necessity to avoid school absenteeism of children during application days. In order to help teachers, recognize the children better and gain information on children’s social skills, the measurement of pretest was initiated (in the first half semester of the school year) six weeks after the school’s first day. Following this process, teachers in the study group were asked to complete, in line with stated explanations, “Social Skills Assessment Scale-Teacher Form” for every child. After collecting the forms of pretest measurement, the training program was initiated. In this view, the researcher applied the Experiment-I group “Story Telling-Based Social Skills Training” in a day, and the Experiment-II group “Play-Based Social Skills Training” on another day for a total of 12 weeks in two-hour sessions. Following the end of the training, in order to measure posttest and, around two months after posttest measurement, to measure the permanence level, teachers were asked to re-complete “Social Skills Assessment Scale-Teacher Form” for every child.

Data Analysis

In a pretest-posttest control-grouped design, if the study focuses on whether the experimental process is effective or not, the most appropriate statistical process is suggested as analysis of covariance (ANCOVA) in which the pretest is the controlled common variable. In pretest-posttest control-grouped designs, ANCOVA is a widely-popular test used to measure the effectiveness of the experimental process. This is a powerful technique that has a relationship with the dependent variable in addition to an independent variable of which the effect is tested in study; this enables an inter-group comparison and also allows conducting a statistical control of a different variable termed as the common variable. ANCOVA is a statistical method that is not only applied when there are significant differences between groups as regards a potentially common variable; it can also be utilized if a linear relationship existed between a common variable and scores of dependent variable, and if the scores of groups were equal at the beginning of study (Büyüköztürk, 1998, 2007).

Since ANCOVA is a technique uniting regression and analysis of variance (ANOVA) it necessitates comparing the hypotheses of both applications. In order to test these hypotheses, Kolmogorov-Smirnov (K-S) test was conducted to measure each children’s pretest, posttest, and permanence scores, and it was identified that distribution of groups in certain dimensions deviated within a specific range from the normal interval (p<.05). It is nonetheless suggested that in any appropriate statistical analysis method, the sampling size should also be taken into account next to the normality of distribution. At this stage, if the sampling size of each subgroup exceeds 30 or more, it is not considered to trigger an excessive diversion from the normal distribution (Büyüköztürk, 2014). Likewise, Green, Salkind, and Akey (1999) stated that if the normality premise had an equal and reasonable (n≥15) size, the normality hypothesis would be accepted as meeting the requirement. Since the groups within the scope of study performed normal distribution in most of the dimensions, and for each group an equal number sampling size (n=40) was analyzed, it supports the view that the distribution’s
normality hypothesis was met. At this stage, another hypothesis is introduced variances of the posttest scores that groups take from the scale’s dimensions and the total should be equal. Then groups’ dependent variable (posttest) scores were analyzed via Levene’s test for homogeneity of variance and it was seen that groups’ “communication” [F(2,117)= 1.53, p>.05], “adaptation” [F(2,117)=2.35, p>.05], “self-control” [F(2,117)=2.27, p>.05], “prosocial behaviors” [F(2,117)=.40, p>.05], and “assertiveness” [F(2,117)=1.43, p>.05] dimensions and total [F(2,117)=1.44, p>.05] variances were equal. It was then identified that a linear relationship (r≥.30 and p<.001 or p<.05) existed between pretest mean scores (common variable) that children received from scale dimensions and total scale and their posttest mean scores (dependent variable). At this stage, the group x pretest common effect test equality of regression trends, it was seen that group x pretest common effect on “communication” [F(2,114)= 1.04, p=.357], “adaptation” [F(2,114)= 1.22, p=.298], “self-control” [F(2,114)= 1.14, p=.253], “prosocial behaviors” [F(2,114)= 2.73, p=.069], and “assertiveness” [F(2,114)= .93, p=.396] dimensions and total of scale [F(2,114)= 1.61, p=.203] was insignificant (p>.05). Lastly, since the experiment and control groups in the context of the research population were selected from different schools and each group was randomly assigned, the hypothesis of unrelated groups was thus met. Accordingly, ANCOVA was utilized to detect if any significant difference existed between adjusted posttest mean scores according to pretest mean scores that children in experiment and control groups received from the scale’s dimensions and total. In the event that a significant difference existed between groups, the Bonferroni test was harnessed to spot among which groups this difference existed. One-way variance analysis of (ANOVA) was applied to identify if any difference existed between pretest scores that children in the experiment and control groups received from the scale’s dimensions and total. Paired samples t-test was harnessed to determine if any significant difference existed between posttest and permanence test mean scores that children in the experiment groups received from the scale’s dimensions and total.

Results and Discussion

To establish the findings of this study, initially, the difference between the mean pretest scores that children in the experiment and control groups received from Social Skills Assessment Scale–Teacher Form were examined. As a result of the ANOVA test applied for that purpose, it was established that between pretest mean scores that children in these groups received from the scale’s “communication” [F(2,117)=2.28, p=.106], “adaptation” [F(2,117)=.89, p=.410], “self-control” [F(2,117)=.59, p=.533] “prosocial behaviors” [F(2,117)=.83, p=.437] and “assertiveness” [F(2,117)=1.25, p=.291] dimensions and total [F(2,117)=.54, p=.581] there was not any significant difference (p>.05). This finding proved that prior to implementing the education program, the social skill levels of all children in the complete set of groups were close in the range to the total population. This finding is also evidence that the education program, the social skill levels of all children in the complete set of groups were close in the range to the total population. This finding was thus identified that a linear relationship (r≥.30 and p<.001 or p<.05) existed between pretest mean scores (common variable) that children received from scale dimensions and total scale and their posttest mean scores (dependent variable). At this stage, the group x pretest common effect test equality of regression trends, it was seen that group x pretest common effect on “communication” [F(2,114)= 1.04, p=.357], “adaptation” [F(2,114)= 1.22, p=.298], “self-control” [F(2,114)= 1.14, p=.253], “prosocial behaviors” [F(2,114)= 2.73, p=.069], and “assertiveness” [F(2,114)= .93, p=.396] dimensions and total of scale [F(2,114)= 1.61, p=.203] was insignificant (p>.05). Lastly, since the experiment and control groups in the context of the research population were selected from different schools and each group was randomly assigned, the hypothesis of unrelated groups was thus met. Accordingly, ANCOVA was utilized to detect if any significant difference existed between adjusted posttest mean scores according to pretest mean scores that children in experiment and control groups received from the scale’s dimensions and total. Paired samples t-test was harnessed to determine if any significant difference existed between posttest and permanence test mean scores that children in the experiment groups received from the scale’s dimensions and total.

RQ1. Is there a difference between the social skills related to the “communication” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

Table 1. ANCOVA results of adjusted posttest mean scores that are related to pretest mean scores that children in experiment and control groups received from social skills related “communication” dimension

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean of Squares</th>
<th>F</th>
<th>sig.</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest (communication)</td>
<td>905.401</td>
<td>1</td>
<td>905.401</td>
<td>25.22</td>
<td>.000</td>
<td>1-2</td>
</tr>
<tr>
<td>Group</td>
<td>1770.461</td>
<td>2</td>
<td>885.231</td>
<td>24.65</td>
<td>.000***</td>
<td>1-3</td>
</tr>
<tr>
<td>Error</td>
<td>4164.249</td>
<td>116</td>
<td>35.899</td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td>Total</td>
<td>6469.300</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p < .001; 1=Experiment-I, 2=Experiment-II, 3=Control
Findings in Table 1 show that a significant difference exists between adjusted posttest mean scores received from the “communication” dimension \( F_{[2,116]}=24.65, p<.001 \). As a result of the Bonferroni test implemented to detect in which groups this difference existed, it was seen that between the Experiment-I group and the Experiment-II group, and also between the Experiment-I group and the Control group, a significant difference existed in favor of the Experiment-I group. In addition to this, a significant difference was determined between the Experiment-II group and the Control group, in favor of the Experiment-II group (\( p<.001 \)). This finding indicates that, on social skills related to the “communication” dimension, story telling-based and play-based social skills training was significantly more effective than preschool education applied within the scope of MoNE (2013) preschool education program. And besides that, story telling-based social skills training was significantly more effective than play-based social skills training. It can be argued that within the scope of social skills training applied to Experiment-I and Experiment-II groups, creating opportunities to keep children together and organize different activities to perform collectively might be the basic factors in developing children’s social skills related to communication.

In the functional scenarios of the stories used for story telling-based social skills training, myriad of skills are examined as regards the communication dimension. In these stories, scenarios that focus on various skills such as listening attentively to the speaker, making eye contact, asking questions to insure correct understanding, continuing to try to achieve new things, talking self-confidently were included. In this case, the expected result is that a child who participates in these scenarios can gain a number of related skills in the communication dimension during this process. Sever (2003) claimed that once these skills and behaviors are taught in the scenarios and other activities then it is a facilitating factor in effective learning. Meantime, it is worth noticing that after reading the stories in class, within the context of story telling-based social skills training, questions on the stories were answered, and children were asked to share stories with their classmates or partners based on questions including details about “Who”, “What”, “When”, “Where” and “How” (4W & H). These practices are also likely to have been effective in teaching students social setting skills such as eye contact while talking, using gestures and mimics appropriately, correctly answering emotion-related questions and eagerness to answer questions. Likewise, Wasik and Bond (2001) determined that children’s expression skills are improved when teachers read books to the mand when teachers ask open-ended questions about the story. In accordance with this argument, Morrow, O’Connor, and Smith (1990) indicated that preschool children participating in the story telling program are better at reading comprehension, taking an initiative to read a popular story, and answering related questions. Also, in story telling-based social skills training, after reading the stories the teacher and children reviewed the emotions experienced after the events in the story. As a result of these actions, it is likely to improve communication dimension skills such as the clear expression of feelings, understanding others’ feelings, and producing a solution-oriented idea in response to a problem. In a study by Esteban et al. (2010) a similar finding was attained and it was seen that preschool children participating in a picture-book reading training program gained better skills at understanding others’ feelings, thoughts and behaviors.

It is also worth noting that within the scope of play-based social skills training, activities (such as singing songs, drawing, playing, and making up a story) focused on emotion control, coping with negative statements and eagerness to try new things and these skills were improved. Within this scope, in each session within the training program, worksheets were also shared and a number of activities were conducted based on the drawings and expressions depicting koalas’ (characters in worksheets) feelings, thoughts, and behaviors. It is believed that such practices play a vital role in developing children’s skills related to the communication dimension. In the same way, Köksal, Dilici, and Koç (2013) claimed that in order to develop children’s social skills, it is necessary to create environments in which children can be engaged in social networking and allow for children to express themselves freely. In the literature, it is emphasized that play can reveal children’s inner feelings and thoughts, it can act as a tool to realize his/her strong and weak points, it can serve as an opportunity for children unable to express themselves in different ways, and it functions as a communication channel (Aksoy & Baran, 2014;
Ashiabi, 2007; Bergen, 2009; Çoban & Nacar, 2006; Lester & Russell, 2010; Spodek & Saracho, 1998; Stockall, Dennis, & Rueter, 2014). Hence, the expected result is that children participating in play-based social skills training can improve skills related to the communication dimension such as correctly answering questions regarding others' feelings, clearly expressing his/her feelings in the face of an event or situation, expressing his/her strengths and weaknesses, and expressing what they want to say self-confidently. Reynolds, Stagnitti, and Kidd (2011) made a similar finding and claimed that children ages four to six who receiving traditional education program and participating in a play-based training program gained improved play skills and social communication skills compared to children participating in a traditional education program. Findings obtained in this context showed that both social skills training programs in the study are functional in developing social skills related the communication dimension. Within the scope of this study, another finding revealed that children participating in story telling-based social skills training had a significantly higher level of social skills related to the communication dimension compared to children participating in play-based social skills training. This finding may be attributed to the fact that within the context of story telling-based training, story listening, answering the questions about the story, understanding the characters' feelings, producing a solution to the problem made learning such skills and behaviors easier. A supportive statement was provided by Justice and Kaderavek (2002) who claimed that to develop communication skills, story activities are more effective than other activities such as play and drama.

**RQ2.** Is there a difference between the social skills related to the “adaptation” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean of Squares</th>
<th>F</th>
<th>sig.</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest (adaptation)</td>
<td>283.700</td>
<td>1</td>
<td>283.700</td>
<td>31.29</td>
<td>.000</td>
<td>1-3</td>
</tr>
<tr>
<td>Group</td>
<td>227.207</td>
<td>2</td>
<td>113.604</td>
<td>12.53</td>
<td>.000***</td>
<td>2-3</td>
</tr>
<tr>
<td>Error</td>
<td>1051.650</td>
<td>116</td>
<td>9.066</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1557.967</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p <.001; 1=Experiment-I, 2=Experiment-II, 3=Control

When Table 2 was analyzed, a significant difference existed between adjusted posttest mean scores received from the “adaptation” dimension \(F_{(2,116)}=12.53, p<.001\). As a result of the Bonferroni test implemented to detect in which groups this difference existed, it was seen that between the Experiment-I group and the Control group, a significant difference existed in favor of the Experiment-I group. Meanwhile between the Experiment-II group and the Control group, the significant difference was in favor of the Experiment-II group (p<.001). In contrast, no significant difference was measured between the Experiment-I group and the Experiment-II group (p>.05). These findings show that children participating in story telling-based social skills training and play-based social skills training, compared to children in the control group not participating in any social skills training were better at following the instructions, keeping the rules in their environment, waiting for their turn, completing their assigned responsibilities, and taking partactively in group work. These results suggest that in the classroom, activities conducted within the scope of story telling-based and play-based social skills training might have been positively effective on the adaptation skills of children in the school and outside the school environment.

Provided that the child has gained required adaptive skills it is only natural that he or she will abide by family rules at home, school rules designated by teachers and rules of certain play with peers. In this study, within the context of story telling-based and play-based social skills training for twelve...
weeks, a systematic approach was followed to instill children with certain skills and behaviors such as keeping the rules, completing their assigned responsibilities, and taking part actively in group works, these activities could have played role in improving children’s related skills. Dereli İman (2014) detected that after receiving a values training program, children ages five to six were better at sharing their toys, more frequently tidying their room and less frequently got offended by their friends. It was seen after the training that scores in the “adaptation” dimension was highest in children participating in play-based social skills training. In accordance with the claim by Anderson McNamee and Bailey (2010), this finding suggests that play is an effective tool in teaching behavioral rules and social values in social settings. Play is an activity that enables a child to learn socially approved or rejected behaviors and notice the rules of social order (Aksoy & Baran, 2014; Barton, 2015; Charlesworth, 2011). In a play-based social skills training program practicing skills such as following the instructions, keeping the rules of their environment, waiting for their turns, fulfilling their assigned responsibilities. These are enhancers of environmental adaptation and by using play could have been facilitators of better learning. Gagnon and Nagle (2004) argued that to correct the acts of preschool children having social adaptation problems with peers, play-based interventions are requisites. Likewise, Durualp and Aral (2010) identified that adaptation dimension skills of children receiving play-based social skills training were significantly higher than children not intervened in terms of social skills.

On the other hand, as regards the positive effects of story telling-based social skills training given to the Experiment-I group on social skills related to the “adaptation” dimension, it is likely that, based on the speech and behaviors of story characters, the child might have developed the appropriate behavioral skills and social behaviors. Sever (2003) claimed that conflicts that story characters’ experience with their selves, environments, and societies could be effective at teaching socially approved or rejected values. This argument is in parallel with findings (Baş, 2011; Daemi, & Farnia, 2013; Esteban et al., 2010) claiming that a story-based training program contributes to children’s adaptation, responsibility and cooperation skills. In the story telling-based social skills training program, after reading the stories particular to each session, children draw pictures based on the context of a story in that session. It was considered that drawing activities could have been effective in developing children’s skills related to adaptation. In relevant literature (Chang, 2005; Schirrmacher, 2002), it is points out that drawing is an activity helping children to self-actualize, and display the situations they cannot verbally share; it is also salient medium for children with adaptation problem to vocalize their opinions. Accordingly, as stated by Tüfekçi (1996), it could be said that drawing activities conducted in this group have rendered a positive effect on children’s personal and social adaptation.

RQ3. Is there a difference between the social skills related to the “self-control” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

Table 3. ANCOVA results of adjusted posttest mean scores that are related to pretest mean scores that children in experiment and control groups received from social skills related “self control” dimension

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean of Squares</th>
<th>F</th>
<th>sig.</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest (self-control)</td>
<td>286.045</td>
<td>1</td>
<td>286.045</td>
<td>9.69</td>
<td>.000</td>
<td>2-1, 2-3</td>
</tr>
<tr>
<td>Group</td>
<td>482.450</td>
<td>2</td>
<td>241.225</td>
<td>16.61</td>
<td>.000***</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>1684.480</td>
<td>116</td>
<td>14.521</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2483.592</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p <.001; 1=Experiment-I, 2=Experiment-II, 3=Control

Table 3 showed that a significant difference existed between adjusted posttest mean scores received from the “self-control” dimension [F(2,118)=16.61, p<.001]. As a result of the Bonferroni test implemented to detect in which groups this difference existed, it was seen between the Experiment-II group and the Experiment-I group, and also between the Experiment-II group and the Control group, a
significant difference existed in favor of the Experiment-II group (p<.001). However not any significant difference was measured between Experiment-I group and Control group (p>.05). This result explains that as regards social skills related to the “self-control” dimension, play-based social skills training is significantly more effective than story telling-based social skills training and the existing preschool education that the control group continued. In play-based social skills training, various activities were applied which focus on relaxing children when they feel sad/angry/worried by doing certain things. These kinds of activities could have improved children’s alternative solution skills in the face of negative events or situations and reinforced children’s discovering at the appropriate reactions in the face of an unlikeable situation. Play-based social skills training also includes certain activities based on moving accompanied music and these activities are likely to let children remove negative energy and get rid of reactions such as aggression, hyperactivity, and temper. Likewise, relevant literature states that play is an activity that relaxes and eases the tension of depressive and introverted children and lessens their stress and saves the child from being aggressive, overly sensitive or introverted (Lehrer, Petrakos, & Venkatesh, 2014; Rivera, 2009; Yavuzer, 2005). Hence, an expected finding that in this group children’s reactions to events and situations were channeled in a more affectionate direction, and negative skills and behaviors including refusing to lose in any play, using others’ object without permission, expressing their demands through cries and whines, damaging the objects in his or her classroom. Pahl and Barrett (2010) also found that play-based social skills training was effective in diminishing children’s anxiety levels and developing their social behaviors.

It is worth noticing that in an existing preschool education program that the control group continued, compared to story telling-based social skills training, had a lower effect on social skills related to the “self-control” dimension. The Turkish activity of preschool education program conducts story-based activities such as story-telling, story-narration from a picture book, creating another story, acting out the story and re-telling the story. However, if these activities lack the content that can support the social development of a child, it is likely to provide fewer positive effects on the whole process. Dağlıoğlu and Çamlıbel Çakmak (2009) identified that fear and violence components are present in some of the story-books provided for preschool children. This indicates that if stories are not selected meticulously, they cannot provide a supportive effect on the developmental process of children. Another worrying aspect is that Fırat, Güleç, and Şahin (2013) in their study detected preschool teachers’ lack of knowledge on qualified children stories and reckless and inattentive decisions in story selection process. As indicated by Sever (2002), stories that focus on heroes achieving their aims through violence, common messages that exalt violence and presentations of violence as a way to solve problems can trigger major emotional disturbances in children.

Another potential explanation about why play-based and story telling-based social skills training provided a positive effect on social skills related to the “self-control” dimension could have been the supportive approach of parents in this group in favor of school education to prevent unaccepted social behaviors. Because, parents were informed about effective parental approaches and strategies for coping with undesired behaviors through interim meetings and parental bulletins, held within the context of story telling-based and play-based social skills training. These affirmations are most likely to render an intensifier effect on preventing children's negative behaviors and boosting positive acts. In the study of Webster Stratton et al. (2001), it was detected that social skills and problem-solving training that integrated the family was effective in reducing children's aggressive behaviors and external problems. Nicholson, Anderson, Fox, and Brenner (2002) claimed that a preventive education program provided to parents proved to be effective in reducing parents' tendency to punish their children verbally and physically and in preventing children's behavioral problems. In parallel with these findings, Ekinci Vural (2006) identified that compared to preschool education, family-integrated social skills training was far more effective in developing self-control skills.
RQ4. Is there a difference between the social skills related to the “prosocial behaviors” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

Table 4. ANCOVA results of adjusted posttest mean scores that are related to pretest mean scores that children in experiment and control groups received from social skills related “prosocial behaviors” dimension

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean of Squares</th>
<th>F</th>
<th>sig.</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest (prosocial behaviors)</td>
<td>579.281</td>
<td>1</td>
<td>579.281</td>
<td>18.31</td>
<td>.000</td>
<td>1-2,</td>
</tr>
<tr>
<td>Group</td>
<td>1462.457</td>
<td>2</td>
<td>731.228</td>
<td>23.11</td>
<td>.000***</td>
<td>1-3,</td>
</tr>
<tr>
<td>Error</td>
<td>3669.819</td>
<td>116</td>
<td>31.636</td>
<td></td>
<td></td>
<td>2-3</td>
</tr>
<tr>
<td>Total</td>
<td>5599.300</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p <.001; 1=Experiment-I, 2=Experiment-II, 3=Control

According to Table 4, a significant difference exists between adjusted posttest mean scores received from the “prosocial behaviors” dimension [F(2,118)= 23.11, p<.001]. As a result of the Bonferroni test implemented to detect in which groups this difference existed, it was seen that between the Experiment-I group and the Experiment-II group, and also between the Experiment-I group and the Control group, a significant difference exists in favor of the Experiment-I. Meanwhile between the Experiment-II group and the Control group a significant difference exists in favor of the Experiment-II group (p<.001). This provides evidence that in developing social skills related to the “prosocial behaviors” dimension, story telling-based social skills training was significantly more effective than play-based social skills training as well as preschool education provided within the scope of MoNE (2013) preschool education program. Also play-based social skills training was significantly more effective than preschool education provided within the scope of MoNE (2013) preschool education program.

It is remarkable that the scope of stories in story telling-based social skills training promotes many positive features of characters (such as problem-solving, helping others, sharing) and has expressions emphasizing that the characters having these features encounter positive results. From these perspectives, children modeled approved behavioral examples and initiated a parallel trend in their skill and behaviors. As also stated by Doescher and Sugawara (1989), role-modeling plays a major role in the acquisition of prosocial behaviors. It should be highlighted that during preschool, children react to story heroes as strong identification components and model the ideas and behaviors of the protagonists (Dilidüzgün, 2004; Yavuzer, 2005). The content of story telling-based social skills training contains activities accompanied by five teacher strategies named as modeling-coaching-cueing, student story-telling, student story re-telling, positive peer reporting, encouragement council, as well as certain applications called the circle of encouragement and star of the week. It is believed that such practices were the encouragements in leading children to manage their behaviors and others’ behaviors, and performing skills and behaviors such as sharing, helping others, saying good words, saluting/greeting, thanking and apologizing. Additionally, after reading stories in the story telling-based social skills training, discussion, about situations in stories, was carried out (what happened in the story, who was in the story and what the character in the story felt and so on) and in this case, certain emphasis was given to performing skills such as helping, thanking and showing love. As stated by Lamme and McKinley (1992), this scenario allowed the children to imagine prosocial behaviors and motivated children to be helpful, sensitive and amiable. Trepanier and Romatowski (1982) detected that reading sharing-focused stories to children and asking them critical thinking questions on the story were effective practices in motivating children to better explain facial gestures and move towards sharing rather than showing aggression. Likewise, Uzmen (2001) reported that after reading sharing/helping
focused books to children, asking about events in the books or performed by characters and sharing/helping behaviors and conducting appropriate activities can be effective in developing helping and sharing behaviors in children.

It deserves attention that in this study on “prosocial behaviors” play-based social skills training was more effective in a positive way compared to preschool education rendered within the scope of MoNE (2013) preschool education program. Within the context of play-based social skills training, the facilitators in this outcome likely were expressing love, saying thanks, helping, asking for help when needed, greeting, saying sorry, sharing and similar skills and behaviors. Accordingly, this opportunity that let children learn via doing/experimenting played a major role. Indeed, the very process of play itself instilled valuable personality traits such as helping, sharing, acting warmly to others, being brave, maintaining self-control, being patient, respecting others’ rights and being tolerant (Aksoy & Baran, 2014; Aydın & Akyol Gürler, 2012; Lester & Russell, 2010; San Bayhan & Artan, 2007; Spodek & Saracho, 1998). Another explanation could be that with the worksheets in the scope of play-based social skills training, activities were executed to allow children to acquire social behaviors and be sensitive to others. Within the context of play-based social skills training, in each session, worksheets depicted koala characters’ images and expressions and via these worksheets, children were asked to form advice on koalas’ certain problems and the ways to overcome the problems triggered in relevant events and situations. Discussions were held to share suggestions on how to make the character feel better and these discussions foregrounded some skills like helping, sharing, asking for help, and expressing his/her love. It is probable that these practices were effective in the internalization of various “prosocial behaviors” dimension related skills by children. This is because, as also stated by Beland, Anderson, Frank, and Mayhew (1991), in the events that moods of anger, fear and anxiety prevent exhibiting desired behaviors, it would be more difficult to learn prosocial behaviors as well.

**RQ5. Is there a difference between the social skills related to the “assertiveness” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?**

**Table 5. ANCOVA results of adjusted posttest mean scores that are related to pretest mean scores that children in experiment and control groups received from social skills related “assertiveness” dimension**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean of Squares</th>
<th>F</th>
<th>sig.</th>
<th>Significant Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest (assertiveness)</td>
<td>402.209</td>
<td>1</td>
<td>402.209</td>
<td>54.17</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>166.364</td>
<td>2</td>
<td>83.182</td>
<td>11.20</td>
<td>.000***</td>
<td>2-1,</td>
</tr>
<tr>
<td>Error</td>
<td>861.166</td>
<td>116</td>
<td>7.424</td>
<td></td>
<td></td>
<td>2-3,</td>
</tr>
<tr>
<td>Total</td>
<td>1369.925</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p <.001, **p<.01; 1=Experiment-I, 2=Experiment-II, 3=Control

As shown in Table 5, a significant difference existed between adjusted posttest mean scores received from the “assertiveness” dimension $[F_{(2,116)}=11.20, p<.001]$. As a result of Bonferroni test implemented to detect in which groups this difference existed, it was seen that between the Experiment-II and the Experiment-I and also between the Experiment-II and the Control group a significant difference existed in favor of the Experiment-II group ($p<.001$). On the other hand, no significant difference was measured between the Experiment-I group and the Control group ($p>.05$). These results are indicative that as regards social skills related to the “assertiveness” dimension, play-based social skills training was significantly more effective than story telling-based social skills training and existing preschool education that the control group continued. This finding suggests that children participating in play-based social skills training were significantly less likely to abstain from joining in other children’s play, to have difficulty in making new friends, to demonstrate shy and introverted stances to
be intimidated to talk with strangers when they were compared to children participating in the existing preschool education program. In the contents of play-based social skills training, children were participated in activities that handled processes oriented different case (make friend, join friends’ plays and adapt to a new environment and so forth). At the core of the training in this process, play-based activities enabling the children to move freely and actively partake in the process were practiced. This might explain children’s willingness to join other children’s play, to make friends easily, to feel comfortable when talking with strangers as the improved skills and behaviors in the children. In parallel with this finding, Aksoy and Baran (2014), Barton (2015) and Durualp and Aral (2010) also stated that play can provide a favorable setting for children to experiment aggressive, timid and assertive behavior forms that they could see in daily life. Additionally, it was suggested that play would be effective in distinguishing assertive and sociable behaviors or aggressive and timid behaviors and they would most likely choose to be sociable in their personal relations. Another note worthy result was that story telling-based social skills training’s effect on social skills related to the “assertiveness” dimension was significantly more different than preschool education demonstrated within the context of MoNE (2013). It is thought that this case may be due to the fact that activities based on stories were at the forefront and processes such as acting in the story process, making an attempt, and revealing oneself were operated less in story telling-based social skills training.

**RQ6.** Is there a difference between the social skills related to the “total” dimension of kindergarten children who have participated in story telling-based social skills training, play-based social skills training and with no intervention?

**Table 6.** ANCOVA results of adjusted posttest mean scores that are related to pretest mean scores that children in experiment and control groups received from total social skills

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean of Squares</th>
<th>F</th>
<th>Sig.</th>
<th>Significant difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest (total)</td>
<td>7130.583</td>
<td>1</td>
<td>7130.583</td>
<td>38.85</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>12093.053</td>
<td>2</td>
<td>6046.527</td>
<td>32.94</td>
<td>.000***</td>
<td>1-3,</td>
</tr>
<tr>
<td>Error</td>
<td>21290.067</td>
<td>116</td>
<td>183.535</td>
<td></td>
<td></td>
<td>2-3,</td>
</tr>
<tr>
<td>Total</td>
<td>38955.300</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p < .001; 1=Experiment-I, 2=Experiment-II, 3=Control

Table 6 manifests that a significant difference exists in the adjusted posttest mean scores that children in the experiment and the control groups received from the total scale [F(2.116)= 32.94, p<.001]. As a result of the Bonferroni test implemented to detect in which group this difference existed, it was seen that between the Experiment-I and the Control group a significant difference existed in favor of the Experiment-I group while between the Experiment-II and the Control group the significant difference was in favor of the Experiment-II group (p<.001). However, no significant difference was measured between Experiment-I and Experiment-II groups (p>.05). This finding suggests that across all social skills, story telling-based and play-based social skills training proved to be significantly more effective in a positive direction than the preschool education offered within the scope of MoNE (2013) preschool education program. Findings obtained at this stage demonstrated that story telling-based social skills training and play-based social skills training, of which a Turkish adaptation was conducted by the researcher, can be utilized in developing the social skills of preschool age children in Turkey and can contribute to the functionality of relevant processes. This finding is also in accordance with relevant literature (Baş, 2011; Brigman, Lane, Switzer, Lane, & Lawrence, 1999; Brigman & Webb, 2003; Durualp & Aral, 2010; Esteban et al., 2010; Görker, 2001; Guglielmo & Tryon, 2001; Pahl & Barrett, 2010; Reynolds et al., 2011; Uzmen, 2001; Villares et al., 2008; Walsh et al., 2006) and proves that stories and play can be harnessed as effective methods in developing social skills of children.
In Turkey, the current MoNE (2013) preschool education program offered within the scope of preschool education also utilizes play and story activities frequently; hence, since in this study it did not create a significant difference, it can be assumed that these activities were not handled in a method to improve social skills. In the current MoNE (2013) program, activities such as Turkish, art, drama, music, movement, play, science, mathematics, preparation for reading and writing, and field trips are integrated. These activities are executed alone or combined and in individual, small or large group activities. In this program encompassing different developmental domains and multi-dimensional activities, educators to develop versatile skills and behaviors of children through practicing learner-centered activities. In essence, within the context of social-emotional development, it is feasible to support social skills via activities like communicating, expressing feelings, answering questions, respecting others' rights and taking responsibility. Nevertheless, since social skills are related to multi-dimensional skills, it is essential to expand specific programs to use in the further advancement of social skills.

At this point, it is a crucial finding of Gönen, Aydos, and Ertürk (2012) that the influence of children’s picture books on the social skills of preschool age children, the major weight is giving to peer-concerned skills but the skills in other categories are inadequately illustrated. In a different study, Zembat and Zülfikar (2006) detected that teachers in preschool education institutions scarcely utilized the discussion method within the context of conversation and story activities. On the other hand, in story telling-based social skills training children were motivated to partake in the processes of thinking and communicating and discussions were held in regards to characters, events or situations. These factors could have played a role in making story telling-based social skills education more effective than current education on the development of children’s social skills. Within the context of a different study Aktaş Arnas, Erden, Aslan, and Cömertpay (2004) reported that in preschool education institutions teachers asked post-reading questions to the children or wanted the children to summarize the story but they avoided post-reading activities such as acting out the scenario or drawing the story in pictures. In story telling-based social skills training, after reading each single story, the teacher and children answered story-related questions and the next children were asked, in line with the objective of the session, to draw the story in line with given directions and enact the story within the scope of activities. Likewise, Deretarla Gül & Erden (2004) identified that preschool teachers mostly harnessed story-books for native language activities and within the scope of story activities they rarely stored and utilized art materials, and story audios. Visible effects of story telling-based social skills training on social skills most likely stem from these organized activities.

Aktaş Arnas et al. (2004) argue that in MoNE (2013) preschool education program teachers’ pay greater heed to instructional plays and physical play rather than social ones. However, in the play-based social skills training, social skills-focused activities and, play that impulsive thinking, speaking, producing and problem-solving were assigned. Likewise, Şener Demir (2004) noted that at formal preschool education institutions, instead of a children-centered approach, a context-centered approach is followed in play and activities are conducted in a way that categorized the play as formal training. As opposed to this approach, in play-based social skills training, activities were designed to prioritize children’s fun and to encourage students’ full participation in the ongoing process accordingly. Indeed, Çorbacı Oruç, Haktanur, and Dinger (2004) showed that although at formal preschool education institutes, playing is a frequent activity, using it as a teaching method is comparatively a less common practice. In play-based social skills training, play-based activities aim to promote children some social skills in children rather than free-time or aimless play activities. In a different study, Erşan (2011) detected that teachers in preschool education institutes did not sufficiently guide children while playing and did not interacted with the children. Otherwise, in play-based social skills training, certain processes require observing children’s skills and behaviors and necessitate sharing the obtained results. Basing on similar practices, an expected result is that play-based social skills training had positive effects on social skills.
Table 7. Paired samples t-test results related to posttest and permanence test mean scores of kindergarten children in experiment groups on the dimensions and total of social skills

<table>
<thead>
<tr>
<th>SOSAS-TF</th>
<th>Evaluation</th>
<th>N</th>
<th>Mean</th>
<th>S</th>
<th>df</th>
<th>t</th>
<th>sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>40</td>
<td>55.07</td>
<td>4.47</td>
<td></td>
<td>39</td>
<td>.26</td>
<td>.791</td>
</tr>
<tr>
<td>Permanence test</td>
<td>40</td>
<td>53.62</td>
<td>5.88</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Posttest</td>
<td>40</td>
<td>42.32</td>
<td>4.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Permanence test</td>
<td>40</td>
<td>41.17</td>
<td>4.97</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Adaptation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>40</td>
<td>41.82</td>
<td>3.93</td>
<td></td>
<td>39</td>
<td>.66</td>
<td>.508</td>
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<tr>
<td>Permanence test</td>
<td>40</td>
<td>41.17</td>
<td>4.97</td>
<td></td>
<td></td>
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<tr>
<td><strong>Self-control</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
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<td>40.45</td>
<td>4.18</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Permanence test</td>
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<td>38.40</td>
<td>6.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Prosocial behaviors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>40</td>
<td>41.07</td>
<td>6.48</td>
<td></td>
<td>39</td>
<td>-2.38</td>
<td>.022*</td>
</tr>
<tr>
<td>Permanence test</td>
<td>40</td>
<td>21.50</td>
<td>4.04</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Assertiveness</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>40</td>
<td>22.45</td>
<td>3.64</td>
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<tr>
<td>Permanence test</td>
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<td>198.47</td>
<td>16.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>40</td>
<td>51.62</td>
<td>5.25</td>
<td></td>
<td>39</td>
<td>1.67</td>
<td>.102</td>
</tr>
<tr>
<td>Permanence test</td>
<td>40</td>
<td>49.65</td>
<td>7.22</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

As seen in Table 7, according to application of the permanence test application performed two months after the posttest, the t-test result showed the differential relation between social skills-related posttest and permanence test mean scores of children in the Experiment-I group; this difference was in significant in the “communication” dimension [t(39)=.26, p>.05], the “adaptation” dimension [t(39)=.66, p>.05], the “self-control” dimension [t(39)=1.54, p>.05] and the total of scale [t(39)=.35, p>.05]; whereas in the “prosocial behaviors” dimension [t(39)=2.38, p<.05] and “assertiveness” dimension [t(39)=2.16, p<.05] a significant difference existed in favor of the permanence test. This finding shows that even two months after the end of story telling-based social skills training it still had the same effects on social skills related to the “communication”, “adaptation”, and “self-control” dimensions while on social skills-related “prosocial behaviors” and “assertiveness” dimensions, the same program rendered a multiplier effect. As the same case was analyzed for children in the Experiment-II group, no significant difference was measured between posttest and permanence test mean scores in the “communication” dimension [t(39)=1.67, p>.05], the “adaptation” dimension [t(39)=1.79, p>.05], the “self-control” dimension [t(39)=1.62, p>.05], the “prosocial behaviors” dimension [t(39)=.66, p>.05], the “assertiveness” dimension [t(39)=1.53, p>.05] and total of scale [t(39)=.11, p>.05]. These findings point out that even two months after the termination of implemented social skills training, it continued to be effective on children’s social skills, and the offered training thus proved its permanency.
Conclusion and Suggestions

The results of this study concluded that social skills of children participating in story telling-based social skills training, and social skills of children participating in play-based social skills training were at a significantly higher level than children in the control group. These social skills included dimensions of “communication”, “adaptation”, “self-control”, “prosocial behaviors” and total social skills for story telling-based social skills training. In the meantime, these social skills are included dimensions of “communication”, “adaptation”, “self-control”, “prosocial behaviors”, “assertiveness”, and total social skills for play-based social skills training. Additionally, it was shown that story telling-based social skills training was significantly more effective than play-based social skills training on social skills related to the “communication” and “prosocial behaviors” dimensions as well as play-based social skills training was significantly more effective than story telling-based social skills training on social skills related to the “self-control” and “assertiveness” dimensions. Moreover, it was concluded that effects of story telling-based and play-based social skills training were permanent. Accordingly, the below-listed suggestions are offered to teachers and researchers.

- Teachers’ knowledge and expertise on social skills supporting activities should be enhanced, and via a learner-centered approach, their competencies in forming social skills supportive activities and practicing skills should be improved. To achieve this, each city should organize in-service training seminars on development of social skills periodically and regular attendance at the training should be encouraged.
- Teachers’ attempts to prevent negative skills and behaviors of children via play which offers a natural learning environment should be supported. At this point, play should be integrated with different activities of social skills to be utilized.
- Teachers, within the scope of social skills-focused activities, should not only deal with the story reading and/or telling activities but also should pay heed to conduct discussions, enacting, drawing and similar post-reading activities. In order to achieve those goals teachers should be knowledgeable about the features of qualified children’ stories and their use in educational settings.
- In social skills training, it is of vital importance to adopt a holistic approach that supports a child’s development in a multi-dimensional manner. Hence, it is suggested to devise social skills training in which different methods and techniques such as group discussion, project approach, family integration, drama, play, story telling, role-modeling are utilized.
- To appeal to all children’s multi-dimensional social skills, play, story, drama, art, music and a list of diversified activities should be included into the context of the learning processes to warrant higher levels of student participation ratios.
- Within the context of training programs, activities should be prepared to integrate parents as well in the process, and in line with family participation, activities developing children’s, teacher’s and parent’s skills and behaviors should be multi-dimensionally supported.
- Future research should conduct longitudinal analyses on the social skills of preschool age children. At this point, researchers should analyze the effects of variables such as age, gender, the type of current school, parents’ educational background, marital adjustment, child rearing style and teacher’s classroom management skills on the overall process.

Acknowledgement

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