Let's Hear Children's Emotions: The Play-Based Psychoeducation Program for the Socio-Emotional Development of Primary School Children

Çocukların Duygularını Duyalım: İlkokul Çocuklarının Sosyo-Duygusal Gelişimlerine Yönelik Oyun Temelli Psikoeğitim Programı

Gülçin Güler Öztekin[1] iD **Hurizat Hande Turp[2]** iD **Samet Ata[3]** iD

[1] Dr. Öğr. Üyesi, Ağrı İbrahim Çeçen Üniversitesi, Fen Edebiyat Fakültesi, Ağrı, Türkiye
[2] Dr. Öğr. Üyesi, Ağrı İbrahim Çeçen Üniversitesi, Eğitim Fakültesi, Ağrı, Türkiye
[3] Doç. Dr., Ağrı İbrahim Çeçen Üniversitesi, Eğitim Fakültesi, Ağrı, Türkiye

Abstract: The acquisition of empathy, emotional literacy and prosocial skills is important for children's social, emotional and moral development. If these skills are supported through play in children, their acquisition will be faster and easier. Therefore, in this study, the Play-Based Socio-Emotional Psychoeducation Program including empathy, emotional literacy and prosocial skills was prepared and its effect on children was examined. The present research was the pretest-posttest quasi-experimental study. The sample of the study consisted of primary school students between the ages of 7-10. 23 children were included in the experimental group and 23 children were included in the control group. An average of 45 minutes of practice was applied to the experimental group for 10 weeks. The findings of the study showed that there was an increase in empathy, emotional literacy, and prosocial skills of the children in the experimental group after the application, but there was no change in their behaviors. These results provided evidence that the program was effective on these skills. It can be said that the current study will shed light on field workers and the play-based psychoeducation program will be an effective program that they can integrate into their practices.

Keywords: Empathy, emotional literacy, prosocial behaviors, play, psychoeducation program

Öz: Empati, duygusal okuryazarlık ve prososyal becerilerin kazanımı çocukların sosyal, duygusal ve ahlaki gelişimleri için önem taşımaktadır. Bu beceriler çocuklarda oyun yoluyla desteklenirse kazanımları daha hızlı ve kolay olmaktadır. Bu yüzden bu çalışmada empati, duygusal okuryazarlık ve prososyal becerileri içeren Oyun Temelli Sosyo-Duygusal Psikoeğitim Programı hazırlanmış ve çocuklar üzerindeki etkisi incelenmiştir. Araştırma ön test-son test kontrol gruplu yarı deneysel bir çalışmadır. Çalışmanın örneklemini 7-10 yaş arasındaki ilkokul öğrencileri oluşturmaktadır. Deney grubuna 23 çocuk, kontrol grubuna 23 çocuk dahil edilmiştir. Deney grubuna 10 hafta boyunca ortalama 45 dakikalık uygulama yapılmıştır. Çalışmanın bulguları, deney grubundaki çocukların uygulama sonrasında empati, duygusal okuryazarlık ve prososyal becerilerinde artış olduğunu, fakat davranışlarında herhangi bir değişiklik olmadığını göstermektedir. Bu sonuçlar oluşturulan programın bu beceriler üzerinde etkili olduğunu kanıtlamıştır. Mevcut çalışmanın alan çalışanlarına ışık tutacağı ve oyun temelli psikoeğitim programının uygulamalarında kullanabilecekleri etkili bir program olacağı söylenebilir.

Anahtar Kelimeler: Empati, duygusal okuryazarlık, prososyal davranışlar, oyun, psikoeğitim programı

Introduction

Play is the language of children and as natural as breathing. Regardless of their ethnicity, language and culture, play is universally a way for all children to express themselves (Drewes, 2005). According to Axline (1948), play is the strongest and most appropriate tool for children to communicate with adults, understand cause-effect relationships, perceive themselves realistically, convey the stressful events they experience, develop new competencies and learn social skills. Through play, children acquire problem-solving skills and gain a sense of power and control as they learn how to handle new experiences, thoughts, and concerns. As a result, children develop feelings of confidence and success (Drewes, 2005). Children's language development lags behind their cognitive development. Thus, they convey their awareness of what is happening in their world through play (Landreth & Bratton, 1999). In addition, play is essential for healthy development as it contributes to children's physical, cognitive, social and emotional well-being (Ginsburg et al., 2007; Öztekin & Gençdoğan, 2023). This shows us that integrating play into intervention programs is a practical and

effective way to support children's developmental areas such as social, emotional, and moral.

Emotional literacy refers to the ability to recognize, understand, and express one's own feelings and emotions and those of others (Sutton, 2023). According to Petrosino et al. (2021), emotionally literate individuals are defined as individuals who are aware of their own emotions and those of the people they communicate with, use healthy emotion regulation methods, and have developed social skills by receiving support from the power of empathy. It has also been found that emotional literacy affects individuals' well-being levels, making them happier individuals (Acton & Carter, 2016). The expanding literature also showed that emotional literacy was positively associated with self-efficacy (Malkoç & Aydın Sünbül, 2020), empathy, mindfulness, self-regulation (Petrosino et al., 2021), social competence, reduced behavioral problems, and decreased emotional distress (Kusché & Greenberg, 2012). Unfortunately, one study determined an inverse relationship between a lower than average level of emotional literacy and the likelihood of being victims of bullying among students (Harris, 2009). A poor emotional literacy hampers children's social and interpersonal adjustment (Kusché & Greenberg, 2012).

Prosocial behaviors refer to actions intended to benefit others such as helping, comforting, sharing and cooperating (Learning, 2003). These behaviors contribute to moral development, societal harmony, positive intergroup relations, and cooperation (Carlo, 2013). Prosocial behaviors are learned from infancy, even if they are not aware of them within the family (Ata & Artan, 2021). 1.5-2 year-old children begin to exhibit these behaviors, but they become more noticeable with the development of empathy between the ages of 2-7 (Dunfield & Kuhlmeier, 2013; Svetlova et al., 2010). Previous studies provided evidence that prosocial behaviors were associated with moral self-concept (Sticker et al., 2021), subjective well-being (Chen et al., 2020), strong peer attachment (Malonda et al., 2019), low dispositional greed (Bao et al., 2020) and low externalizing behaviors (Memmott-Elison et al., 2020).

Empathy refers to the understanding and sharing the feelings, thoughts, and behaviors of another individual (Basch, 1983). The development of empathic skills is considered to be an essential part of the social and emotional adaptation of individuals and empathy is crucial for interpersonal communication (Ersoy & Köşger, 2016). For example, studies revealed that child empathy was positively associated with child prosocial behaviors and negatively associated with child aggressive behaviors (Wang et al., 2019). In addition, the acquisition of empathy is a fundamental component of moral development, and empirical relationships between many forms of prosocial behaviors and empathy have been identified (Kamas & Preston, 2021; Pang et al., 2022). The deficits in empathic competencies in early childhood can lead to psychopathology later in life and lead to the emergence of antisocial behaviors, bullying, aggression, sexual offenses, and violent crimes (Di Girolamo et al., 2022; Garandeau et al., 2022). Therefore, we can say that acquiring empathy skills during childhood is effective on children's positive behaviors and mental well-being.

Social emotional development skills include the ability to identify emotions, manage their expression, and develop positive relationships with others in an empathetic manner (Akkök, 2003; Elias et al., 2006; Zins et al., 2007). Therefore, practices with emotional literacy, prosocial behaviors, and empathy may promote social emotional development. Since the verbal expression skills of children between the ages of 3-10 have not yet developed, it may be more useful to raise awareness and help them acquire some skills through play. Play is one of the most common methods used by children to practice social skills and expression of emotions. For example, children help each other more after performing rhythmic movements synchronously than asynchronously in peer play. This movement synchronization can potentially be used to facilitate socialization between peers in educational settings (Tunçgenç & Cohen, 2018). Accordingly, children can learn prosocial behaviors through plays and activities that involve movement (Bauer et al., 2021). It is also recommended to integrate play-based activities to cope with emotional problems and improve emotional literacy and empathy (Ariapooran & Gorji Chalsepari, 2019; Waite & Rees, 2014). On the other hand emotional literacy activities for children facilitate the recognition and expression of their emotions (Öksüz, 2016). Steiner's (2003) emotional literacy model consists of the recognition of emotions in self, empathy, regulation of emotions, emotional resilience, and the skills of establishing good relationships. In addition, the acquisition of prosocial and empathy skills for children is considered a step towards becoming a healthy member of society (Hoffman,

2008). Therefore, psychoeducation programs that include play-based activities are important to support the acquisition of these skills in this age group. It is known that such programs carried out with children in this period are narrowly focused on a single developmental area (Havighurst et al., 2004). For this reason, more skills that support each other were included in the psychoeducation program prepared within the scope of this study and we aimed for children to acquire these skills.

The current study aimed to examine the effects of the Play-Based Socio-Emotional Psychoeducation Program prepared for the socio-emotional development of primary school children on emotional literacy, empathy, prosocial behaviors, and child behaviors. Within this general purpose, we sought answers to the following problem situations:

- RQ1. Does the Play-Based Socio-Emotional Psychoeducation Program influence the emotional literacy levels of the children?
- RQ2. Does the Play-Based Socio-Emotional Psychoeducation Program influence the prosocial behaviors of the children?
- RQ3. Does the Play-Based Socio-Emotional Psychoeducation Program influence the empathy levels of the children?
- RQ4. Does the Play-Based Socio-Emotional Psychoeducation Program influence the children's behaviors?

Method

Research Model

The study is quasi-experimental research with a pretest-posttest control group. The independent variable of the study was the play-based psychoeducation program, and the dependent variable was the children's emotional literacy, prosocial behavior and empathy levels and general behaviors. It is possible to specify the dependent variable as the result of an event and the independent variable as the reason (Karasar, 2005). Necessary permissions were obtained from Ağrı İbrahim Çeçen University Ethics Committee and the Ministry of National Education in Agri on February, 22, 2023 (Ethic Code: 65655).

Participants

Karasar (2005) stated that the universe is of two types. One is the "universe", which is easy to define but difficult to reach, and the other is the "study universe", which is more accessible and from which the study can be carried out by determining a cluster. The population of this study consists of primary school students in Agri. The sample of the study consists of students in a primary school. The sample group of the study was selected by simple random sampling method consisted of two different classes. The randomness was applied at the selection of school and classes. First, the school was determined, then the classes in the school. Randomization at the school level aimed to minimize biases and confounding variables that could arise from individual differences across classrooms or schools. After obtaining information about whether the school was willing to participate in the study, the sample group was determined by obtaining parental consent form for the students who volunteered to participate in the study. 48 third-grade students agreed to participate in the study in two classes (25 students from one class, 23 students from the other class). After pretests were administered to all participants, analysis was performed to determine the equivalence of the

experimental and control groups. When it was seen that the experimental and control groups showed a homogeneous distribution, one of the classes was determined as the experimental group and the other as the control group with a random method. However, since the posttest data of two students from the experimental group could not be obtained, the study was completed with a total of 46 participants, 23 students in the experimental group and 23 students in the control group. Demographic information about the children participating in the study is presented in Table 1.

Table 1 showed that the experimental group consisted of 13 girls (56.5%) and 10 boys (43.5%). The majority of participants were 9 years old (n= 20). The mean age of mothers was 34.52 (sd= 4.49) and the mean age of fathers was 41.14 (sd= 6.36). The control group consisted of 12 girls (52.2%) and 11 boys (47.8%). The majority of participants were 9 years old (n= 20) and 8 years old (n= 7). The mean age of mothers was 33.70 (sd= 4.71) and the mean age of fathers was 41.09 (sd= 6.82).

Measures

General information form

A form including demographic information such as age and gender was developed by the researchers to collect general information from the participants about themselves and their parents.

Emotional literacy scale in primary school

The scale was developed by Turp and Gençdoğan (2022) to measure the emotional literacy skills of primary school children. The scale consists of 18 items and two sub-dimensions: individual emotional processes, and social emotional processes. The scale is a 4-point Likert type. An example item is "I understand how a friend feels when his/her toy is broken". High scores indicate high emotional literacy levels. Cronbach alpha values were calculated as .734 for individual emotional processes, .806 for social emotional processes and .838 for the total scale.

Child prosociality scale: Child form

The scale, developed by Ata and Artan (2022), is a 20-item scale that aims to measure children's prosociality levels. The 4-point Likert-type scale consists of three subscales: help, sharing and empathy. An example item is "If I see someone sad, I ask why they are sad". Higher scores indicate more prosocial behaviors. Cronbach alpha values were .663 for help, .682 for sharing, .574 for empathy and .811 for the total scale.

An index of empathy for children and adolescents

The scale was developed by Bryant (1982) and adapted to Turkish culture by Gürtunca (2013). The scale is structured as 21 items and binary answers (yes-no) to measure the empathy skills of children and adolescents. An example item is "It's hard for me to understand why someone is upset". As a result of the analysis using both the test-retest method and the KR-20 formula, the scale was found to be reliable. The KR-20 value was 0.70 and the Pearson Product Moment Correlation Coefficient calculated by the test-retest method was 0.76.

Child behavior scale

The scale was developed by Ladd and Profilet (1996) and adapted to Turkish culture by Ergene et al. (2018). The 59-item scale is a 3-point Likert type and consists of six subscales: aggressive behavior to peers, hyperactivity, asocial relationship with peers, anxiety-fear, prosocial relationship with peers, and exclusion by peers. Example items are "He/she blames other children", and "He/she helps other children". Cronbach alpha values were .92 for aggressive behavior to peers, .78 for hyperactivity, .86 for asocial relationship with peers, .74 for anxiety-fear, .86 for prosocial relationship with peers, and .92 for exclusion by peers.

Data Collection

After the permissions from the necessary institutions and the approval of the school administration and the classroom teacher, parental consent forms and the Child Behavior Scale were sent to the parents of the experimental and control groups through the children to approve the consent forms and fill out the scale. In addition, the "Emotional Literacy Scale in Primary School", "Child Prosociality Scale: Child Form" and "An Index of Empathy for Children and Adolescents" were scored by the children as pretests. While the forms were being filled out, a researcher read the questions to facilitate students' follow-up. The program was applied to the experimental group once a week on a day determined by the classroom teacher through activity modules lasting approximately 45 minutes. When the application was completed, the same scales were scored by the children and their parents as posttests.

Table 1. Demographic information about the participants

Group	Variables	Participants	F	%
Experimental Group	Gender	Girl	13	56.5
		Boy	10	43.5
	Children's Ages	8 years old	2	8.7
		9 years old	20	87.0
		10 years old	1	4.3
	Mean age of mothers	34.52 (±4.49)		
	Mean age of fathers	41.14 (±6.36)		
Control Group	Gender	Girl	12	52.2
		Boy	11	47.8
	Children's Ages	7 years old	1	4.3
		8 years old	7	30.4
		9 years old	12	52.2
		10 years old	3	13.0
	Mean age of mothers	33.70 (±4.71)		
	Mean age of fathers	41.09 (±6.82)		

The experimental group attended the 10-week training between March 20, 2023 and May 26, 2023, but the control group did not attend any training during the training period. In order to comply with ethical principles, the psychoeducation program was also applied to the control group for three weeks between May 29, 2023 and June 16, 2023.

Psychoeducation Program

The psychoeducation program implemented within the scope of this study was prepared by the researchers by reviewing the literature on the study variables and examining the experimental studies in detail. While constructing the basic framework of the psychoeducation program, we focused on the Steiner's (2003) emotional literacy model and emotion-sharing models. According to Steiner (2003), the recognition of emotions in self, empathy, regulation of emotions, emotional resilience, and the skills of establishing good relationships are necessary to acquire emotional literacy and make up the fabric of daily interactions. On the other hand, emotion sharing models suppose that an empathic concern for the others' needs motivates prosocial behaviors (Batson, 2014). They argue that perceiving another person in need or distress triggers an isomorphic emotional state (i.e., affecting sharing or emotional contagion) in the observer (Paulus, 2014). In addition, the play-based activities to be included in the program have been integrated using the book "101 Favorite Play Therapy Techniques" written by Schaefer and Kaduson (2019). For example, the "Emotion Labels" activity was chosen to help children identify and express their emotions. The "Bubbles" activity was chosen as a coping method when experiencing emotions such as anger. The "Collaborative

Creativity" was chosen to encourage collaboration to support the development of positive social skills. The supervision of three experts in their field (an academic from the Child Development, Guidance and Psychological Counseling and Program Development departments) was consulted during the program construction stages, such as determining the session contents, their suitability for the developmental characteristics of the children, and examining the compatibility of the techniques with the content. After the consensus of these three experts, the program was ready for implementation. The program was applied by the researchers to the experimental group once a week with activity modules lasting approximately 45 minutes. The content of the 10-session Play-Based Socio-Emotional Psychoeducation Program is presented in Table 2.

Statistical Analysis

Participant characteristics were analyzed using percentage and frequency. For both groups, the normal distribution assumption was tested with skewness and kurtosis values, and it was found that the normality distribution was provided (±3.0). Tan (2016) suggests that a sample size of 20 or more is sufficient for the use of t-test. Moreover, De Winter (2013) states that the t test can be applied even if the sample size is below 5. The differences between the two groups on emotional literacy, prosociality, empathy, and child behaviors were analyzed using the independent sample t-test, and the differences on the pretest and posttest were analyzed using the dependent sample t-test. SPSS 25.0 was used for the analysis and the significance level was determined as $p<.05$.

Table 2. The content of the program

Sessions	Content	Achievement
Session 1	Preliminary interview	Children gain information about what they will do for 10 weeks.
Session 2	Let's meet	Children and trainers get to know each other.
		Children begin to gain the ability to express themselves within the group.
Session 3	Self-Awareness	Children get to know themselves with their strengths and weaknesses.
		Children begin to convey their feelings using the word "I".
		Children begin to accept themselves.
		Children begin to develop their self-concept.
Session 4	Emotional Awareness	Children recognize emotional facial expressions.
		Children recognize the basic emotions they experience.
		Children use words related to emotions.
		Children can tell the difference between emotions and behaviors.
Session 5	Expressing Emotion	Children express the basic emotions they experience with words.
		Children know that all emotions are important and acceptable.
		Children can convey their emotions by making them concrete.
Session 6	The Expression of Emotion in the Body	Children can contact their bodies.
		Children know what is happening in their bodies while experiencing basic emotions.
		Children tell/show where they feel emotions they experience in their bodies.
Session 7	Empathy	Children can understand the emotions of others.
		Children express that they understand the feelings of others.
		Children become more sensitive to the emotions of others.
Session 8	Prosociality	Children learn what prosocial behavior is.
		Children learn the concept of emotional prosociality.
		Children learn to share emotions within the framework of prosocial behaviors.
Session 9	Collaboration	Children recognize each other's needs in group interaction.
		Children seek support within the group when they need help.
		Children can act together to complete a task.
Session 10	Evaluation	Children express the changes before and after training.
		Children express their opinions about their development.

Table 3. Homogeneity distribution of the experimental and control groups

Variables	Experimental Group n = 23 Mean (S.d)	Control Group n = 23 Mean (S.d)	t	p
Individual emotional processes	35.48 (5.59)	33.43 (6.19)	1.175	.246
Social emotional processes	14.00 (2.92)	13.57 (3.26)	.476	.636
Help	25.17 (4.05)	24.04 (5.52)	.791	.433
Sharing	15.96 (3.43)	14.91 (4.31)	.909	.368
Prosocial-empathy	16.35 (2.71)	16.96 (3.98)	-.606	.547
Prosociality	57.48 (8.24)	55.91 (11.22)	.539	.592
Empathy	11.78 (2.61)	11.35 (2.55)	.571	.571
Aggressive behavior to peers	8.91 (2.86)	8.43 (1.70)	.689	.494
Hyperactivity	7.26 (1.86)	6.65 (1.70)	1.159	.253
Asocial relationship with peers	8.87 (2.90)	7.70 (1.49)	1.728	.091
Anxiety-fear	6.91 (2.86)	6.70 (1.58)	.319	.751
Prosocial relationship with peers	18.17 (2.29)	18.22 (2.39)	-.063	.950
Exclusion by peers	9.52 (3.53)	7.57 (1.20)	2.518	.055

p<.05

Table 4. Comparison of the scores after the application

Variables	Intervention				Comparison			
	Pre	Post	t	p	Post Intervention	Post Control	t	p
Individual emotional processes	35.48 (5.59)	39.35 (5.71)	-11.779	.000*	39.35 (5.71)	33.57 (5.63)	3.458*	.000*
Social emotional processes	14.00 (2.92)	16.78 (2.39)	-12.800	.000*	16.78 (2.39)	13.48 (3.16)	3.998*	.000*
Helping	25.17 (4.05)	28.91 (4.08)	-5.096	.000*	28.91 (4.08)	23.52 (5.38)	3.832*	.000*
Sharing	15.96 (3.43)	18.96 (3.39)	-8.184	.000*	18.96 (3.39)	14.78 (4.52)	3.541*	.001*
Prosocial-empathy	16.35 (2.71)	18.43 (2.33)	-5.067	.000*	18.43 (2.33)	15.78 (3.20)	3.209*	.002*
Prosociality	57.48 (8.24)	66.30 (6.93)	-7.803	.000*	66.30 (6.93)	54.09 (10.94)	4.524*	.000*
Empathy	11.78 (2.61)	15.13 (2.55)	-17.179	.000*	15.13 (2.55)	12.00 (2.71)	4.035*	.000*
Aggressive behavior to peers	8.91 (2.86)	8.22 (1.31)	1.274	.216	8.22 (1.31)	8.48 (1.97)	-.528	.600
Hyperactivity	7.26 (1.86)	7.65 (1.37)	-.805	.429	7.65 (1.37)	6.96 (2.03)	1.361	.180
Asocial relationship with peers	8.87 (2.90)	7.91 (2.23)	1.447	.162	7.91 (2.23)	7.65 (1.53)	.462	.646
Anxiety-fear	6.91 (2.86)	6.22 (1.83)	1.058	.302	6.22 (1.83)	6.09 (1.38)	.273	.786
Prosocial relationship with peers	18.17 (2.29)	18.43 (2.33)	-.646	.525	18.43 (2.33)	18.09 (2.39)	.499	.620
Exclusion by peers	9.52 (3.53)	8.70 (2.49)	.978	.339	8.70 (2.49)	7.61 (1.23)	1.873	.068

*p<.05

Results

The pretest scores of the participants are presented in Table 3.

When the pretest scores were compared, no statistically significant differences were obtained between the two groups in terms of empathy, emotional literacy, prosocial behaviors, and child behaviors (p>.05). Therefore, it can be said that the experimental and control groups show a homogeneous distribution.

The comparison of the scores of the experimental group from the pretest and posttest and the scores of the control group from the posttest is presented in Table 4.

It was found that there were statistically significant differences between the pretest and posttest scores of the experimental group in individual emotional processes (t_{22}=-11.779; p<.05), social emotional processes (t_{22}=-12.800; p<.05), helping (t_{22}=-5.096; p<.05), sharing (t_{22}=-8.184; p<.05), prosocial-empathy (t_{22}=-5.067; p<.05), prosociality (t_{22}=-7.803; p<.05), and empathy (t_{22}=-17.179; p<.05), but there was no statistical difference in child behaviors (p>.05). The same result was obtained in the posttests comparisons of the experimental group and the control group: individual emotional processes (t_{44}=3.458; p<0.05), social emotional processes (t_{44}=3.998; p<.05), helping (t_{44}=3.832; p<.05), sharing (t_{44}=3.541; p<.05), prosocial-empathy (t_{44}=3.209; p<.05), prosociality (t_{44}=4.524; p<.05), and empathy (t_{44}=4.035; p<.05). Accordingly, while it can be said that there were statistically significant increases in the empathy, emotional literacy and prosocial behaviors perceived by the children after the intervention, there was no statistical difference in the child behaviors perceived by the parents.

Discussion

This study aimed to develop primary school students' skills through the Play-Based Socio-Emotional Psychoeducation Program. Within the scope of the research, the skills were determined as empathy, prosocial behaviors, and emotional literacy sub-skills. The analyses showed that the program was effective on all sub-social skill levels.

The findings of the present study showed that the psychoeducation program increased the emotional literacy levels of students in the experimental group. In other words, we have provided evidence that emotional literacy skills can be improved through the Play-Based Socio-Emotional Psychoeducation Program. Teaching emotional literacy skills through psychoeducational programs has been supported for many years, and this concept is a type of social skill for which training is organized. For example, in the doctoral thesis study conducted by Saleme et al. (2021), it was yielded that the gamified social marketing program contributed to the development of social-emotional skills and prosocial

behaviors. One of the oldest models used to support emotional literacy in educational curricula is Moseley's (1996) Circle Time model. This helps children understand their behaviors and the reactions of others to these behaviors, gain mastery over emotional impulses, and increase their confidence and self-esteem (Coppock, 2007). Later, various programs aiming at emotional development such as CASEL, RULER, PATHS were presented. In studies based on these programs, it is stated that children's emotional skills such as emotional literacy are developed and their permanence is ensured (Greenberg & Kusché, 2006; Taylor et al., 2017). Some countries, such as England and the United States, allocate time for emotional literacy activities in their curriculum (Matthews, 2005). In addition, it is recommended to develop emotional literacy programs for children and young people as a preventive tool to improve future mental health (Coppock, 2007). Educational approaches emphasize the responsibility of schools to protect children, promote their health and well-being, and address their emotional and behavioral needs (Carnwell & Baker, 2007). To achieve this, arrangements are supported to improve students' emotional literacy and social competence.

The results of this study showed that the program had a positive effect on the prosocial skills of primary school students in the experimental group. It has been determined that there are studies with similar and opposite results to this study in the relevant literature. A recent study examined the effects of an intervention program designed as a social and cognitive skills training to support children's development on children's antisocial and prosocial behaviors (Santos et al., 2023). Contrary to this study, it was found that the program was not effective. On the other hand, another program found that daily breathing exercises offered to primary school students increased prosocial behaviors, especially in girls (von Salisch & Voltmer, 2023). A study conducted to develop a new, integrative intervention to promote prosocial behaviors concluded that the program was effective in improving prosocial behaviors and related constructs (e.g., empathy) (Baumsteiger, 2019). In a systematic review study evaluating the effect of intervention programs on encouraging prosocial behaviors and reducing aggressive behaviors, it was found that the programs were effective in enhancing prosocial behaviors and reducing aggressive behaviors (Mesurado et al., 2019). Another study found that programs based on digital gamification design were effective in the acquisition of social emotional skills such as prosocial behaviors (Saleme et al., 2021). When the results of the aforementioned studies are evaluated together with the findings of the present study, it is thought that the contradictory findings may be due to the different characteristics of the study group and programs.

The current study found that the empathy skills of the students in the experimental group increased. Previous literature includes many empathy skill acquisition studies for primary school children. For example, in Han et al.'s (2021) group intervention study with children, where emotional expressions were used, it was found that the application had a positive effect on developing emotional empathy. In a systematic review study examining studies conducted with children and adolescents between the ages of 5 and 18, it was concluded that mindfulness-based programs increase empathy (Cheang et al., 2019). Rezayi (2020) stated that the empathy scores of autistic children in the experimental group increased with the Adlerian puppet therapy intervention program. Empathy is a form of skill that individuals have by nature and is nourished by their interactions in a group (Levine, 2013).

There are studies in the literature presenting the possible effects of intervention programs aiming to increase empathy (Ata, 2023; Herrles, 2023). In this regard, it has been determined that different training programs also improve empathy skills such as the Creative Writing and Social Learning Skills programs (Herrles, 2023).

This study determined that there was no change in children's behaviors. In other words, mothers stated that they did not perceive any change in their children's behavior. Consistent with this finding, Muskett's (2008) study found that parents were unable to notice the developed social skill levels of their children, suggesting that a similar situation may have occurred in the current study. However, Öztekin and Gülbahçe (2019) and Öztekin and Gençdoğan (2021) found in their studies with filial therapy, one of the types of play therapy, that the play-based program reduced children's behavioral problems. A meta-analysis study showed that preschool children benefit from socio-emotional learning interventions in different contexts (Murano et al., 2020). The difference in the results of the studies may be due to the parents not being involved in the process.

Despite its contributions, this study has some limitations. One of these limitations is that the study does not include a follow-up test. Future studies should include a follow-up test to determine the long-term effects of the program. In addition, since voluntary participation was taken as a basis, equal distribution of the study groups in terms of some demographic characteristics such as age (7-10 years old) was not achieved. Researchers can examine study variables by considering age groups one by one in their studies.

In conclusion, our study results yielded that the Play-Based Socio-Emotional Psychoeducation Program has valuable effects such as increasing emotional literacy, prosocial skills, and empathy levels among primary school students and contributes to raising more socially and emotionally equipped students. Since the study provided evidence that the program is effective on empathy, emotional literacy and prosocial skills, this program may be used to support the development of children and to eliminate the skill deficiencies in primary school. This program, which may be disseminated and put into practice in schools across the country, may be implemented by classroom and/or guidance teachers without the need for any additional training, and can be considered as a gain.

Author Contributions

All authors took an equal part in all processes of the article. All authors have read and approved the final version of the study.

Ethical Declaration

The purposes and procedure of the current study were granted approval from the Ethical Committee of Agri Ibrahim Cecen University (Session Date: February 22, 2023; Protocol Number: 65655).

Conflict of Interest

The authors declare that there is no conflict of interest with any institution or person within the scope of the study.

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