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The effectiveness of child-centered play therapy on behavior problems of children#

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ABSTRACT

This study aims to examine Child-Centered Play Therapy's effect on reducing behavioral problems in five- and six-year-old children living in Istanbul. The study was conducted with 20 children from socio-economically disadvantaged families. Families applied for support to a play therapy room established in a primary school. A pre-test and post-test control group design is used. Child-Centered Play Therapy sessions were implemented in the experimental group for eight weeks as individual sessions. Data due to the children's behavior problems were collected from parents via the "Social Competence and Behavior Evaluation-30 Scale" and the family pre-interview form. Mann Whitney-U Test and Wilcoxon Test analyzed data. Results of the experimental group (ingroup analyses) show a significant difference between pre-test and post-test scores of social competence, anger aggression, and anxiety withdrawal subscales, as hypothesized. However, analyses of between groups' post-test comparisons show significant differences only in the social competence subscale. Between groups, post-test scores, comparisons of anger-aggression, and anxiety withdrawal subscales showed no significant differences. The results are discussed; additionally, observations of the researcher as a play therapist are presented.

Keywords: Child-centered play therapy, behavior problems, social competence, experimental design.

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INTRODUCTION

Turkey is a middle-income country with well-established institutions that provide comprehensive public services, especially health, and education. Turkey's capacity to defend and support children's rights beyond national borders is remarkable (TUIK, 2017). On the other hand, regional, socio-economic, and gender inequalities continue to affect children's living conditions and access to high-quality education and health services (UNICEF, 2018). Along with the population increase, the 20th century has also been a period of violence, war, and urbanization. Mental health services are provided in public and state institutions, especially hospitals and municipalities, but these services are extremely limited in meeting the general population's needs. Services offered in private centers are only accessible to individuals from the upper middle- and high-income groups. In cosmopolitan cities, where populations have increased with immigration, individuals have difficulty reaching high-quality education and developmental guidance until school age. In Turkey, public services that families can get free support for early childhood emotional and behavioral problems are minimal. The present study was conducted with the children of families living at the border of hunger and poverty. The study can also be considered an example of how psychological support processes can be carried out for socio-economically disadvantaged families and children in their neighborhoods.

Play research in Turkey has progressed within the scope of examining the effect of play on the development of children for a long time (Koçyiğit et al., 2007; Ünal, 2009; Kalaycıoğlu, 2011; Bekmezci and Özkan, 2015). Especially in the 2000s, the importance of psychotherapies for children has increased due to the search for non-pharmacological approaches for children

and adolescents. The World Health Organization (WHO, 2020) proposed that countries' national policies should include child mental health studies. Countries acting on this suggestion have taken steps to make their internal regulations. As a reflection of the revisions, the Ministry of National Education has initiated cooperation processes with various institutions to improve the practice skills and increase the qualifications of the psychological counselors working in schools within the scope of the 2023 education vision. One of the subjects studied within the scope of this cooperation was childhood behavioral problems. This research is the product of an effort to reduce the behavioral problems of 5 to 6-year-old children.

Play is a developmental need and right. Play, as a form of expression, is the symbolic language used by the child. Play is children's most potent form of communication (Nussbaum, 2002; UNICEF, 2018; Haight et al., 1999; Landreth, 2012). Thus, play therapy is a widely accepted intervention method for frequently encountered problems in childhood. The healing power of play itself, combined with the systematic approach of play therapy, has a developmentally influential role. Play, as a child occupation, is also effective in individual therapy (Landreth, 2012; Schaefer, 2011; Murphy, 2008). The theoretical framework of Child-Centered Play Therapy (CCPT), which was developed with a focus on the client-centered psychotherapy theory of Rogers, was created by Virginia Axline and turned into a systematic approach by Garry Landreth (Landreth, 2012). CCPT believes in the child's potential to improve his/herself when the appropriate physical and psychological environment is provided and supports the individual's healing power as a non-directed play therapy approach (Landreth, 2012).

CCPT, which does not approach the child from a diagnostic or problem-focused way, primarily focuses on the inner world of the child and prioritizes the child's self-discovery, self-strengthening, development of decision-making skills, increasing self-confidence and creating positive self-concept by focusing on the therapeutic relationship (Schaefer, 2011). Play has therapeutic power and effectively supports children's normal development; this state of play is called therapeutic play (Ray, 2011).

According to the CCPT framework, problem behavior arises from negative life events and learning experiences. Through play, distressing emotions and harmful behaviors are reduced, and the child acquires new skills (Kaminski and Claussen, 2017; Lin and Bratton, 2015; Ray, Armstrong, Balkin, and Jayne, 2015). In addition, play serves as crucial means of communication about children's needs, fears, and anxieties. Play therapy provides a tool for children to express what concerns them without requiring the predominantly verbal expression of their thoughts and feelings (Axline, 1969).

During the CCPT session, the therapist tries to support the child's awareness of internal obstacles and helps the child with change. It is the relationship that is essential in this support process. The therapeutic relationship established between the child and the therapist plays an active role in recovery (Landreth, 2012). In play therapy, the therapeutic aspect of play is used to support the child to develop holistically and acquire skills in solving his/her difficulties. Thanks to this process, children can understand and analyze their obstacles and challenges and develop the experience to solve them (Reddy et al., 2005). Unlike adult therapy, children do not have to make any explanations about their problems. Children play by communicating at their level without feeling questioned or threatened in CCPT sessions.

The behavioral problem in childhood is the symptomatic expression of emotional or interpersonal maladjustment empressed by a negative and often unacceptable behavior pattern with the influence of the social environment (Yavuzer, 2018). School counselors frequently encounter behavioral problems as a problem expressed by teachers and families. Although school counselors plan protective and preventive services within the scope of guidance services, they often experience difficulties in practice due to limited opportunities. In addition, the process may result in negative results due to insufficient referral services.

Families of children who do not attend any preschool institution have difficulty accessing free psycho-social support services. This study was designed to examine whether CCPT, offered to the children of socially and economically disadvantaged families who think their children have adjustment and behavior problems, is effective in reducing adjustment and behavior problems. With this scope, the hypotheses of the study are:

1. There will be no difference between the pretest scores of the experimental and control group obtained from the Social Competence and Behavior Evaluation-30 Scale (SCBE-30).
2. Post-test scores of the experimental group obtained from the SCBE-30 scale will differ from the control group's pre-test scores. (a) Post-test scores of the experimental group obtained from the social competence subscale will be significantly higher than the pre-test scores of the experimental group. (b) Post-test scores of the experimental group obtained from the anxiety-withdraw subscale will be significantly lower than the pre-test scores of the experimental group. (c) Post-test scores of the experimental group obtained from the anger-aggression subscale will be significantly lower than the pre-test scores of the experimental group.
3. Post-test scores of the experimental group obtained from the SCBE-30 scale will differ from the control group. (a) Post-test scores of the experimental group obtained from the social competence subscale will be significantly higher than the control group. (b) Post-test scores of the experimental group obtained from the anxiety-withdraw subscale will be significantly lower than the control group. (c) Post-test scores of the experimental group obtained

from the anger-aggression subscale will be significantly lower than the control group.
4. There will be no difference between the pretest and post-test scores of the control group obtained from the SCBE-30 scale.

METHODOLOGY

The present study investigates the effects of Child-Centered Individual Play Therapy on behavior problems and social effectiveness of 5 to 6-year-old children. This is a quasi-experimental design with pre-and post-test measurements and a control group.

The study design is a 2×2 split-plot (combined) one; both independent processing groups (experimental and wait-list control) and repeated measurements of dependent variables (pre-test and post-test) are realized. This repeated measures approach was used to demonstrate significant change over time and between groups (Dugard et al., 2012).

The independent variable of the research is CCPT; the dependent variables are parent-evaluated behavioral problems (anger aggression, anxiety-introversion, and social competence). After the pre-test measurements, the experimental group was given eight individual child-centered play therapy sessions. Subsequently, the experimental procedure and post-test measurements were applied to the parents of children participating in experimental and control groups.

Procedure

The playroom where the play therapy sessions are realized was organized by Istanbul Development Agency (IDA) and transferred to the Ministry of National Education within the scope of sustainability—families who experience difficulties with their children's behavior problems applied to the study. Parents filled SCBE-30 scale, and they are requested to evaluate their child. The children who scored high in behavioral problems according to the parent's evaluation were included in the study group. Children participating in the study have not undergone a psychiatric evaluation nor been diagnosed. The study aims to test the effectiveness of CCPT in reducing behavioral problems and increasing the communication skills of children aged five and six.

Parents completed the SCBE-30 scale and demographic information form following the informed consent form. According to parents' evaluations, children with higher scores on the SCBE-30 questionnaire were accepted for the study. Participants were assigned to the experimental or the waitlist control group regarding age and sex differences.

Ten students in the experimental group received eight 40-min individual CCPT sessions per week. In this study, each child in the experimental group (n = 10) received 320 hours of individual play therapy. Play therapy sessions are conducted by a psychological counselor in specially equipped playrooms in a school setting. The playroom was created with the support of IDA and the Avcılar District Directorate of National Education. Playrooms were equipped with various specific toys to facilitate a broad range of expression, following VanFleet et al. (2010) and Landreth's (2012) general guidelines.

Study group

The sample of the study was chosen among the applications from the families residing in the vicinity of the play therapy room in the Avcılar district of Istanbul. The research was conducted in a region that has formed a variable population after the great Marmara earthquake in 1999. In this region, families who experience internal migration due to job opportunities and who are international refugees and asylum seekers are mostly settled (Emeç et al., 2019; Logie and Morvan, 2021).

The socioeconomic status of the applicant families is low and below low. Five of the families are under the hunger level, eleven are under the poverty level, and four represent a low-income group, according to Turkish Statistical Institute poverty rate reports (TUIK, 2019).

Participants are 20 children whose parents applied to receive support for their children's unwanted behavior. SCBE-30 scale was used by parents to determine children's behavior problems. The participants were matched to the experimental and control groups regarding their obtained pretest scores. The children in the experimental group received eight individual child-centered play therapy sessions, lasting 40 minutes each.

Twenty children were assigned to the experimental group (n = 10) or the waitlist control group (n = 10). Ten are five years old, and ten are six. Participants were included in the experimental and control groups in equal numbers according to the gender variable. Five male and five female students are in the experimental and control groups.

After the experimental procedure, the SCBE-30 Scale was applied to the parents of both groups to obtain post-test scores. Ensuring the research was completed, the children in the control group were allowed to participate in 8 sessions of individual play therapy as the experimental group received.

Before starting the play therapy sessions, it aimed to determine whether the pretest scores of the SCBE-30 scale of the experimental and control groups differed significantly according to the group variable. Results of the Mann-Whitney U test show no significant differences (Hypothesis 1).

Data collection

Data were collected via Social Competence and Behavior

Assessment Questionnaire-30 and the personal information form created by the researcher to obtain information such as the age, gender, and economic status of the participants.

Social Competence and Behavior Evaluation Scale (SCBE-30): SCBE-30 was developed by LaFreniere and Dumas (1996) to evaluate preschool children's emotional and behavioral problems and the quality of social skills. The Turkish adaptation of the scale was carried out by Çorapçı et al. (2010). The scale has 30 items and three sub-dimensions, which parents or teachers can fill in. The sub-dimensions of the scale were named as Anger-Aggression, Social Competence, and Anxiety-Withdrawal. The Cronbach Alpha, internal consistency coefficients were found to be .87 for anger-aggression, .88 for social competence, and .84 for anxiety-introversion. The scale has a six-point Likert rating structure.

The social Competence subscale evaluates the positive characteristics of children, such as cooperation and finding solutions to conflicts in their peers, friends, and family relationships. The anger-Aggression subscale evaluates the level of the externalization problem symptoms and maladaptive and aggressive behaviors in peer and sibling relationships. Finally, the anxiety-withdrawal subscale assesses children's sad and depressive moods and signs of internalizing problems, such as shyness in the group (Çorapçı et al., 2010).

RESULTS

The effectiveness of CCPT pre-test and post-test findings due to social competence, anxiety-withdrawal, and anger-aggression subscales are presented. The analyses were carried out using non-parametric tests. The analysis was based on a 95% confidence level. In addition, the non-parametric Wilcoxon Signed Orders Test was used to analyze the difference between two dependent groups, and the Non-Parametric Mann-Whitney-U test was used to analyze the difference between two independent groups.

The Wilcoxon rank-sum test was performed to compare the pre-test and post-test scores and determine if there was a significant difference. As seen in Table 1, there are significant differences between pre-test and post-test scores of Social Competence, Anxiety-Withdrawal, and Anger-Aggression subscales of the experimental group regarding the results of the Wilcoxon Sum Rank Test, as hypothesized. Social competence post-test scores are significantly higher than pre-test scores ($Z = -2.527$, $p < 0.05$); anxiety-withdrawal post-test scores are significantly lower than pre-test scores ($Z = -2.253$, $p < 0.05$) and anger-aggression ($Z= -2.655$, $p<0.01$) post-test scores are significantly lower than pre-test scores. The results show that participants' social competencies increased while anxiety-withdrawal and anger-aggression scores decreased after receiving CCPT sessions, as hypothesized.

Once again Non-parametric Wilcoxon Z test was conducted to determine if there were significant differences between the pretest and posttest scores of the control group for the subscales of SCBE-30.

As seen in Table 2, there is no significant difference between pre-test and post-test scores of the Anger-Aggression, Social Competence, and Anxiety-Withdrawal subscales of the control group regarding the results of the Wilcoxon Sum Rank Test, as hypothesized.

Lastly, the Whitney-U test was conducted to determine whether the scores obtained from sub-scales differ according to the group variable. Results are given in Table 3.

Table 1. Non-parametric Wilcoxon Z test results to analyze Pretest-Posttest Scores of the Experimental Group.

		N	Mean Rank	Sum of Ranks	Z	p
Social Competence - Pre-test	Negative Ranks	0	0.00	0.00	-2.527	0.01
Social Competence - Post-test	Positive Ranks	8	4.50	36.00		
	Ties	2				
	Total	10				
Anxiety/Withdrawal - Pre-test	Negative Ranks	7	5.93	41.50	-2.253	0.02
Anxiety/Withdrawal- Post-test	Negative Ranks	2	1.75	3.50		
	Ties	1				
	Total	10				
Anger-Aggression- Pre-test	Negative Ranks	9	5.94	53.50	-2.655	0.00
Anger-Aggression - Post-test	Negative Ranks	1	1.50	1.50		
	Ties	0				
	Total	10				

Table 2. Non-parametric Wilcoxon Z test results to analyze pretest-posttest scores of the control group.

		N	Mean Rank	Sum of Ranks	Z	p
Social Competence - Pre-test	Negative Ranks	6	4.5	27	-1.294	0.19
Social Competence - Post-test	Positive Ranks	2	4.5	9		
	Ties	2				
	Total	10				
Anxiety/Withdrawal - Pre-test	Negative Ranks	3	4.33	13.00	-0.527	0.59
Anxiety/Withdrawal - Post-test	Negative Ranks	3	2.67	8.00		
	Ties	4				
	Total	10				
Anger-Aggression - Pre-test	Negative Ranks	2	4.25	8.50	-1.669	0.09
Anger-Aggression- Post-test	Negative Ranks	7	5.21	36.50		
	Ties	1				
	Total	10				

Table 3. Non-Parametric Mann-Whitney-U Test to analyze post-test scores of SCBE 30 scale between groups.

Group		N	Mean Ranks	Sum of Ranks	U	Z	p
	Experimental Group	10	13.45	134.50	20.5	-2.233	0.02
Social Competence - Post-test	Control Group	10	7.55	75.50			
	Total	20					
	Experimental Group	10	8.90	89.00	34	-1.215	0.22
Anxiety-Withdrawal - Post-test	Control Group	10	12.10	121.00			
	Total	20					
	Experimental Group	10	8.1	81.00	26	-1.816	0.06
Anger-Aggression - Post-test	Control Group	10	12.9	129.00			
	Total	20					

As a result of the Mann Whitney-U test (Table 3), which was conducted to determine whether the scores obtained from sub-scales differ according to the group variable, a significant difference was found between the groups in the social competence sub-dimension. In addition, the social competence post-test scores of the experimental group were found to be significantly higher than the scores of the control group ($U = 20.50$; $p > .05$). There are no significant differences in the post-test scores of anxiety-withdrawal and anger-aggression subscales between the experiment group and the control group.

DISCUSSION

The study aimed to investigate the effectiveness of CCPT in reducing behavioral problems in children aged 5 to 6. For this purpose, eight sessions of CCPT were provided individually to 10 children in the experimental group. Significant differences were found between the pretest and posttest scores of the participants in the experimental group who received child-centered play therapy. In addition, while the social competence scores of the experimental group increased, it was observed that there was a significant decrease in anxiety-withdrawal and anger-aggression sub-scales, as hypothesized. Post-test scores of the experimental and control groups are compared. Although there was a significant difference in favor of the experimental group in the social competence subtest, in post-test score comparisons of the experimental and control groups, no significant difference was found in the anxiety-withdrawal and anger-aggression subscales.

The with-in group analyses revealed that CCPT practices are effective regarding social competence, anxiety-withdrawal, and anger-aggression. The result that CCPT is effective in externalizing and internalizing behavior problems is in line with the literature. In addition,

the study realized by Kot et al. (1998) revealed that internalizing and externalizing behavior problems were reduced when children were given CCPT. This is consistent with the current study, which found that CCPT reduces internalizing and externalizing behavior problems.

The studies by Tural (2012) and Tew (1997) found that CCPT was effective in reducing anxiety levels in children. In addition, the studies showed that the intervention group had significantly lower anxiety levels than the control group post-treatment. Furthermore, the intervention group had significantly lower anxiety levels. Therefore, CCPT is an effective intervention for reducing emotional problems (Ray, 2008).

The current research has also revealed that CCPT is effective in the development of the social competence level of participants. For example, Ray et al. (2015), meta-analysis and empirical studies conducted by Ledyard (1999) and Sezici (2013) revealed that CCPT is effective in creating meaningful changes in individuals' social competencies by supporting the development of individuals' social, emotional, and behavioral skills.

The present study found that the intervention group had a significant decrease in anger-aggression problems from pre- to post-test, while the control group did not. This finding is consistent with previous studies showing that CCPT is an effective intervention for anger-aggression problems (Fall et al., 2002; Tyndall-Lind et al., 2001). In addition, a meta-analysis of 82 play therapy studies (Bratton and Ray, 2000) revealed that CCPT effectively reduces externalizing behavior problems, such as anger-aggression.

Comparison analysis of post-test scores of the experimental and control groups show significant differences in the social competence sub-dimension as hypothesized. However, no significant differences were observed in the anxiety-introversion and anger-aggression sub-dimensions.

Two main limitations of the study are thought to be related to the lack of expected significant results in intergroup comparisons. First, the need for parental involvement is a substantial limitation of the study. Parental cooperation is essential in child therapy for the progress of the treatment. In the present study, interviews with the families were extremely limited. Some families were unwilling to cooperate and did not follow the suggestions for parental support. Providing proper modeling and environmental arrangements is crucial to reduce behavior problems, especially externalizing behavior problems like aggression. When domestic arrangements are not made, play therapy sessions may be incomplete or behavioral adjustments may be temporary. Although parents applied to the study voluntarily, as they wanted a change in their child's behavior, they were unwilling to cooperate. Therefore, it should be more comprehensive and functional to include parent education parallel to play therapy sessions. Especially when parents have more information about evaluating the therapy process, the change can be made holistically, and they will be able to consider more realistically whether an observed behavior is a behavior problem or a form of expression of the child's aggression. In the present study, one of the most critical obstacles to the involvement of parents in the process is the low level of awareness of parents regarding the effects of their attitudes and behaviors on their child's behavior. Low socio-economic status and low education level lead to the definition of the parenting role as nurturing and raising the child; therefore, parents with low demographic backgrounds pull themselves back in issues such as child education and behavior regulation (Kağıtçıbaşı, 2017). Organizing pioneering and parallel training for parents in economically and educationally disadvantaged groups is highly recommended because it is understood that the therapist's short meetings with parents were insufficient for parent cooperation in this study.

Secondly, CCPT sessions in this research are limited to eight individual sessions. It has been observed that 12 sessions or more can be more effective in reducing externalizing behavior problems (Tyndall-Lind et al., 2001). In addition, Ray's (2008) review article on the effects of CCPT's internalization and externalization problems demonstrated a higher effect size for the studies between 11 and 18 sessions.

The study was carried out with the experimental research model. However, the content of individual play therapy sessions is also essential for understanding the subject. For this reason, the practitioner's observations on individual play therapy sessions are also presented in this section.

Since the first encounter is for the child at its own pace, it also contains much information. Although the acquaintance covers a different duration for each child, the themes of exploration and measuring boundaries were frequently observed in the first sessions. While adapting to the new environment occurs at their own pace for each child, some unique approaches have emerged in individuals. While children with extroverted behavior patterns often exhibited the behavior of immediately going to the playroom, exploring the surroundings, and establishing similarities between the toys in the room and their toys, the children with introverted behavior patterns showed the behavior of playing games by humming with a limited number of toys. Children with extroverted behavior patterns quickly invited the therapist to play the role of "aggressor" or "criminal" in earlier sessions; however, children with internalizing behavior problems had difficulty inviting the therapist to the play or needed support for this. In this respect, how they express their experiences is also consistent with the etymology of behavioral problems.

Signs of gender roles and male-dominated social norms have been observed in children's toy preferences.

Although in the initial sessions, children choose toys according to their gender roles, in later sessions, they choose all kinds of toys to express themselves. In the first sessions, girls usually choose dolls and doll houses; boys choose cars, soldiers, and marbles. In addition, both groups played with non-gendered wooden blocks. After a few sessions, it was observed that both groups played with all kinds of toys.

Children who are evaluated as shy and withdrawn by their parents and bought up with internalizing behavior patterns have often chosen to play housekeeping, cooking, cleaning, babysitting, and doctoring; In contrast, children whose parents applied for the complaints of behavioral problems, peer relationship problems, and attention deficits preferred to play with guns, rifles, pistols, soldiers, and cars in early sessions. In brief, it is seen that the first group worked with the themes of care, nutrition, and protection, while the second group worked on the themes of power and control. These playroom observations are consistent with the literature (Ray, 2011).

Children whose parents applied with complaints of behavior and peer relationship problems often needed boundary reminders during the play therapy sessions. Themes of power and control were frequently observed in the plays of these children, and boundary reminders were made for damaging the toys and the behaviors which make the room unusable.

In play therapy sessions, observing a change in play themes is accepted as a sign of healing (Ryan and Edge, 2011). For example, a child showing internalizing behavior problems, who works with the themes of nutrition and care, in the seventh session, said, "*…now I have cleaned everywhere, I have fed everyone, and I am very bored,*" and he started racing cars. The theme change observed here can be considered an essential precursor of treatment. Similarly, the client who came due to internalizing behavior problems during her parent's divorce complained that everyone and the house were very dirty, fed the baby doll, and cleaned the doll house in each session. At the end of the sixth session, she painted the house's roof colorfully and said, "it is *nice enough; I do not need to clean it anymore*" In child-centered play therapy, it has crucial meaning for the child to study their own themes (Wilson and Ryan, 2005).

In child-centered play therapy, toys are accepted as tools for the child to express him/herself. For this reason, one of the desired goals is to express aggression in a healthy way. Soft and bobo dolls are frequently used to express aggression in play therapy sessions. Kicking, throwing, trying to cut or pierce the bobo-dolls, and wrestling was commonly observed in the first sessions of the children who show externalizing behavior patterns that can reveal aggression directly. Despite this, children with internalizing behavior patterns who could not express aggression showed aggression towards the last sessions, such as throwing the bobo-doll, hugging too tight, and even hitting it by saying, "*we are very good friends."*

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