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RESEARCH ARTICLE

Cognitive Behavioral Play Therapy (CBPT) to Improve Emotional Regulation in Children with ADHD: A Quasi-Expreimental Study

Cognitive Behavioral Play Therapy (CBPT) untuk Meningkatkan Regulasi Emosional pada Anak ADHD: Studi Kuasi Eksperimental

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Abstract

Attention-deficit/hyperactivity disorder (ADHD) affects children's academic, social, and emotional functioning, highlighting the need for feasible school-based interventions. This study evaluated the effectiveness of Cognitive Behavioral Play Therapy (CBPT) in improving emotion regulation among elementary school children with ADHD. A quasi-experimental pretest-posttest control-group design was used. Sixteen children aged 6–9 years were recruited through total sampling and allocated to an intervention group (n=8) or control group (n=8). The intervention group received eight structured CBPT sessions over seven days in an Indonesian elementary school, whereas the control group continued routine school activities without CBPT. Emotion regulation was assessed using the Emotion Regulation Checklist (ERC). Data were analyzed using paired-samples and independent-samples t-tests. In the intervention group, the mean emotion-regulation score increased from 57.88 at pretest to 73.13 at posttest, representing a statistically significant improvement ($p < 0.05$), while the control group showed minimal change. The structured activities helped children identify emotions, challenge maladaptive thoughts, practise self-control, and develop adaptive coping strategies through play. These findings indicate that CBPT may be an effective, developmentally appropriate school-based intervention for improving emotion regulation in children with ADHD. Studies with larger samples, multiple schools, and longer follow-up periods are recommended to confirm the findings.

Keywords: adhd, play therapy, elementary school, emotion regulation

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Abstrak

Attention-Deficit/Hyperactivity Disorder (ADHD) dapat mengganggu fungsi akademik, sosial, dan emosional anak sehingga diperlukan intervensi berbasis sekolah yang aplikatif. Penelitian ini bertujuan menganalisis efektivitas Cognitive Behavioral Play Therapy (CBPT) dalam meningkatkan regulasi emosi pada anak sekolah dasar dengan ADHD. Penelitian menggunakan desain kuasi-eksperimental pretest-posttest dengan kelompok kontrol. Sebanyak 16 anak berusia 6–9 tahun direkrut melalui total sampling dan dibagi menjadi kelompok intervensi (n=8) serta kontrol (n=8). Kelompok intervensi menerima delapan sesi CBPT terstruktur selama tujuh hari di sekolah dasar di Indonesia, sedangkan kelompok kontrol mengikuti kegiatan rutin sekolah tanpa CBPT. Regulasi emosi diukur menggunakan Emotion Regulation Checklist (ERC). Data dianalisis menggunakan uji t berpasangan dan uji t independen. Pada kelompok intervensi, rerata skor regulasi emosi meningkat dari 57,88 saat pretest menjadi 73,13 saat posttest dan perbedaannya signifikan secara statistik (p < 0,05), sedangkan kelompok kontrol menunjukkan perubahan minimal. Kegiatan terstruktur dalam CBPT membantu anak mengenali emosi, mengubah pikiran maladaptif, melatih kontrol diri, dan mengembangkan strategi koping adaptif melalui permainan. Hasil ini menunjukkan bahwa CBPT berpotensi menjadi intervensi berbasis sekolah yang efektif dan sesuai perkembangan anak untuk meningkatkan regulasi emosi pada anak dengan ADHD. Penelitian selanjutnya perlu melibatkan sampel yang lebih besar, lebih dari satu sekolah, dan masa tindak lanjut yang lebih panjang.

Kata Kunci: *adhd, terapi bermain, regulasi emosi, sekolah dasar*

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Highlight:

- The CBPT intervention exerts a significant therapeutic effect in enhancing children's emotion regulation capacities.
- CBPT interventions effectively train children to utilize adaptive emotional expressions.
- Cognitive Behavioral Play Therapy (CBPT) represents a highly effective, evidence-based modality tailored to the developmental stages of children with ADHD.

INTRODUCTION

Children born without developmental impairment typically exhibit typical growth and development. Conversely, children born with functional impairments or limitations face distinct developmental challenges; these individuals are broadly categorized as children with special needs. According to the Ministry of National Education, children with special needs experience developmental deviations or disorders across physical, mental, social, or emotional domains compared to their neurotypical peers. In educational settings, a prominent characteristic that directly impacts the learning process is the co-occurrence of attentional deficits and excessive motor activity. This clinical presentation is recognized as Attention Deficit Hyperactivity Disorder (ADHD), locally designated as Attention Deficit Hyperactivity Disorder (ADHD) (Oktavia and Mustikasari, 2025).

The reported prevalence of ADHD among primary school children varies

significantly across epidemiological studies. A systematic review and meta-analysis indicated that approximately 7.6% of children under the age of 12 are affected by ADHD, whereas adolescents aged 12 to 18 years demonstrate a lower prevalence rate of 5.6% (Salari et al., 2023). Furthermore, a population-based study utilizing Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) criteria identified that 15.5% of students in grades 1 through 5 met the diagnostic threshold for ADHD (Sadida et al., 2024). These collective findings suggest that the global prevalence of ADHD among elementary school-aged children ranges between 7.6% and 15.5%, contingent upon methodological frameworks and specific diagnostic criteria employed across studies.

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) defines Attention-Deficit/Hyperactivity Disorder (ADHD) as a neurodevelopmental disorder characterized by persistent patterns of inattention, excessive motor activity, and age-inappropriate impulsivity. ADHD predominantly manifests during childhood and adolescence, most frequently diagnosed during school age, and often persists into adulthood (Mairita et al., 2024).

Children with neurodevelopmental disorders frequently exhibit rapid emotional shifts or difficulty regulating negative affect. They tend to display heightened emotional intensity compared to neurotypical peers due to underdeveloped emotional regulation mechanisms. Although these children exhibit heightened sensitivity and motivation toward rewards alongside a low tolerance for frustration, their capacity to perceive others' emotions remains comparable to that of neurotypical children (Novitasari and Basoeki, 2018). In pediatric populations, emotion regulation encompasses the ability to recognize internal affective states and those of others, as well as effectively communicate these feelings (Krisdiyanto, 2022). Emotion regulation is defined as the capacity to manage emotional responses appropriately to preserve mental health and execute context-appropriate behaviors; impaired emotion regulation in children is associated with elevated risks of mental health conditions, including anxiety, depression, and impulsive actions (Fiqih and Ambarini, 2024). Furthermore, children presenting hyperactive and impulsive behaviors frequently encounter interpersonal difficulties across familial, peer, and social environments, while children with neurodevelopmental disorders also experience learning difficulties (Humaiya and Zulaikha, 2023). Conversely, the development of coping strategies has been reported to enhance a child's capacity to manage negative emotions effectively (Muthmainah, 2022).

One effective non-pharmacological intervention for children with Attention Deficit Hyperactivity Disorder (ADHD) is Cognitive Behavioral Play Therapy (CBPT). CBPT integrates cognitive and behavioral principles with developmentally appropriate play activities. Through this approach, children are guided to recognize emotions, understand the interplay between thoughts, feelings, and behaviors, and practice adaptive coping strategies within a play-based medium. Play activities enhance therapeutic engagement, as primary school-aged children typically express their thoughts and emotions more effectively through play than direct verbal communication (Feizollahi et al., 2020). Riset by Hassani et al. (2021) emonstrated that CBPT alleviates anxiety and aggression in children with ADHD who have a history of trauma, while Shaloui-Chaharpaniche and Esmaeili (2024) found that CBPT effectively reduces impulsivity in hyperactive children. Furthermore, CBPT has been reported to enhance concentration in children diagnosed with ADHD (Kholilah and Solichatun, 2017).

A systematic observation by Alemdar et al. (2023) urther supports the efficacy of CBPT in reducing pediatric anxiety. Remey (2024) noted that integrating CBPT with sandplay therapy facilitates emotional exploration in children with neurodevelopmental

conditions. Additionally, Rezaeerezvan et al. (2022) highlighted the utility of CBPT in improving expressive language impairment in bilingual children, which is frequently linked to emotional difficulties. Expanding its therapeutic applications, (Indriyani, 2024) observed a reduction in verbal aggression among children with gaming addiction, noting that CBPT not only mitigates aggressive behavior but also promotes adaptive emotion regulation and interpersonal communication skills. Finally, Kurniawan and Sulistyarini, (2024), reported that play-based cognitive-behavioral approaches effectively address emotional and behavioral problems in children with oppositional defiant disorder.

Although numerous studies have demonstrated the efficacy of Cognitive Behavioral Play Therapy (CBPT) in addressing pediatric behavioral problems, anxiety, impulsivity, and aggression, empirical research specifically evaluating its impact on emotion regulation among children with ADHD in Indonesian elementary school settings remains limited. Existing literature has predominantly focused on clinical settings, broader neurodevelopmental populations, or specific behavioral manifestations such as aggression, anxiety, and impulsivity. This study addresses this literature gap by implementing CBPT within an Indonesian primary school context, primarily focusing on enhancing emotion regulation in children with ADHD. The intervention comprises structured play sessions encompassing emotion identification, emotional toolboxes, thinking tools, role-play, social stories, reflection, and action plan development. Given its reliance on play-based modalities congruent with childhood development and applicable within school environments, this approach is uniquely suited for elementary school students. Consequently, this study aims to examine the effectiveness of Cognitive Behavioral Play Therapy (CBPT) in enhancing emotion regulation among elementary school children with ADHD.

METHODS

This study employed a quasi-experimental non-equivalent control group design with pretest and posttest measurements. The design involved two non-randomized groups: an intervention group and a control group. The intervention group received Cognitive Behavioral Play Therapy (CBPT), whereas the control group did not receive CBPT and continued to participate in routine school counseling activities. Emotion regulation was measured in both groups at pretest and posttest using the same assessment instrument.

This study received ethical approval (Ref. No. 189/LPPM-UYM/VI/2025). The research was conducted at SKH Dharmawati Arief Inclusive School, with the target population comprising all 16 primary school children diagnosed with ADHD in grades 1 to 3 at SKH Dharmawati Arief. The participants ranged in age from approximately 6 to 9 years. During this developmental stage, children face increasing demands to adhere to classroom rules, maintain attention, regulate behavior, and adjust their emotions within school learning environments.

A non-probability total sampling technique was employed, wherein all children meeting the eligibility criteria were included as research subjects. The total sample comprised 16 children, divided into two groups: 8 participants in the intervention group and 8 participants in the control group. Group assignment was determined based on classroom placement and administrative considerations of the school to optimize intervention execution and minimize the risk of cross-group contamination.

The inclusion criteria were: (1) children enrolled in grades 1–3 diagnosed with ADHD based on school records, psychological assessment results, or available medical records; (2) children exhibiting emotion regulation difficulties as indicated by baseline

scores on the Emotion Regulation Checklist (ERC); (3) children capable of following simple instructions during group play activities; and (4) parents/guardians providing written informed consent, alongside verbal assent or willingness from the children to participate according to their capacity.

The exclusion criteria were: (1) severe comorbid conditions that could impede participation in group play activities, such as moderate-to-severe intellectual disability or severe developmental disorders based on shadow teacher reports; (2) failure to attend at least 80% of the intervention sessions; and (3) withdrawal of parental/guardian consent during the course of the study.

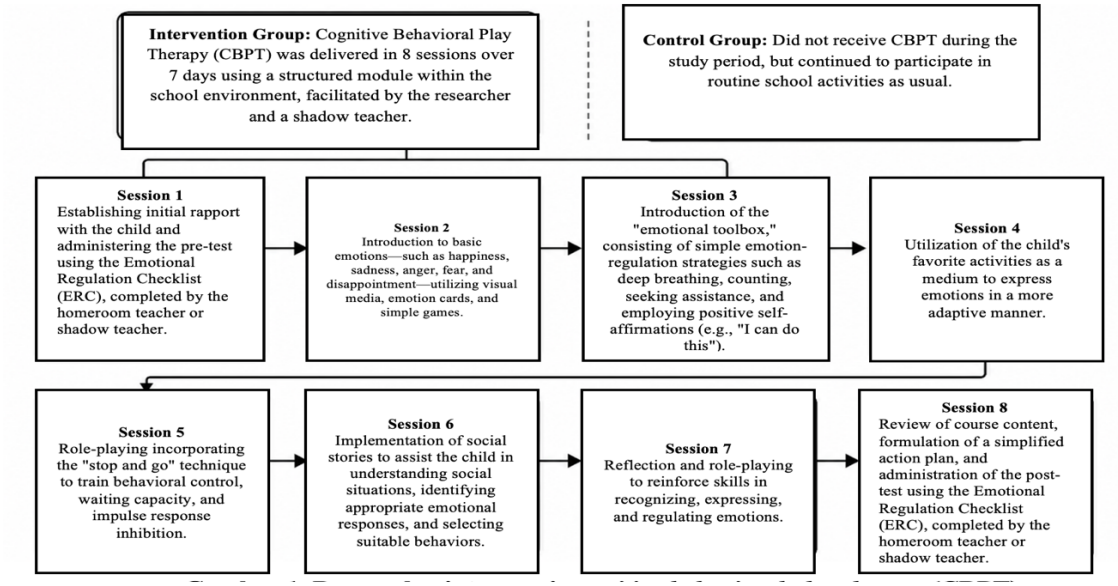

Figure 1. Flowchart of Cognitive Behavioral Play Therapy (CBPT) intervention

The research procedure (Figure 1), commenced with coordination among school authorities, shadow teachers, and parents/guardians. The researcher detailed the study's objectives, benefits, procedures, minimal risks, data confidentiality, and the participants' right to withdraw at any time without compromising the child's educational services. Following the signing of informed consent by parents/guardians, baseline measurements (pretest) were administered to both groups. The pretest was conducted using the Emotion Regulation Checklist (ERC), completed by homeroom teachers or shadow teachers familiar with the children's daily behavioral patterns at school. Upon completion of the intervention, posttest assessments were conducted for both groups using the identical measurement tool.

The experimental group underwent a Cognitive Behavioral Play Therapy (CBPT) intervention consisting of 8 sessions administered across 7 days based on a structured protocol. In this study, CBPT was defined as a play-based therapy integrating cognitive and behavioral techniques to assist children in identifying emotions, understanding the interplay among thoughts, feelings, and behaviors, and practicing self-regulation strategies through play activities. Each session was conducted within the school environment, co-facilitated by the researcher and shadow teachers. The control group received no CBPT during the study period and continued with their standard routine school activities.

Collected data were analyzed using statistical software. Univariate analysis was performed to describe subject characteristics, including age and gender. Prior to

hypothesis testing, data normality was evaluated using the Shapiro-Wilk test, and homogeneity of variance across groups was assessed using Levene's test. A paired-samples t-test was planned to determine within-group differences in emotion regulation scores before and after the intervention, while an independent-samples t-test was designated to compare mean score changes between the intervention and control groups. In the event of non-normal data distribution, non-parametric alternative tests were specified: the Wilcoxon signed-rank test for within-group pretest-posttest comparisons and the Mann-Whitney U test for between-group comparisons of change scores. Statistical significance was set at $p < 0.05$

RESULTS AND DISCUSSION

The findings regarding the effects of Cognitive Behavioral Play Therapy (CBPT) on emotion regulation among children with neurodevelopmental disorders in a special education school setting are systematically presented: preliminary assumption testing, univariate analysis, and bivariate analysis. Preliminary testing evaluated data normality and homogeneity of variance, while univariate analysis outlined the descriptive and frequency distributions of the study variables. Subsequently, bivariate analysis was conducted to examine the effect of the independent variable on the dependent outcome.

Normality and homogeneity test results

Table 1. Results of normality testing

Phase	Group	Shapiro-Wilk Statistic	df	Sig
Pre-Test	Kontrol	0.879	8	0.183
	Intervensi	0.948	8	0.688
Post-Test	Kontrol	0.871	8	0.155
	Intervensi	0.958	8	0.794

Note: Shapiro-Wilk test; data are considered normally distributed if p > 0.05.

Table 1 demonstrates that all *p*-values exceeded the 0.05 threshold ($p > 0.05$), indicating that the emotion regulation data across both groups were normally distributed. This normal distribution satisfies the parametric assumptions required for executing paired-samples and independent-samples t-tests.

Table 2. Results of homogeneity testing

Variable	Levene Statistic	df1	df2	Sig.	Remarks
Regulasi Emosi	1.844	1	14	0.196	Homogen

Note: Levene's test; variances are considered homogeneous if p > 0.05.

Table 2 shows that the homogeneity test for emotion regulation yielded a *p*-value greater than 0.05 ($p > 0.05$), confirming that the data exhibit equal variances across groups. Satisfying this assumption of homogeneity supports the appropriateness of parametric procedures, such as the independent-samples t-test.

Subject characteristics

The study involved 16 children, equally distributed into an intervention group (n = 8) and a control group (n = 8). Overall, the sample was predominantly male (n = 13, 81.2%), with 8-year-olds representing the largest age subgroup (38%). Detailed baseline

demographic distributions for both groups are presented in Table 3.

Table 3. Baseline demographic characteristics of participants

Subject characteristics	Intervention Group (*n* = 8)	Control Group (*n* = 8)
Age		
6 years	1 (12%)	1 (12%)
8 years	4 (50%)	3 (38%)
9 years	3 (38%)	4 (50%)
Sex		
Female	1 (12%)	2 (25%)
Male	7 (88%)	6 (75%)

Source: Primary data, 2025

Emotion regulation before and after intervention

Prior to the intervention, baseline assessments across all 16 participants revealed that no children fell into the low emotion regulation category; 62.5% exhibited moderate emotion regulation, and 37.5% demonstrated high levels. This baseline distribution indicates sub-optimal emotion regulation capacity prior to treatment. Following the administration of CBPT, noticeable shifts in emotion regulation levels were observed in the intervention group, where 100% of participants achieved the moderate regulation category post-test, whereas the control group remained unchanged.

Table 4. Distribution of emotion regulation levels pre- and post-intervention

Category	Intervention Group (*n* = 8)		Control Group (*n* = 8)	
	Pre-Test F(%)	Post-Test F (%)	Pre-Test F (%)	Post-Test F(%)
Low Emotion	0	0	0	0
Moderate Emotion	5 (62.5%)	8 (100%)	6 (75%)	6 (75%)
High Emotion	3 (37.5%)	0	2 (25%)	2 (25%)

Source: Primary data, 2025

Based on Table 4, it can be concluded that children participating in CBPT experienced an improvement in emotion regulation, whereas the control group demonstrated no significant changes. These findings indicate that CBPT is effective in helping children manage their emotions. Qualitative observational data revealed that prior to the intervention, several children frequently cried without apparent cause, shouted in class, or wandered around during instruction. Following CBPT implementation, such disruptive behaviors noticeably diminished. Children demonstrated an improved capacity to sit quietly, listen, and exercise self-restraint when frustrated. Furthermore, some participants began verbally expressing their feelings using simple phrases such as *"I am upset with [Person A], Ma'am"* or *"I like this toy, Aunty."* These behavioral shifts illustrate how CBPT trains children to identify and utilize adaptive channels for emotional expression.

The study highlights a clear synergy between emotion regulation development and CBPT. Children in the experimental group exhibited improvements because CBPT provides a structured framework for understanding and controlling emotional responses, whereas the control group lacked structured training and consequently maintained

baseline regulation patterns. Effective emotion regulation requires cognitive skills to identify emotions, behavioral skills to channel feelings adaptively, and play mediums to practice these competencies. CBPT integrates these three components simultaneously, yielding significant improvements in the experimental group. These significant outcomes stem from the alignment of CBPT with children's developmental stages, offering experiential learning opportunities to recognize and understand emotions; thus, CBPT represents an appropriate and effective intervention for enhancing emotion regulation in children with neurodevelopmental disorders (Shahzadehahmadi et al., 2023).

Difference in mean emotion regulation scores between intervention and control groups

An independent-samples t-test revealed a statistically significant difference in emotion regulation post-test scores between the intervention and control groups. The intervention group demonstrated a mean emotion regulation score of 57.88 (*SD* = 9.296), whereas the control group recorded a mean score of 73.13 (*SD* = 4.518). The mean difference between the two groups was 15.25, with a 95% confidence interval ranging from 7.122 to 23.37 (*SE* = 3.45, $p < .05$). These empirical results confirm that the CBPT intervention exerted a statistically significant treatment effect on enhancing emotion regulation outcomes in the intervention group compared to the control group.

Table 5. Comparison of Mean Emotion Regulation Scores Between Groups

Variable	Intervention Group *Mean* (*SD*)	Control Group *Mean* (*SD*)	Mean Difference	Perbedaan CI 95%		Standard Error Difference	Sig. (2 tailed)
				Lower	Upper		
Emotion Regulation Score	57.88 (9.296)	73.13 (4.518)	15.25	7.122	23.37	3.45	< 0.05*

Note: *Independent t-test, significant if p-value < 0,05

Mechanistically, CBPT operates through adaptive behavior modeling, emotional recognition training, positive reinforcement, and the habituation of coping strategies. Play-based modeling illustrates practical techniques for self-soothing, turn-taking, seeking assistance, and verbally expressing anger. Children rehearse these strategies within a play environment, facilitating the translation of these skills into daily life. In children with Attention-Deficit/Hyperactivity Disorder (ADHD), emotion regulation difficulties are frequently tied to deficits in impulse control, sustained attention, and behavioral adaptation to environmental demands. Consequently, affected children are more prone to irritability, frustration, weeping, conversational interruptions, hyperkinesia, or delayed gratification challenges when encountering adverse situations. Therefore, interventions targeting ADHD must extend beyond merely mitigating hyperactivity or impulsivity to actively enhancing emotional recognition and self-regulation skills. This aligns with the CBPT framework, which emphasizes cognitive and behavioral restructuring through skill acquisition, problem-solving training, and self-control strategies. In pediatric populations, these approaches must be tailored to developmental stages through play mediums to ensure accessibility and practical application.

CBPT supports children with ADHD by integrating cognitive techniques, behavioral strategies, and play activities. In the present study, participants were trained to identify basic emotions, utilize an "emotional toolbox," practice positive self-affirmation, follow "stop and go" behavioral instructions, engage in role-playing, and comprehend social dynamics via social stories. These empirical findings align with Feizollahi et al. (2020), who evaluated the efficacy of Cognitive Behavioral Play Therapy combined with parent management training among children aged 7–11 with ADHD. Their study demonstrated that CBPT yields significant positive effects on core ADHD symptomatology and supports behavioral improvement. These convergent results reinforce that cognitive-behavioral play approaches represent a highly suitable intervention framework for children with ADHD, as learning is facilitated through developmentally appropriate and engaging mediums.

Another study by Khatoon et al. (2020) similarly demonstrated that Cognitive Behavioral Play Therapy (CBPT) effectively reduces inattention in children with ADHD. This finding is particularly relevant to the current study, as an individual's emotion regulation capacity is intrinsically linked to sustained attention, response inhibition, and instructional adherence. Enhanced focus and comprehension of task rules enable children to more effectively identify affective states and select adaptive behavioral responses.

Furthermore, CBPT strengthens the therapeutic alliance by establishing a psychologically safe environment wherein children can freely express themselves and foster self-discovery through play. Corroborating this, CBPT has been shown to reduce ADHD symptom severity in children aged 4 to 12 years (Suryaningrum and Hadi Soetjipto, 2025). Significant clinical progress was observed post-intervention, driven by marked reductions in core inattentive and hyperactive symptomatology, alongside improvements in attention span. Behavioral play interventions specifically targeted at impulse control have been proven to enhance attention duration while curbing impulsivity in children diagnosed with ADHD (Naria and Mariyati, 2024).

These findings align with prior research demonstrating that CBPT mitigates internalizing/externalizing problem behaviors and clinical symptoms in children with ADHD (Amira et al., 2022). Additionally, Shabani et al. (2024) highlighted the efficacy of cognitive-behavioral play therapy in alleviating social anxiety and enhancing academic self-efficacy among elementary students with learning challenges. At its core, CBPT restructures cognitive schemata, which subsequently translates into adaptive behavioral modifications during play. Pediatric therapists assist children in identifying and restructuring maladaptive core beliefs. The consistency of these findings across literature reinforces CBPT as a robust, evidence-based modality that empowers children to regulate emotions through experiential learning in a secure therapeutic setting.

These findings are consistent with several other studies demonstrating the efficacy of CBPT in the context of emotion regulation and neurodevelopmental disorders such as ADHD. For instance, Alemdar et al. (2023) found in their systematic review that CBPT effectively reduces anxiety levels in children, across study designs including randomized controlled trials and quasi-experimental studies involving 8–12 weekly sessions. Shaloui-Chaharpaniche and Esmaeili (2024) showed that CBPT reduces impulsivity in children aged 5–7 with ADHD—a trait frequently linked to emotion regulation difficulties—utilizing a quasi-experimental design with a 1.5-month follow-up that mirrors our pretest-posttest design and indicates sustained emotional improvement. In another study, Remey (2024) combined CBPT with sandplay therapy, revealing that this integrated method assists in managing emotions through both verbal and nonverbal communication, proving particularly beneficial for children with ADHD by enhancing

emotion-focused play sessions. As demonstrated by Rezaeerezvan et al. (2022), CBPT improves expressive language difficulties in bilingual children—which are often associated with emotion regulation issues due to language developmental delays—further underscoring how CBPT addresses interrelated emotional and developmental challenges present in our study cohort.

Further reinforcing this alignment, recent evidence from related studies strengthens these parallels. For example, Elbeltagi et al. (2023) highlighted the role of play therapy in reducing undesirable behaviors in children with ADHD through enhanced emotion regulation, emphasizing the impact of pretend play on self-regulation and executive function—echoing our findings regarding adaptive coping in neurodevelopmental contexts. Similarly, Pemovska et al. (2024) reported that CBPT-based interventions yield comparable therapeutic outcomes.

The efficacy of CBPT resides in its seamless integration of cognitive, behavioral, and play-based strategies. Through play activities, children internalize new self-regulation skills more effectively. Play provides a safe medium for emotional expression, affect recognition, and the practical rehearsal of self-regulation techniques. This aligns with emotion regulation theories that emphasize repeated experiential learning to develop affective recognition, evaluation, and response control. Furthermore, these findings underscore the practical necessity of integrating play-based therapies into inclusive educational settings. Schools catering to children with special needs can incorporate CBPT as a supportive secondary intervention to enhance students' overall emotion regulation capabilities.

CONCLUSIONS

This study demonstrates that Cognitive Behavioral Play Therapy (CBPT) is an effective intervention for enhancing emotion regulation in children with Attention-Deficit/Hyperactivity Disorder (ADHD). Children who received the CBPT intervention exhibited significant improvements in emotion regulation compared to the control group, as evidenced by statistically significant differences in mean scores ($p < 0.05$). These empirical findings indicate that CBPT facilitates children in recognizing, expressing, and managing their emotions in a more adaptive manner. Consequently, CBPT can be recommended as a highly practical, non-pharmacological intervention to support the emotional development of children with ADHD. This intervention can be effectively integrated into school settings, particularly through school-based psychological counseling programs and school nursing services, to foster emotional regulation. Furthermore, shadow teachers can be actively involved in delivery to reinforce acquired emotion regulation skills throughout daily classroom activities. Future research should consider expanding sample sizes, involving multiple school sites, and accounting for participant characteristics such as age, gender, baseline ADHD symptom severity, and family support dynamics. Additionally, extending follow-up evaluation periods post-intervention is recommended to assess the long-term sustainability and lasting efficacy of CBPT on emotion regulation outcomes in children with ADHD.

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