

# The Efficiency of Cognitive Behavioural Play Therapy on Emotional and Behavioural Problems Among Children with Attention Deficit Hyperactivity Disorder

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**Abstract-** This study aimed to find out the efficacy of Cognitive Behavioral Play Therapy on emotional and behavioural problems among children with Attention Deficit Hyperactivity Disorder. Totally 30 children with Attention Deficit Hyperactivity Disorder, with age group of 6 to 10 years were selected based on inclusion criteria by using convenient sampling method. Subjects were divided into two groups, Group A (experimental group) and Group B (control group). 15 subjects were allotted to each group. Pre-test has been conducted for both the groups by using Pediatric Symptom Checklist. Group A (experimental group) receives Cognitive Behavioral play Therapy for 24 sessions (3 sessions in a week). Each session last for 1 hour along with conventional therapy for 2 months. Participants in experimental group were divided into 3 sub groups, consist of 5 members in each group. Group B (control group) receives only conventional therapy. After the intervention, post test was conducted for the two groups by using Pediatric Symptom Checklist. On the basis of scores obtained in the pre and post test of each groups, data were analyzed statistically.

**Keywords:** Attention Deficit Hyperactive Disorder, Cognitive Behavioral Play Therapy, Emotional and Behavioural problems

## I. INTRODUCTION

Attention-deficit hyperactivity disorder (ADHD) is a chronic condition that affects millions of children and often continues into adulthood. ADHD includes a combination of persistent problems, such as difficulty sustaining attention, hyperactivity and impulsive behaviour. ADHD, or Attention Deficit Hyperactivity Disorder, is a condition where individuals experience persistent challenges with attention, hyperactivity, and impulsivity, leading to difficulties in various aspects of life. These difficulties include trouble maintaining focus on tasks, excessive physical restlessness, and acting impulsively without considering consequences. Symptoms typically emerge during childhood but can persist into

adulthood, affecting academic performance, social interactions, and overall well-being.

Children with ADHD often experience emotional and behavioral challenges. This can manifest in various ways which includes; emotional dysregulation, impulsivity, hyperactivity, inattention, opposing and defiant behaviour, low self esteem, social difficulties, poor impulse controls etc.

Many children with ADHD experience a combination of emotional and behavioral difficulties. This combination can significantly impact their functioning and well-being. Research suggests that up to 60-80% of children with ADHD may have one or more co existing emotional or behavioural disorders. Cognitive Behavioral Play Therapy (CBPT) combines cognitive-behavioral techniques with play therapy to address emotional and behavioral issues in children. It uses play as a medium for expression and communication, integrating structured activities with child-directed play. Therapists tailor interventions to the child's age, interests, and needs aiming to teach coping skills, problem-solving strategies, and emotion regulation techniques.

It is evident from literatures, that Children with ADHD suffers emotional and behavioral problems in daily life, keeping in mind all the aspects, the study was conducted to evaluate the effect of Cognitive Behavioral Play Therapy on emotional and behavioral problem in children with ADHD.

### Aim of the study

To find out the efficacy of Cognitive Behavioral Play Therapy on emotional and behavioural problems among children with Attention Deficit Hyperactivity Disorder.

Objective of the study

- To assess the level of emotional and behavioural problems among children with Attention Deficit Hyperactivity Disorder using Pediatric Symptom Checklist.
- To evaluate the efficacy of Cognitive Behavioral Play Therapy on emotional and Behavioural problems among children with Attention Deficit Hyperactivity Disorder.

- ✓ Children with ADHD was diagnosed by pediatrician and clinical psychologist
- ✓ Both male and female children were included
- ✓ Children who scored 28 or above in pediatric symptoms checklist were included

Research hypothesis: Cognitive Behavioral Play therapy is ineffective for addressing the emotional and behavioural problems among children with Attention Deficit Hyperactivity Disorder.

Exclusion Criteria

- ✓ Children with other associated neurological condition were excluded
- ✓ Children under medication for ADHD were excluded

INSTRUMENT USED

The Pediatric Symptom Checklist (PSC)

Source of data: Global Integrated Rehabilitation and development centre, Kondatty, Kerala.

Ethics:

The study was granted by the head of the department of Jkmmrf College of Occupational Therapy.

II. METHODOLOGY

RESEARCH DESIGN:

This study adopts a quasi-experimental research design, the present study consists of two groups and include pre- test and post-test.

PROCEDURE: This study aims to find out the efficacy of cognitive Behavioral Play Therapy on emotional and behavioral problems among children with ADHD. A sample of 30 subjects were selected based on selection criteria by using convenient sampling method. The informed consent were taken from the care taker. The subjects were divided into 2 groups , Group A (experimental group) and Group B (control group), 15 samples were allotted to each group. Pediatric symptoms checklist were administered to all the subjects to evaluate the pre-test value. Group A receives Cognitive Behavioral Play Therapy for 24 sessions (3 sessions in a week) each session last for 1 hour along with conventional therapy for 2 months. Participants in experimental group were divided into 3 sub groups, consist of 5 members in each group and Group B receives only conventional therapy. After the intervention post-test was conducted for the two groups by using Pediatric Symptoms checklist respectively. Data was analyzed, tabulated and discussed.

SAMPLE TECHNIQUE, SIZE, SETTING

Global Integrated Rehabilitation and development centre, Kondatty, Kerala.

VARIABLES UNDER THE STUDY

INDEPENDENT VARIABLE:

Cognitive Behavioral Play Therapy

DEPENDENT VARIABLE:

Emotional and behavioral problems  
 Duration of the study: Duration including 6 months of intervention

SELECTION CRITERIA

Inclusion Criteria

- ✓ Age ranges from 6 to 10 are included

III. DATA ANALYSIS AND RESULT

Table-1

Comparison Between Pre Test Values of Control Group And Experimental Group.

GROUP	TEST	MEAN	S.D.	't' VALUE	'p' VALUE
CONTROL GROUP	PRE-TEST	30.93	2.34	0.4134	0.6825
EXPERIMENTAL GROUP		30.60	2.06		

GRAPH -1

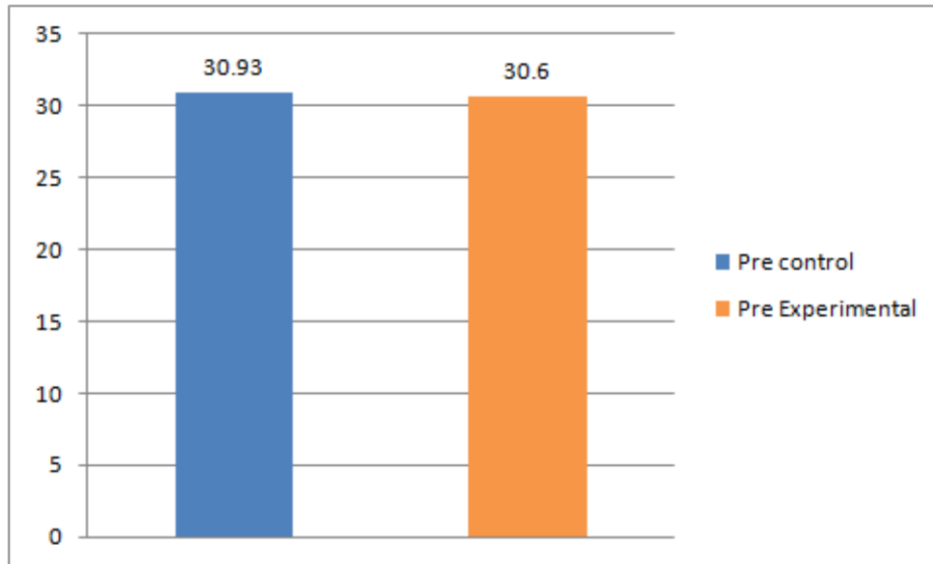


Table 1 and Graph 1: shows comparison between pre test values of control group and experimental group. In this the mean values of control group is 30.93 and experimental group is 30.60, 't' value is 0.4134 and 'p' value is 0.6825. Therefore this shows that pre test values of control group and experimental group are not statistically significant

TABLE 2: Comparison Between Pre Test And Post Test Values Of Control Group

GROUP	TEST	MEAN	S.D.	't' VALUE	'p' VALUE
CONTROL GROUP	PRE-TEST	30.93	2.34	0.8881	0.3895
	POST-TEST	30.67	1.50		

GRAPH 2

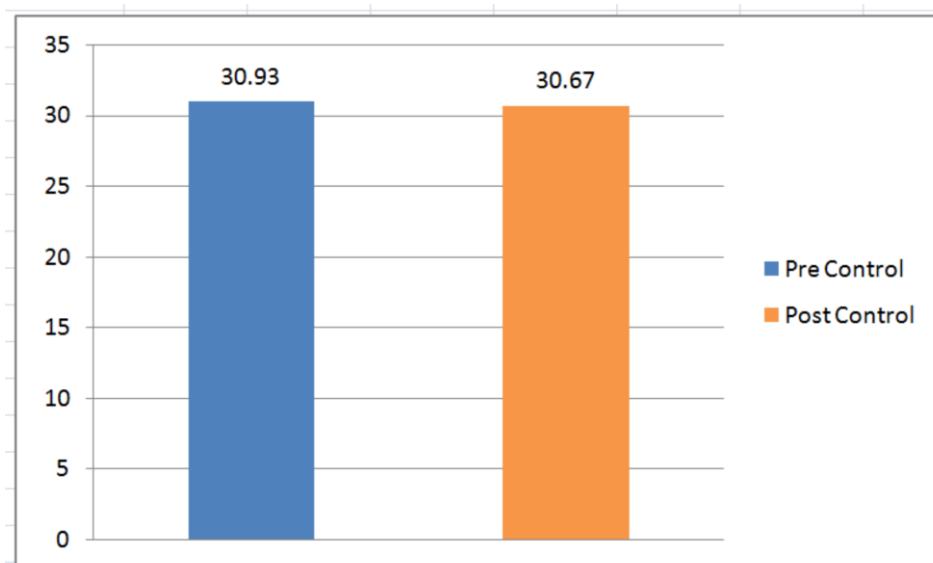


Table 2 and Graph 2: shows comparison between pre test and post test values of control group. In this the mean values of pre test is 30.93 and post test is 30.67, 't' value is 0.8881 and 'p' value is 0.3895. Therefore this shows that pre-test and post-test values of control group are not statistically significant.

TABLE – 3: Comparison Between Pre test and Post test Values of Experimental Group.

GROUP	TEST	MEAN	S.D	't'Value	'p' value
EXPERIMENTAL GROUP	PRE-TEST	30.60	2.06	8.5114	< 0.0001
	POST-TEST	24.07	2.12		

GRAPH-3

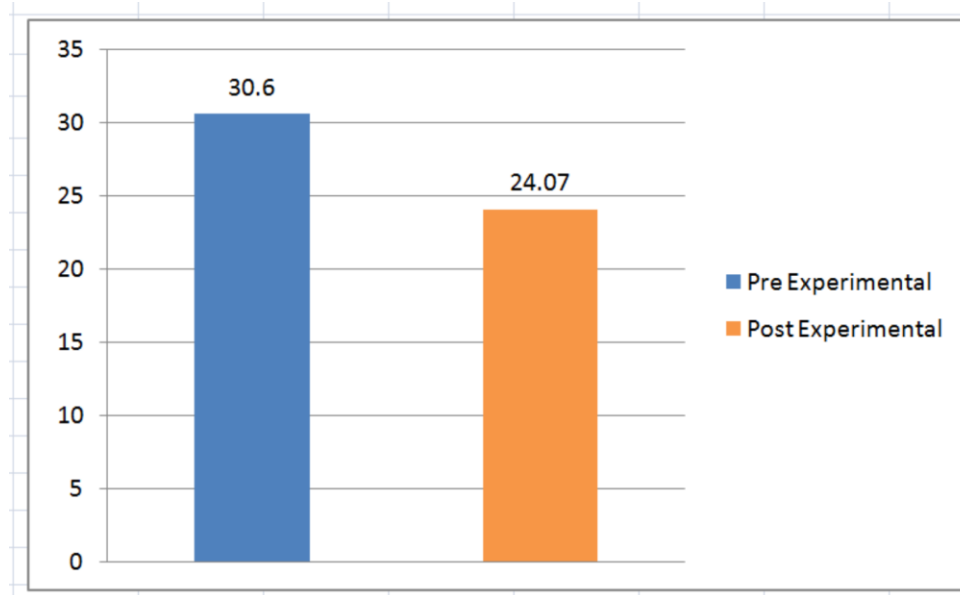


Table 3 and Graph 3: shows comparison between pre test and post test values of experimental group. In this the mean values of pre test is 30.60 and post test is 24.07, 't' value is 8.5114 and 'p' value is <0.0001. Therefore this shows that pre test and post test values of experimental group are extremely statistically significant.

TABLE 4: Comparison of post test values of control and experimental group.

Group	Test	Mean	S.D.	't' value	'p' value
Control Group	Post-test	30.67	1.50	9.8509	< 0.0001
Experimental Group		24.07	2.12		

GRAPH 4:

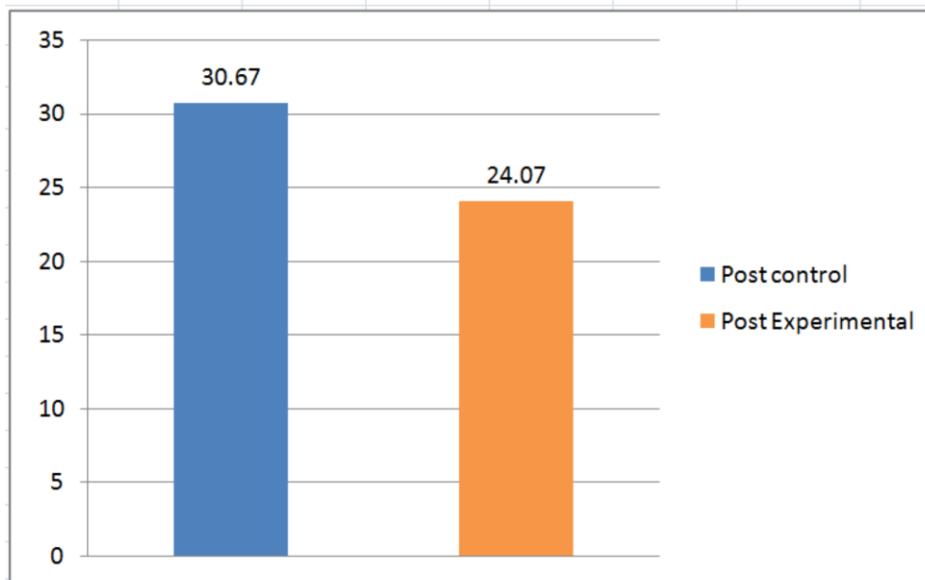


Table 4 and Graph 4: shows comparison of post test values of control group and experimental group. In this the mean values of control group is 30.67 and experimental group is 24.07, 't' value is 9.8509 and 'p' value is  $< 0.0001$ . Therefore this shows that post-test values of control group and experimental group are extremely statistically significant.

#### IV. DISCUSSION

The aim of the study was to find out the efficacy of Cognitive Behavioral Play Therapy on emotional and behavioral problems among Attention Deficit Hyperactivity Disorder.

The total of 30 male and female combined type Attention Deficit Hyperactivity Disorder children were selected based on the inclusion criteria by using convenient sampling method. Samples were allocated to experimental group (Cognitive Behavioral Play Therapy) and Control Group (Conventional Therapy). The Researcher obtained informed consent form from the parents of ADHD children. After getting the consent the data were assessed and used for the intervention.

The paired 't' test was used to compare the score of the control group and experimental group of pre test and post test values, while the unpaired 't' test was used to compare the pre test values of the control and experimental group. Graph Pad was utilized for the data analysis

The following are the outcome of the study is :

Table1 and Graph1: shows comparison between pre test values of control group and experimental group. In this the mean values of control group is 30.93 and experimental group is 30.60, 't' value is 0.4134 and 'p' value is 0.6825. Therefore this shows that pre test values of control group and experimental group are not statistically significant.

Table2 and Graph2: shows comparison between pre test and post test values of control group. In this the mean values of pre test is 30.93 and post test is 30.67, 't' value is 0.8881 and 'p' value is 0.3895. Therefore this shows that pre-test and post-test values of control group are not statistically significant.

Table3 and Graph 3: shows comparison between pre test and post test values of experimental group. In this the mean values of pre test is 30.60 and post test is 24.07, 't' value is 8.5114 and 'p' value is  $< 0.0001$ . Therefore this shows that pre test and post test values of experimental group are extremely statistically significant.

These findings are also supported by (AKhatoonet.,al [2021])An exploratory research was designed to study the effectiveness of Cognitive Behavioral Play Therapy (CBPT) for children with Attention Deficit Hyperactivity Disorder (ADHD). It was hypothesized that CBPT markedly reduces inattentiveness in children with ADHD. A sample of 10 children (5 girls and 5 boys) was selected from the Army Special Education Academy, Fort Road, Rawalpindi Cantt. The children were in the age range of 08-15 years. Swanson, Nolan, and Pelham Teacher and Parent Rating Scale was used to screen out

inattentiveness in children (Bussing et al., 2008). Paired sample t-test was used to check the significant changes in the behaviours of children and to measure the overall effectiveness of CBPT. The difference in the symptoms for pre-test and post-test measures was found to be significant for the symptoms of inattention in children with ADHD. It was also found that CBPT is effective for reducing inattentiveness in children with ADHD

Table 4 and Graph 4: shows comparison of post test values of control group and experimental group. In this the mean values of control group is 30.67 and experimental group is 24.07, 't' value is 9.8509 and 'p' value is <0.0001. Therefore this shows that post-test values of control group and experimental group are extremely statistically significant.

The findings are also supported by (Shaloui-Chaharpaniche, Fatemeh; Esmacili, et.al [2024]) This study aims to examine the impact of cognitive-behavioral play therapy (CBPT) on reducing impulsivity in hyperactive children aged 5 to 7 years. A quasi-experimental design was used, with pre- and post-tests, a control group, and a one-month follow-up. The sample consisted of 30 children diagnosed with hyperactivity disorder in Izeh City, Iran, selected through purposeful sampling. Participants were randomly assigned to an experimental group (receiving 12 sessions of CBPT) and a control group (on a waiting list). Impulsivity was measured using the Barratt Impulsiveness Scale-Version 11 (BIS-11). Statistical analysis via ANCOVA revealed that CBPT significantly reduced impulsivity ( $F = 24.514$ ,  $p = 0.001$ ), and the improvement was maintained during the follow-up period. These results suggest that CBPT is an effective method for reducing impulsivity in hyperactive children, with lasting effects even after the therapy.

Hence with these findings the researcher accepts the alternative hypothesis and rejects the null hypothesis that Cognitive Behavioural Play Therapy is effective on emotional and behavioural changes among ADHD children.

Based on the results, the Experimental Group scored significantly higher on receiving the Cognitive Behavioural Play Therapy than the Control Group following to indicate more positive attitudes towards Cognitive Behavioural Play Therapy. This implies

that children were able to improve their emotional and behavioural changes after following CBPT.

## V. CONCLUSION

The result of the study was concluded that there is statistically significant improvement in reducing emotional and behavioral problems among children with Attention Deficit Hyperactivity Disorder through Cognitive Behavioral play Therapy

## VI. LIMITATION

1. The study is done with a limited sample size.
2. The study is done for a confined age group.
3. The study is not compared with genders.
4. The study is not compared with other treatment methods.
5. The study is done for a short duration of time .

## VII. RECOMMENDATION

1. The study can be done on a large sample size
2. Follow up can be recommended .
3. The study can be repeated with comparison between genders.
4. The study can be repeated with comparison on other treatment techniques.
5. The study can be done for a long duration of time

Source of Funding/Support: self

Conflicting Interest: None

Ethical Clearance: approval from institutional ethics committee was obtained prior to the students