

**“A STUDY ON PREVALENCE OF ATTENTION DEFICIT  
HYPERACTIVITY DISORDER AMONG PRIMARY SCHOOL  
CHILDREN AND EFFECTIVENESS OF F.O.C.U.S, THE  
LEARNING STRATEGY ON ADHD CHILDREN IN SELECTED  
PRIMARY SCHOOLS, KANPUR”**

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**ABSTRACT:-**

Attention deficit hyperactivity disorder (ADHD) is the most common diagnosed biological-behavioral disorder of childhood and it occurs in approximately 6 % to 9% of school aged children. The two core dysfunctions that characterize ADHD-Inattention and impulsivity/hyperactivity- are present in varying degrees of intensity and are manifested in symptoms that interfere directly with achievement of developmental tasks, academic performances, and social relationships. Early identification of the symptoms of ADHD and implementation of appropriate strategy to improve the academic performance of the children is essential. The focus of this study was to assess the prevalence of ADHD among primary school children and evaluate the effectiveness of F.O.C.U.S, the learning strategy on ADHD children in selected primary schools, Kanpur.

**STATEMENT:-**

A Study on Prevalence of Attention Deficit Hyperactivity Disorder among Primary School Children and Effectiveness of F.O.C.U.S, the Learning Strategy on ADHD Children in Selected Primary Schools, Kanpur.

**OBJECTIVES:-**

1. To assess the effectiveness of implementation of FOCUS strategy among ADHD children.
2. To assess the effectiveness of F.O.C.U.S strategy on ADHD children.

**METHODS:-**

A descriptive design and exploratory approach was used to assess the prevalence of ADHD among primary school children and true experimental design and evaluative approach was used to evaluate the effectiveness of F.O.C.U.S learning

strategy on ADHD children. The data was collected from 500 children studying in selected primary schools of Kanpur. Cluster random sampling is used to select the setting and Simple random sampling adopted to select the subject. Data was collected using Conner's Teacher ADHD rating scale and FOCUS observation chart.

### **RESULT:-**

Findings of the study show that about 1/5<sup>th</sup> of the primary school children had the symptoms of ADHD. There was a significant difference in pretest and posttest ADHD scores in Experimental group. From this it is concluded that FOCUS, the learning strategy is effective in decreasing the scores of ADHD among ADHD children. And there was significant association between the prevalence of ADHD and selected demographic variables such as age, gender, religion, area and class studying.

**KEY WORDS:** Prevalence; Attention Deficit Hyperactivity Disorder; Primary School Children; Effectiveness; FOCUS Learning Strategy.

### **INTRODUCTION :-**

Attention Deficit Hyperactivity Disorder is a syndrome first described by Heinrich Hoff in 1854 since then it has been known by a variety of names like Minimal brain dysfunction, Hyperkinetic syndrome, Strauss syndrome, Organic driveness and Minimal brain damage. Currently the term Attention Deficit Hyperactivity Disorder has been adopted by the American Psychiatric Association. Children with ADHD are unable to stay focused on a task, cannot sit still, act without thinking, and rarely finish projects which they begin at home or school

The survey was conducted in Delhi-NCR, Mumbai, Ahmadabad, and Kolkata Bangalore, Chennai, Hyderabad Chandigarh, Jaipur and Luck now. It covered around 1000 school teachers who said that they have 1-3 children's who are diagnosed with ADHD in every single class. The symptoms of ADHD include restless feeling, often fidgeting with hands or feet, running, climbing, or leaving a seat, when they are expected to sit quiet or remain silent, blurting out answers before hearing the whole question, and having difficulty waiting in line or for their turn

### **STATEMENT OF THE PROBLEM :-**

“A Study on Prevalence of Attention Deficit Hyperactivity Disorder among Primary School Children and Effectiveness of F.O.C.U.S, the Learning Strategy on ADHD Children in selected Primary Schools, Kanpur”.

### **OBJECTIVES OF THE STUDY :-**

1. To assess the prevalence of ADHD among primary school children.
2. To assess the effectiveness of F.O.C.U.S strategy on ADHD children.

### **HYPOTHESIS :-**

There is a significant difference between the post interventional level of ADHD and the pre interventional level of Attention Deficit Hyperactivity score among ADHD children.

### **RESEARCH APPROACH :-**

In this study the exploratory approach was used to assess the prevalence of ADHD among primary school children and evaluative approach to assess the effectiveness of FOCUS learning strategy on ADHD children

### **RESEARCH DESIGN:-**

In the present study the Descriptive design is used to assess the prevalence of ADHD among primary school children and true Experimental research design is used to assess the effectiveness of FOCUS learning strategy on ADHD children in selected schools of Kanpur.

### **SETTING OF THE STUDY :-**

The present study was undertaken in selected schools, Kanpur. This setting was selected because of the geographical proximity, availability of the samples and permission to conduct the study.

### **VARIABLES :-**

Variables are qualities, properties or characteristics of persons, things or situations that change or vary. Variables of the present study were the following

**Independent variable:** FOCUS learning strategy on ADHD children

**Dependent variables:** Symptoms of ADHD such as inattention, hyperactivity and impulsivity among primary school Children.

**Demographic variables:** Age, gender, religion, type of school, location of school, class studying, syllabus and medium of education,.

### **POPULATION :-**

The target population for the present study comprised of primary school children studying in primary schools of Kanpur.

### **SAMPLE :-**

In this study the sample consisted of Primary school children studying in selected government and private primary schools of Kanpur.

### **SAMPLE SIZE :-**

The total sample size of this study is 500 primary school children to assess the prevalence of ADHD and 60 primary school children to evaluate the effectiveness of FOCUS learning strategy, 30 each in experimental and control group.

### **SAMPLING TECHNIQUE :-**

In this study, Cluster random sampling is used to select the setting of the study and the simple random sampling technique will be adopted to select the subject.

### **DATA COLLECTION PROCEDURE :-**

The data collection was done for 4 weeks in selected schools of Kanpur. A formal written permission was obtained from the Block Education Officer North Block, Kanpur and data collected within a given period from 15-02-2023 to 15-03-2023. Data were collected from 500 primary school children who fulfilled the inclusion and exclusion criteria.

### **PLAN FOR ANALYSIS OF DATA :-**

The following plan was developed for data analysis.

- ✚ Descriptive statistics such as frequency and percentage to describe the demographic characteristics of the participants; mean, mean percentage and standard deviation will be used to describe the prevalence of ADHD among primary school children.
- ✚ Inferential statistical methods like Paired 't' test will be used to compare the effectiveness of FOCUS strategy.
- ✚ The results were represented under following sections

**Section-I:** Demographic characteristics of primary school children.

**Section-II:** Prevalence of ADHD among primary school children

**Section III:** Effectiveness of implementation of FOCUS strategy

**Section IV:** Effectiveness of F.O.C.U.S strategy on ADHD children

### **SECTION-I: DEMOGRAPHIC CHARACTERISTICS OF PRIMARY SCHOOL CHILDREN.**

**Table – 1: Distribution of primary school children by their age**

**N=500**

<b>1. Age in years</b>	<b>Frequency</b>	<b>Percentage</b>
a. 6 years	81	16.2
b. 7 years	84	16.8
c. 8 years	114	22.8
d. 9 years	54	10.8
e. 10 years	167	33.4
Total	500	100.0

**Table – 2: Distribution of primary school children according to their Gender****N=500**

<b>2. Gender</b>	<b>Frequency</b>	<b>Percentage</b>
a. Boys	248	49.6
b. Girls	252	50.4
Total	500	100.0

**Table – 3: Distribution of primary school children according to their religion****N=500**

<b>3. Religion</b>	<b>Frequency</b>	<b>Percentage</b>
a. Hindu	381	76.2
b. Muslim	119	23.8
Total	500	100.0

**Table – 4: Distribution of primary school children according to School type****N=500**

<b>4. School type</b>	<b>Frequency</b>	<b>Percentage</b>
a. Government	199	39.8
b. Private	301	60.2
Total	500	100.0

**Table – 5: Distribution of primary school children according to School location**

**N=500**

<b>5. School location</b>	<b>Frequency</b>	<b>Percentage</b>
a. Rural	178	35.6
b. Urban	322	64.4
Total	500	100.0

**Table – 6: Distribution of primary school children by their Class studying**

**N=500**

<b>6. Class studying</b>	<b>Frequency</b>	<b>Percentage</b>
a. 1st standard	83	16.6
b. 2nd standard	116	23.2
c. 3rd standard	120	24.0
d. 4th standard	50	10.0
e. 5th standard	131	26.2
Total	500	100.0

**Table – 7: Distribution of primary school children according to syllabus.**

**N=500**

<b>7. Syllabus</b>	<b>Frequency</b>	<b>Percentage</b>
a. State	259	51.8
b. CBSE	241	48.2
Total	500	100.0

**Table – 8: Distribution of primary school children according to medium of education**

**N=500**

<b>8. Medium of education</b>	<b>Frequency</b>	<b>Percentage</b>
a. Kannada	300	60.0
b. English	200	40.0
Total	500	100

## SECTION II: PREVALENCE OF ADHD AMONG PRIMARY SCHOOL CHILDREN

**Table – 9: Prevalence of ADHD among Primary School Children.**

**N =500**

<b>ADHD</b>	<b>Frequency</b>	<b>Percent</b>
a. Yes	89	17.8
b. No	411	82.2
<b>Total</b>	<b>500</b>	<b>100.0</b>

**TABLE – 10: Analysis of ADHD Scores of primary school children.**

**N = 500**

	<b>No. of Items</b>	<b>Max Score</b>	<b>Mean</b>	<b>Mean %</b>	<b>Median</b>	<b>SD</b>
ADHD Score	15	45	9.31	20.68	8	5.53

## SECTION III: EFFECTIVENESS OF IMPLEMENTATION OF FOCUS STRATEGY.

**TABLE – 11: effectiveness of implementation of FOCUS strategy among experimental group.**

**N =30**

<b>FOCUS Skills</b>	<b>Pretest</b>		<b>Posttest</b>	
	<b>Frequency</b>	<b>Percent</b>	<b>Frequency</b>	<b>Percent</b>
a. Low Focus skills	30	100.0	15	50
b. High Focus Skills	0	0.0	15	50
<b>Total</b>	<b>30</b>	<b>100.0</b>	<b>30</b>	<b>100</b>

**SECTION IV: EFFECTIVENESS OF F.O.C.U.S STRATEGY ON ADHD CHILDREN**

**TABLE – 12: Comparison of pre test scores of ADHD children in experimental and control group.**

**N = E-30 +C-30**

Group	Mean	Mean %	Median	SD	Mean Difference	t value	Inference
Experimental Group	22.50	50.0%	22.00	2.389	0.10	0.188	NS
Control Group	22.40	49.77%	22.000	1.673			

**TABLE – 13: Comparison of pre test and post test scores of ADHD children in experimental group.**

**N = 30**

Group	Mean	Mean %	Median	SD	Mean Difference	t value	Inference
Pre test	22.50	50.0%	22.00	2.389	9.47	13.084	S
Post test	13.03	28.95%	12.00	2.822			

**TABLE – 14: Comparison of pre test and post test scores of ADHD children in control group.**

**N = 30**

Group	Mean	Mean %	Median	SD	Mean Difference	t value	Inference
Pre test	22.40	49.77%	22.00	1.673	1.87	6.293	S
Post test	20.53	45.62%	20.00	1.795			



**TABLE – 15: Comparison of post test scores of ADHD children in experimental and control group.**

**N = E-30 +C-30**

Group	Mean	Mean %	Median	SD	Mean Difference	t value	Inference
Experimental Group	13.03	28.95	12.00	2.822	7.50	12.28 2	S
Control Group	20.53	45.62	20.00	1.795			

### **DISCUSSION :-**

The present study was conducted to assess the prevalence of ADHD among primary school children and effectiveness of FOCUS Strategy among ADHD Children in selected primary schools, Kanpur. In order to achieve the objectives, an evaluative research approach and true experimental design was adopted and clustered random sampling technique was used to select the samples.

### **CONCLUSION :-**

This study was aimed at evaluating the effectiveness of FOCUS Strategy on ADHD children in selected Primary Schools, Kanpur. A true experimental design and evaluative approach was used in the study. The data was collected from 500 samples for prevalence of ADHD and 60 ADHD Children, each 30 in experimental and control group, by using the Conner's Teacher Rating Scale, followed by implementation of FOCUS Strategy and post observation.

### **SUMMARY :-**

This study was intended to assess the prevalence of ADHD among primary school children and effectiveness of FOCUS Strategy among ADHD Children in selected primary schools, North Block, Davangere. In order to achieve the objectives, an evaluative research approach and true experimental design was adopted and clustered random sampling technique was used to select the samples.

### **BIBLIOGRAPHY :-**

1. Information Manual 3: Tsunami psychosocial care for children. [Online]. 2005[cited2011May18]. Available from: Wolraich M, Brown L, Brown RT,

- DuPaul G, Earls M, Feldman HM et al. ADHD: clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents. *Pediatrics*. 2011 Nov;128(5):1007-22. Available from:
2. NirajAhuja. A Short Text Book of Psychiatry. 6<sup>th</sup> Ed. New Delhi: Jaypee Brothers; 2006. p. 179.
  3. Suvarna. BS, Kamath.A, prvelance of of attention deficit disorder among preschooler age children.nepal med coll J [serial online].2009[cited 2012 may19]; 11(1):1-4.
  4. Hockenberry MJ, Wilson D. Wong's nursing Care of infants and children. 7<sup>th</sup> Ed. Elsevier publishers; 2006. p. 536-7.
  5. Kliegman RM, Behrman, Jenson, Stanton. Nelson's Text Book of Paediatrics, 18th Ed. Elsevier publishers; 2008. p. 146-8.
  6. Christine Cadena. Teacher's Role in Making First Diagnosis of ADHD/ADD. Importance of Educators in Making Diagnosis 2007 Sept 10; p.1-2. Available from: <http://www.associatedcontent.com> September 10, 2007; P.1-2.
  7. Bhatia MS, Bhasin SK, Choudhary S, Sidana A. Behavior disorders among children attending a nursery school. *Journal of Mental Health and Human Behavior* 2000; 5(1):7-11.
  8. Erik G. Willcutt. The prevalence of DSM-IV attention-deficit/hyperactivity disorder: a meta-analytic review. *Neurotherapeutics* 2012;9:490-9.
  9. Thomas R, Sanders S, Doust J, Beller E, Glasziou P. Prevalence of Attention-Deficit/Hyperactivity Disorder: A Systematic Review and Meta-Analysis. *Pediatrics* 2015 Mar;135(4):e994-1001.
  10. Jyothsna AV, Panicker AS. Prevalence of attention deficit hyperactivity disorder in primary school children. *Indian Journal of Psychiatry* 2013;55(4): 338-42.