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A STUDY TO EVALUATE THE EFFECTIVENESS OF CONCENTRATION ENHANCEMENT ACTIVITY ON ATTENTION AND CONCENTRATION AMONG SCHOOL AGE CHILDREN IN SELECTED SCHOOL AT HASSAN

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ABSTRACT

The present study was undertaken to assess the effectiveness of attention and concentration enhancement activities among school age children studying in Vasavi English Medium School at Hassan. The enhancement activities to children were very effective in improving their attention and concentration when compared to pre-test as evidenced by the result of post-test level scores. The research design adopted for study was pre-experimental design with one group pre-test and post-test design. The sample consists of the 30 school age children studying in VEM School at Hassan. The data gathered was analyzed by using Chi-Square test and paired "t" test. Overall pre-test and post-test mean score was 60.60 and 75.87 respectively. The 't' value was 7.95, shows that there is a significant increase in the level of attention and concentration after conducting the attention and concentration enhancement activities. The x^2 = 5 values shows that there is significant association between the pre-test level of attention and concentration and their socio demographic variables of the gender of the children. Children had a remarkable increase in the level of attention and concentration after attending the enhancements activities, when compared to their previous level of attention and concentration. Thus, the children researcher recommends further studies in these areas to improve knowledge regarding attention and concentration among school age children.

INTRODUCTION

Children are vital to the nation's present and its future. In recent years, there has been an increased focus on issues that affect children and on improving their health. Children have begun to be recognized not only for whom they are today but for their future roles in creating families, powering the workforce, and making democracy work[1].

Concentration is the capability to focus and continue attention on a task at will. Concentration involves sustained attention, multi-tasking, and ignore any disturbance in the background. Concentration is an important skill for children as it provides and capability to focus and Help to control distractions. Lack of concentration is a major problem in school-age children. Lack of concentration can lead to behavioral problems and poor academic performance in school[2].

Concentration is important for the child's development. It gives a foundation for their character and social behaviour. No one from outside can force a child cause to concentrate. Only they should set out their psychic life. This skill is most essential for every kind of success in their life. Concentration has numerous advantages. It aids in studying, understanding faster, enhances the memory, aids in focusing on any task, work, and goal achieving it more easily and profoundly[3].

Attention has a very important place in every aspect of life and it affects the standard of life, "to pay attention, be all ears, to take into consideration" are usually used expressions in daily life[4].

We cannot understand, learn or remember that which we do not first attend to Positive attention helps your child feel secure and valued. Positive attention is important for your child's self-image and development[5].

Physical activities may enhance children's cognitive control or can pay attention and also result in a prominent improvement on academic achievement tests" The single acute bout of moderate exercise - walking - was beneficial to improve cognitive function[6].New neurons are produced

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every day in the brain through the process of neurogenesis. Mental and physical training can increase the number of cells that matured into functional neurons within the brain[7]. Cancellation tasks have been largely used to evaluate visuospatial function and attention. Clinical and experimental studies of attention have used cancellation tests for well over 100 years, and the procedures have been noted to require sustained attention, rapid visual scanning and motor activation, and rapid inhibition of responses[8].

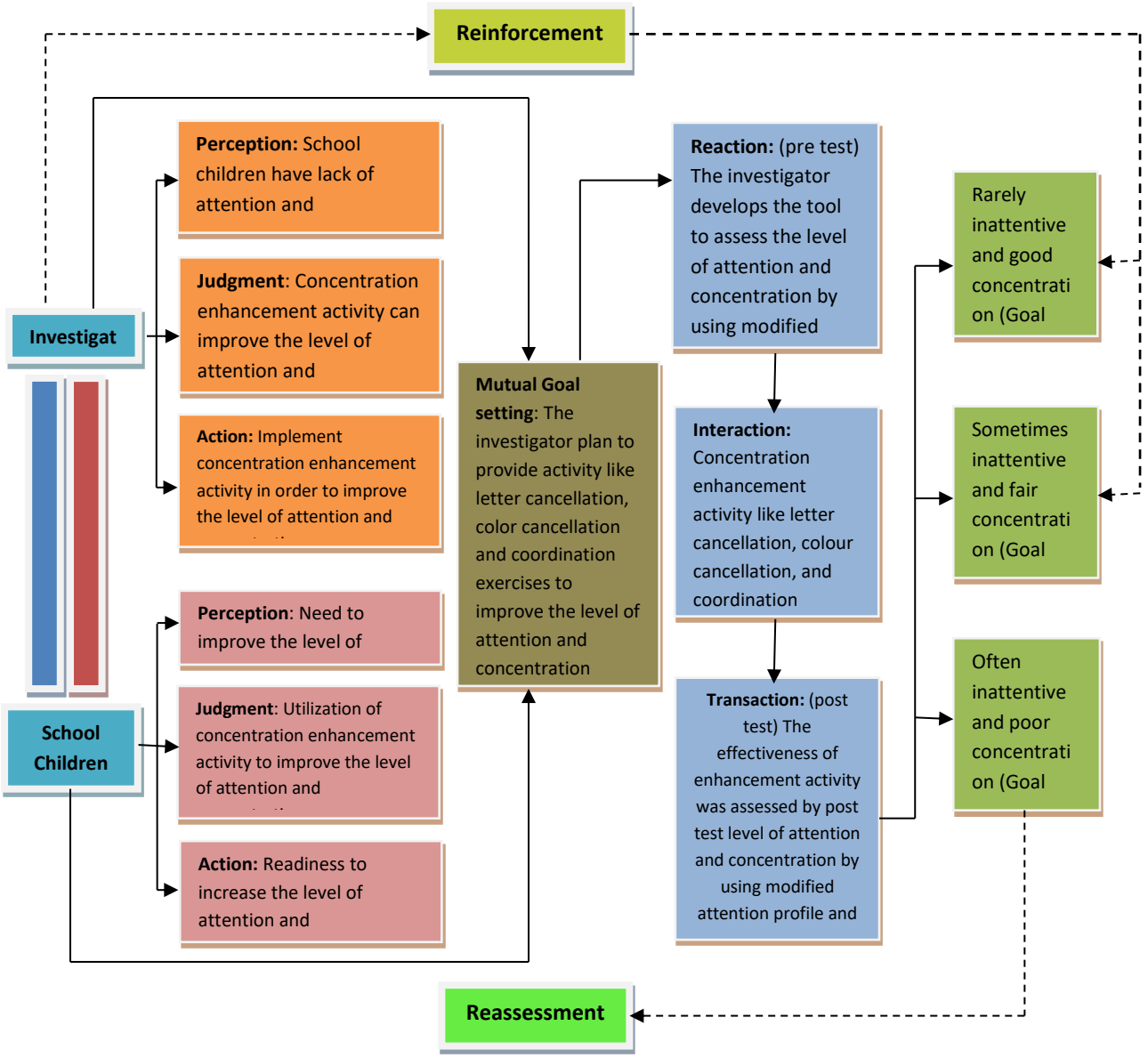
METHODOLOGY

The research design refers to the researcher's overall plan or blue print obtaining answer to the research questions, testing hypothesis and how to handle some of the difficulties encountered during the research process. The research design spells out the strategies that the researcher adopts to develop information that is accurate, objective and interpretable.

The research design used for the present study is Pre-experimental; one group pre-test post-test design. It includes only manipulation, no randomization and no control group.

OBJECTIVES

1. To assess the pre-test level of attention and concentration among school age children.
2. To evaluate the effectiveness of concentration enhancement activity regarding attention and concentration among school age children after the post-test.
3. To find out the association between pre-test level of attention and concentration among school age children with their selected demographic variables.



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RESEARCH HYPOTHESIS

H1: There will be significant difference between mean pre-test and post-test level of attention and concentration among school age children.

H2: There will be significant association between pre-test level of attention and concentration among school age children with their selected demographic variables.

Setting

Research setting is the general location and condition in which data collection takes place in a study. The present study was conducted at VEM school at Hassan.

Target Population

The entire aggregation of cases that meets designated set criteria is considered as the target population. The present study targets the school age children at Hassan.

Swampland Sample Size

A sample consists of a sub-set of a population selected to participate in a research study. The sample used for this study was 30 students of VEM school at Hassan, who fulfil the inclusive and exclusive criteria.

Criteria for the Selection of Sample

a) Inclusion criteria

1. Children who belong to the age group of 9 -12 years.
2. Children include both boys and girls.
3. .Children who can understand and speak English.
4. Children who scored 50% or below during their previous academic performance.

b) Exclusion criteria

1. Children who have chronic illness.
2. Children who were absent in school for a long duration.
3. Children who practice meditation and other concentration enhancement activity.

Sampling Technique

Sampling refers to the process of selecting a portion of the population to represent the entire population. The samples were collected using purposive sampling technique, which is a type of Non- probability sampling approach.

Recommendations

- A similar study can be replicated on a sample with different demographic characteristics.
- The same study can be done on a larger sample pool to validate and generalize the findings.
- A similar study can be done with a control group.
- A descriptive study on assessing the level of attention and concentration can be done among school age children.

Section -I

Analysis and Interpretation of Pre Test Level of Attention and Concentration.

Objective 1: To assess the existing levels of attention and concentration in school age children at the selected school in Hassan.

Table 1: Pre Test Level of Concentration

Level of Attention and Concentration	No. Of School Age Children	Percentage
Low	09	30%
Medium	21	70%
High	00	0%
Total	30	100%

The above Table depict that 70% of the children had medium level of attention and concentration whereas 30% of the children had low level of attention and concentration. None of them had High level of attention and concentration in pre test.

Table 2: Mean, mean percentage and standard deviation on pre test level of attention and concentration.

Pre-test level	No. of questions	Mean	SD	Mean %
Level of concentration	10	29.07	3.26	58%
Level of attention	10	31.53	3.65	63%
Overall level of attention and concentration	20	60.60	5.94	61%

The above table reveals the aspect wise mean percentage scores regarding level of attention and concentration obtained from children. 58% mean score was obtained for the level of concentration and 63% mean score for the level of attention.

Scetikon - II

Analysis and Interpretation of Post Test Level of Attention and Concentration.

Objective 2. To assess the effectiveness of attention and concentration enhancement activities on the attention and concentration among school age children in selected school in Hassan.

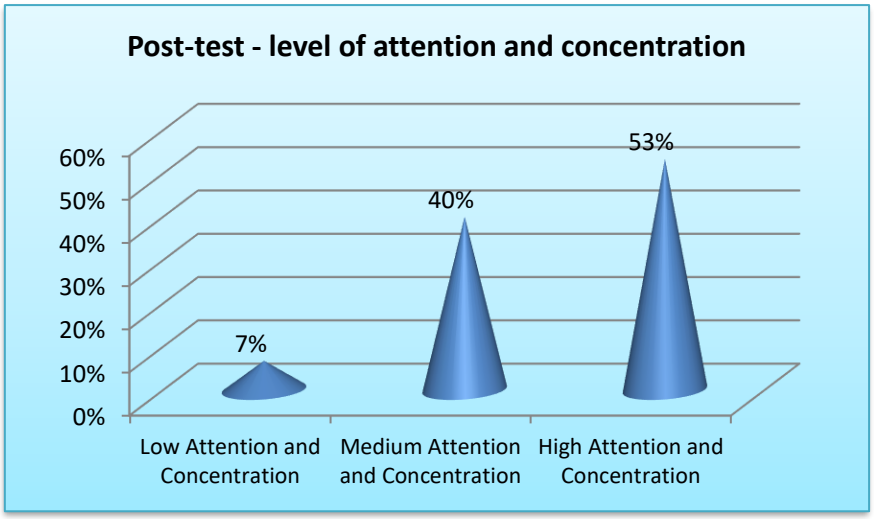

Figure 2: Cone diagram showing post test levels

Table 3: Mean, mean percentage and standard deviation of post test level of attention and concentration.

N=30

Post-test level	No. of questions	Mean	SD	Mean %
Level of concentration	10	37.10	5.08	74%
Level of attention	10	38.77	4.30	78%
Overall level of attention and concentration	20	75.87	8.67	76%

The above table reveals the aspect wise mean percentage scores regarding level of attention and concentration obtained from children. 74% mean score was obtained for the level of concentration and 78% mean score for the level of attention.

Section - III

Analysis and Interpretation of Effectiveness of Attention and Concentration Enhancement Activities on Attention and Concentration Among School Aged Children in Selected School in Hassan.

Table 5: Comparison of Pre Test and Post Test Scores

Score levels	Pre test		Post test		Paired t test
	Mean	SD	Mean	SD	
Concentration	29.07	3.26	37.10	5.08	t =7.28**
Attention	31.53	3.65	38.77	4.30	t =7.02**
Overall	60.60	5.94	75.87	8.67	t =7.95**

* Significant at p ≤0.05, ** highly significant at p ≤0.01, *** very high significant at p ≤0.001, df = 29

The above table depicts the comparison of pre and post test scores on attention and concentration among school age children studying in selected school before and after participating in the attention and concentration enhancement activities. The difference between pre and post test scores are tested by using paired't' test and found highly significant in all aspects.

Table 6: Each Domain Wise Percentage Gain **N=30**

	Pre test%	Post test%	% of enhancement
Concentration	58	74	16
Attention	63	78	15
Overall	61	76	15

The above table shows each domain wise percentage gain after conducting attention and concentration enhancement activities. An overall 15% gain was observed in the level of attention and concentration by comparing pre-test (61) and post-test (76) score percentages.

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Section- v

Association Between Pre-Test Attention and Concentration Levels With Selected Demographic Variables.

To find the association between pre-test score and selected demographical variables of school age children studying in selected school in Hassan.

Table 6: Association between Pre-Test Attention and Concentration Levels with Selected Demographic Variables. N=30

No	Characteristics	Category		Pre-test				Chi square test
				Low		Medium		
				n	%	n	%	
1	AGE	9 - 10 years	0	0	0	0	0	χ 2 =0.523
		10 - 11 years	17	6	35%	11	65%	NS
		11 - 12 years	13	3	23%	10	77%	DF=1
2	GENDER	Male	14	7	50%	7	50%	χ2 =5.0
		Female	16	2	13%	14	88%	**S***
								DF=1
3	EDUCATION	5th STD	0	0	0	0	0	χ2 =1.42
		6th STD	27	9	33%	18	67%	NS
		7th STD	3	0	0%	3	100%	DF=1
4	HABITANT	Urban	11	4	36%	7	64%	χ 2 =1.07
		Rural	17	5	29%	12	71%	NS
		Semi urban	2	0	0%	2	100%	DF=2
5	DIETARY PATTERN	Vegetarian	5	0	0%	5	100%	χ 2 =2.57
		Mixed	25	9	36%	16	64%	NS
								DF=1
6	FATHER'S EDUCATION	Illiterate	1	0	0%	1	100%	χ2 =3.98
		Primary school	2	0	0%	2	100%	NS
		High School	16	6	38%	10	62%	DF=4
		Higher Secondary	7	3	43%	4	57%	
		Graduate & above	4	0	0%	4	100%	
7	MOTHER'S EDUCATION	Illiterate	0	0	0	0	0	χ 2 =1.91
		Primary school	2	0	0%	2	100%	NS
		High School	15	6	40%	9	60%	DF=3
		Higher Secondary	8	2	25%	6	75%	
		Graduate & above	5	1	20%	4	80%	
8	TYPE OF FAMILY	Joint	7	3	43%	4	57%	χ 2 =0.72
		Nuclear	23	6	26%	17	74%	NS
		Single parent	0	0	0	0	0	DF=1
		Extended family	0	0	0	0	0	
9	SCREEN TIME	1 hour	16	4	25%	12	75%	χ 2 =1.83
		2 hours	12	5	42%	7	58%	NS
		3 hours and more	2	0	0	2	100%	DF=2
10	FAMILY INCOME	Below Rs. 5K	7	3	43%	4	57%	χ 2 =0.83
		Rs. 5K - 10K	15	4	27%	11	73%	NS
		Rs. 10K - 15K	4	1	25%	3	75%	DF=3
		Above Rs. 15K	4	1	25%	3	75%	

*Significant at p≤0.05, S-significant, NS- not significant

Data presented in the above table for pre test indicate that the chi square values of demographic variables like age, education, dietary details, residence, family income, educational status of father, educational status of mother, sources of information and screen time are not significant at 0.05 level of significance. On the contrary, the chi square values of the demographic variable 'gender' is of 0.05 level of significance. Thus it is concluded that there is significant association between level of attention and concentration and their selected demographical variables of school age children studying in selected school in Hassan. Hence we accept the research hypothesis H2 and reject the null hypothesis $H_0$2.

CONCLUSION

The present study was undertaken to assess the effectiveness of attention and concentration enhancement activities among school age children studying in Vasavi English Medium School at Hassan. The enhancement activities to children were very effective in improving their

attention and concentration when compared to pre-test as evidenced by the result of post-test level scores. So, this chapter concluded that pre test level of concentration was 58% and followed by intervention, the post test level was 74%. The pre test level of attention was 63% and after the post test level was 78%. So, the researcher believes that the study would benefit from widening its scope and use.

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