

Effect of Yoga on Children's Memory

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ABSTRACT:

Yoga, an ancient holistic approach for overall well-being, after gaining importance in the recent years, when implemented on school students, has also shown improvement in memory. This study aims to study the impact of yoga on the memory of children aged 10-11 years. The total strength of 30 likely aged students was uniformly divided by alternate allotments into control and experimental groups based on their pretest scores. The experimental group had undergone 1 month of yoga intervention, to be more precise, a 30-minute session for 5 days a week, comprising physical postures, guided breathing and practicing concentration. The posttest, conducted after a month on both the groups as a parallel test of the pretest shows statistically significant improvement in the memory of the intervention group ($p < 0.001$), as compared to the control group. Hereby, this study encountered data showing positive impact on the memory of school-going children practicing yoga.

Keywords: Yoga, memory, intervention, alternate allotments, concentration

1. INTRODUCTION

In this fast-paced highly digitalized environment where children are suffering from issues like stress, anxiety, distraction, insomnia etc., advancements in technology acts as the mother of all these potentially threatening issues. While the brighter side of technology provides great ease in various monotonous jobs and saves us time, but its redundant use turns into the darker path, where gadget addiction results in extensive screen time and reduced physical activity. On the other hand, academic pressure affects a child's cognitive function (memory, attention, perception, executive function) and emotional stability adversely, causing the young generation to have adverse physical and mental effects. The elixir to all these problems is yoga which offers a holistic development to balance body, mind and emotions.

Yoga, an aggregate of physical posture, breathing techniques and meditation, has gained significant importance in the last few decades, and studies on yoga exhibit its positive effect on cognitive function and mental health of the children. Various studies showed that practicing yoga has a significant effect on children's cognitive function. Field (2011) showed that regular practice of yoga increased memory, that is the capacity to recall and the attention span of the children. Yoga improves children's working memory score, attention and academic achievement (Telles et al., 2013).

Yoga, having its origin in the Vedic period aims to strengthen a person physically, mentally and emotionally through regular practice of certain scientifically validated techniques. When incorporated into the lives of children, not only does it ensure their overall well-being, but also enhances their emotional stability, stress adaptation and intellectual faculties, hence resulting in greater success in the academics (the

basis of this study). In this study the investigator examines whether there is an effect of yoga practice on memory of the school students.

OBJECTIVES:

To assess the effect of yoga on memory of children of age group 10 - 11 years.

HYPOTHESIS:

There exists a significant effect of yoga on the memory of children of age group 10 to 11 years.

HYPOTHESIS IN NULL FORM:

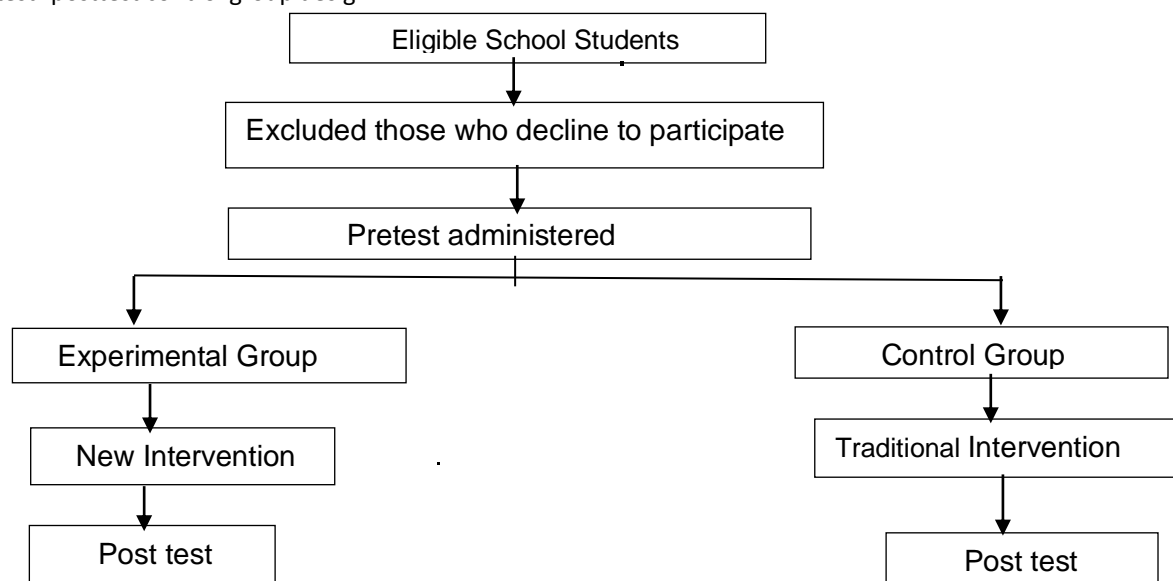
There will be no significant effect of yoga on memory of the children of age group 10 to 11 years.

2. METHODOLOGY

In this study the investigator used pretest- posttest control group design. 30 children of age group 10 to 11 years were taken for this study. At first all the children were given some memory assessment test to test their memory level. On the basis of the pretest score both the groups were formed by alternate placement of students based on their score ranks, so that both groups are comparable. After that, one month of yoga intervention (five days a week for thirty minutes daily) was given to the experimental group. Some asanas, breathing techniques and concentration practice were included in that intervention. After the intervention the investigator administered the parallel form of memory assessment test on both the group and collected the test scores.

RESEARCH DESIGN

Pretest- posttest control group design:



3. RESULT AND DISCUSSION:

Table 1 shows the t value difference between mean scores of the test by the control and experimental groups along with relevant measures

Group Measures	PRE-TEST	
	Control	Experimental
N	15	15
M	7.26	7.13
SD	1.67	1.37
SED	0.56	
t	0.23	

From the table it shows that both groups performed almost same. t value (0.23) shows no significant difference($p>.05$) between the two means.

Table 2 shows the t value difference between mean scores of the test by the pretest and posttest of the control group along with relevant measures

Group Measures	Control Group	
	Pretest	Post test
N	15	15
M	7.26	7.86
SD	1.67	1.36
SED	0.56	
t	1.08	

t value (1.08) shows no significant difference ($p>.05$) exist between the pretest and posttest score of the control group.

Table 3 shows the t value difference between mean scores of the test by the pretest and posttest of the experimental group along with relevant measures

Group Measures	Experimental Group	
	Pretest	Post test
N	15	15
M	7.13	10.93
SD	1.37	1.44
SED	0.51	
t	7.41	

The difference between pretest and posttest in the experimental group is statistically significant $t=7.41(p<.05)$. This result indicate that experimental intervention(yoga) had a large effect on performance of the children.

Table 4 shows the t value difference between mean scores of the test by the control and experimental groups along with relevant measures

Group Measures	Post test	
	Control	Experimental
N	15	15
M	7.86	10.93
SD	1.36	1.44
SED	0.51	
t	6.00	

t value ($p<.001$) shows mean difference is highly statistically significant.

4. FINDINGS

Table 1 indicates that both groups were comparable at baseline and had similar levels of memory before the yoga intervention.

Table 2 shows that the post-test mean score of memory is slightly higher than the pretest mean score of the control group. The mean score difference was not statistically significant, $t(14) = 1.08, (p>.05)$. This implies that without yoga intervention the memory score in the control group did not improve significantly.

Table 3 shows that score of mean difference of pre and post-test of experimental group is highly significant, $t(14) = 7.41, (p<.001)$ indicating that yoga intervention had a positive impact on memory of the children.

Table 4 shows that the post-test mean score of the experimental group is highly significant than the post-test mean score of the control group. This confirms the effectiveness of yoga intervention on memory of the children in the intervention group i.e. null hypothesis is rejected and alternative hypothesis is accepted.

5. CONCLUSION

The above findings confirm the positive effect of yoga intervention on memory of the child.

6. REFERENCE

1. Field, T. (2011). Yoga clinical research review. *Complementary Therapies in Clinical Practice*, 17(1), 1-8
2. Kauts, A and Sharma, N. (2012). Effects of concentration and memory in relation to stress. *ZENITH International Journal of Multidisciplinary Research*. 2(5), 1-14.
3. Telles, S. et al. (2013). Effect of yoga or physical exercise on physical cognitive and emotional measures in children: A randomized control trial. *Child and Adolescent Psychiatry and Mental Health*, 7(1), 37.
4. Banerjee, S. (2014). Effect of yoga on memory of middle school level students. *IOSR Journal of research and Method in Education (IOSR-JRME)*, 4(1), 49-52.
5. Patel, T.B. and Acharya, P.B. (2015). Effect of yoga on memory of higher secondary school students. *Indian Journal of Applied Research*, 5(5), 19-21.
6. Joice, S.N. and D'Souza, L. (2018). The Effect of Superbrain Yoga on Concentration, Memory and Confidence in School Students. *Indian Journal of Traditional Knowledge*. 17(4), 741-744.
7. Swaroop, S and Mathur, M. (2021). Effect of yoga exercise on memory and academic achievement. *International Journal of Creative Research Thought (IJCRT)*. 9(4), 2568-2571.

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