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## Impact of yoga program on reasoning ability of school going children

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### Abstract

Reasoning Ability is applied in everywhere nowadays for getting a job or selecting anywhere as a professional person. The purpose of the present study was to examine and find out the impact of the Yoga program on Reasoning Ability of School going children. The subjects were collected from Ausgram High School, Burdwan, and West Bengal, India. The present study was conducted on two groups Experimental group and Controlled group with sixty (N=60) students of class VII aged ranged 11 to 13 years. In this study, Reasoning Ability was measured before and after 12 weeks of the yoga program in Scholl condition. Reasoning Ability was measured by Reasoning Ability Test questionnaire developed by L.N. Dubey from National Psychological Corporation, Agra, India and transformed into Bengali versioned by the expert of concern language. Mean and Standard deviation of different variables was calculated. The data of the selected variables were analyzed by applying SPSS. Statistical significance was tested at 0.05 levels. After the findings and analysis, it reveals that the impact of Yoga Program on Reasoning Ability was significant.

**Keywords:** Reasoning Ability, School going Children, Yoga Program and Student.

### Introduction

The health related significance of yoga has perceived by Swami Kunalayannada, as early as in 1924:

“...The physical side is only a minor aspect of Yoga which is chiefly mental and spiritual”

Physical Education is a spacious field of new research. In this field of research is going on throughout the beginning of civilization. The Yogic neurophysiology of Traditional Yoga – with its principles of Prana(the prime energy dynamics operating within the body, creating the psycho-physiological substrate), as well as, with its subtle experience –awarience – transcendence phenomenon –seems to hold a great promise for modern man.

Now a days Reasoning Ability is applied everywhere getting a job or get selection anywhere as professional person. Reasoning is a process of controlled thinking as association which starts with some problem of interest to the reasoned and is directed towards its solution. It differs from ordinary imagination in that the results of reasoning are supposed to check with some outside criteria, that is they are supposed to be correct while such checks are not necessarily required in imagination.

Since reasoning starts with some unsolved problem, we must, if we wish train our students to reason, and make them conscious of problems to be solved. It is futile to attempt to get reasoning simply by admonishing students to think. If a child is not acquainted with a particular problem, how can he think about it? More and more exercises in problem solving will develop a child’s reasoning ability. If a child starts taking interest in problem solving he will develop self-confidence and thus he may improve his reasoning ability.

### Purpose of the Study

The purpose of the present study was to examine and find out the impact of Yoga Program on Reasoning Ability of school going children.

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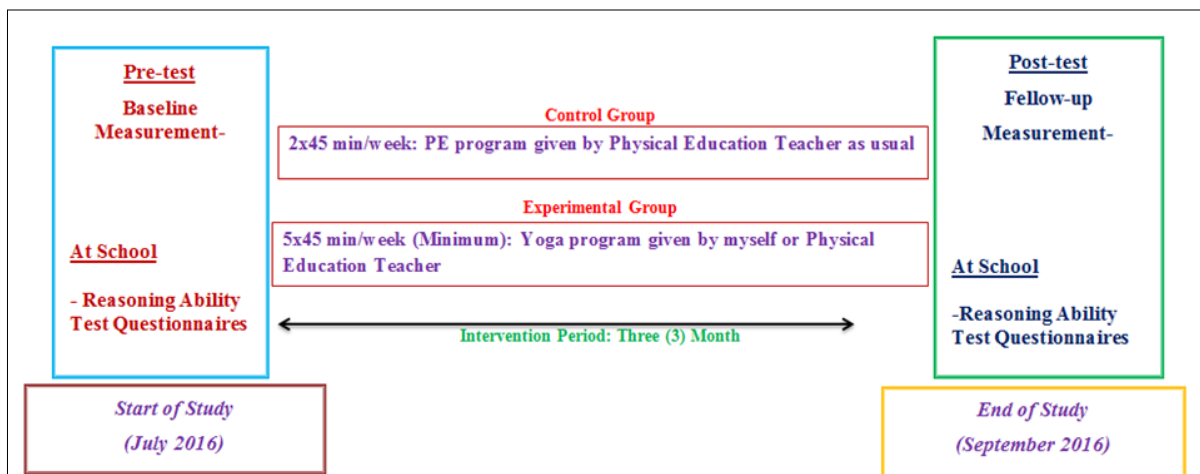
**Methodology**

**Subjects:** Sixty (N=60) school going children of class seven (VII) were selected as subjects for the present study. The age of the subjects were ranged from 11 to 13 years.

**Study Area:** The subjects were collected from Ausgram High School, Ausgram, district of Burdwan, West Bengal, India.

**Criterion Measure:** In this study Reasoning Ability was measured by Reasoning Ability Test questionnaire developed by L.N. Dubey from National Psychological Corporation, Agra, India and transformed into Bengali versioned by expert of concern language.

**Experimental Design**



In the present study Yoga program was given for the Experimental group five (5) periods in a week in other hand there was no any special Yoga class for control group. The Training Protocol was two part one preparatory part in which included ‘Suryanamaskar’, various type of yogic worming up and another part was main part in which included the ‘Asanas’(Standing, Sitting, supine, prone etc.) In time of practiced students concentrated on breathing and their own body part as per direction.

used to analysis since there was a consequential relationship between the within subjects data. Hence, the ANOVA was used to test for (i) significant difference between the assessment i.e. at baseline and after twelve weeks (this was a within subject factor, time) and (ii) difference between the groups (Yoga and Control), this was a between-subjects factor. The level of significance was set at the 0.05 level ( $p < 0.05$ ).

**Statistical Procedure:** After collecting the data ANOVA was

**Results and Discussion**

**Table 1:** Descriptive analysis of Reasoning Ability Score of Experimental Group and Control Group

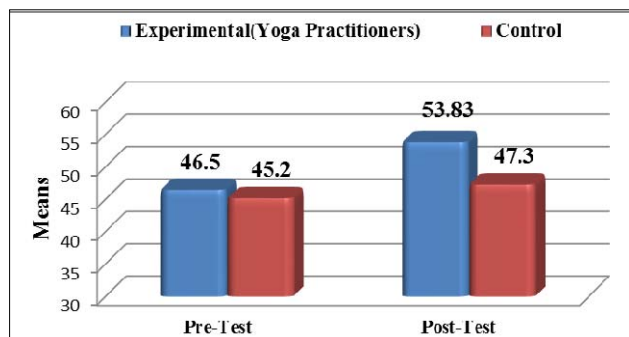
Variables	Group	Test	N	Mean	Mdf	Standard Deviation	Std Error of Mean
Reasoning Ability	Experimental	Pre-Test	30	46.5	7.33	±10.96	2.002
		Post-Test		53.83		±13.036	2.38
	Control	Pre-Test	30	45.27	2.03	±9.843	1.779
		Post-Test		47.30		±10.215	1.865

It is reveals from the table-I that the Mean and SD value of Experimental Group (Yoga Practitioners) Reasoning Ability Score of Pre-test is  $46.5 \pm 10.96$  and Post-test is  $53.83 \pm 13.036$ . Also Control Group Mean and SD value of Pre and Post Test is  $45.27 \pm 9.843$  and  $47.30 \pm 10.215$  respectively.

**Table 2:** Reasoning Ability *f* score of within Experimental Group (Yoga Practitioners)

Variables	Group	‘F’Value	‘P’
Reasoning Ability	Experimental(Yoga Practitioners)	5.55947	.021775

The *f*-ratio value is 5.55947. The *p*-value is .021775. The result is significant at  $p < .05$ .



**Fig I:** Comparison among the Experimental Group (Yoga Practitioners) and Control Group Pre and Post-Test Means score of Reasoning Ability Test

Table-II shows that the comparative assessment of the Reasoning Ability before and after the Yoga Program within group showed that there was significant increment in the Reasoning Ability of the subjects.

**Table 3:** Reasoning Ability *f* score of within Control Group

Variables	Group	‘F’ Value	‘P’
Reasoning Ability	Control Group	0.61632	.435612

The *f*-ratio value is 0.61632. The *p*-value is .435612. The result is not significant at  $p < .05$ .

Table-III shows that the comparative assessment of the

Reasoning Ability before and after twelve weeks within group showed that there was no significant increment in the Reasoning Ability of the subjects.

**Table 4:** Reasoning Ability *f* score between the group of experimental and Control Group

Variables	Group	'F' Value	'P'
Reasoning Ability	Experimental and Control Group	4.66851	.034864

The *f*-ratio value is 4.66851. The *p*-value is .034864. The result is significant at  $p < .05$ .

It is reveals from the table-IV the comparative assessment of the Reasoning Ability before and after twelve weeks between Experimental (Yoga Practitioner) and Control group showed that there was significant difference in the Reasoning Ability of the subjects. After the twelve weeks of Yoga Program the Reasoning Ability of Experimental group is significantly increases.

### Conclusion

Within the limitation of the present study and depending on results of the statistical calculations the conclusion was down that there was significant difference within and between two groups.

The twelve weeks special Yoga Program effect on the Reasoning Ability of School going children as we know the yoga has a positive effect on body and mind. As the study area was rural, the awareness of health, lifestyle and diets may effect on BMI and as well as Reasoning Ability.

### References

1. Beck SR, Cutting N, Apperly IA, Demery Z, Iliffe L, Rishi S, *et al.* Is tool-making knowledge robust over time and across problems? *Front. Psychol.* 5:1395 10.3389/fpsyg, 2014; 01395.
2. Raman Alope sen. effect of yogic asana on health related physical fitness in school children, *Yoga Mimamsa, Lonavla*, 2012; XLIV(3).
3. Nagendra HR, Mohan T. *Yoga in Education*, Swami Vivekananda yoga prakasan, 2001.
4. Prof A, Yobu. *Test Measurement and Evaluation in Physical Education and Sports*, New Delhi, Friends Publication, 2010.
5. Ellis KJ. Body Composition of a Young, Multi-ethnic. Male Population. *Am J Clin Nutr*, 1997; 66:1323-1331.
6. Chakroborty T, Saha DG. Relationship of antropometric variables with orentation ability and differentiation ability of the adolescent school children. *Man in a Motion koklata: Sarir Siksha Prakasani*, 2013; 242-246.
7. Dr. Ajmir Singh DJ. *Essential of Physical Education*. Delhi: Kalnani Publishers, 2000.
8. Defeyter MA, German TP. Acquiring an understanding of design: evidence from children's insight problem solving. *Cognition* 2003; 89: 133–155. 10.1016/S0010-0277(03)00098-2