

**Chapter – 4**  
**AIMS AND OBJECTIVES**

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#### **4.1 AIMS OF THE STUDY:**

To evaluate the effects of yoga program versus physical exercise on executive function and physical performance measures in school children

#### **4.2 OBJECTIVES OF THE STUDY:**

1. To evaluate the effects of yoga vs physical exercise on executive function such as attention span, working memory and mental speed in higher primary and high school children in rural areas.
2. To evaluate the effects of yoga vs physical exercise on cardio-respiratory fitness and physical performance such as strength, balance and flexibility in higher primary and high school children in rural areas.

#### **4.3 RESEARCH QUESTIONS:**

Are the effects of yoga better when compared to physical exercise training on measures of executive function and physical performance tasks in school children?

#### **4.4 RATIONALE/JUSTIFICATION OF THE STUDY:**

The rationale for the study was to evaluate the effects of yoga intervention in an actual field setting. Since earlier studies were done in individual schools and classes with smaller sample size contributing to type II error, we wanted to test the efficacy of implementing the yoga program across rural and urban schools by training the school teachers themselves in Yoga program. Also, we evaluated the intervention against a structured physical exercise program imparted by physical education teachers as a control intervention as physical exercise is already integrated into the school curriculum.

#### **4.5 HYPOTHESIS:**

Yoga will improve scores on executive function tests and physical performance compared to physical exercise training following two months of intervention in school children.

#### **4.6 NULL HYPOTHESIS:**

Effects conferred by yoga intervention will be similar to that of physical exercise following two months of intervention in school children.