**Hypothesis:**
Yoga will improve physical performance and performance on psychomotor tasks compared to physical training following four months of intervention in school children.

**Subjects:** School children in higher primary (5-7\textsuperscript{th} class) and high school (8-10\textsuperscript{th} class) will be recruited for the assessments in this study. Rural schools participating in this yoga shikshana program will be randomly selected to import yoga or physical training to select group of students in among any one of these classes. Through many schools will be participating in this program those schools with only one teacher for many grades will not be selected for this study. Schools will be selected if they have adequate teacher to student ratio and have a physical education teacher. Subjects for the study from the above mentioned schools will be selected if they satisfy the following selection criteria:

**Selection criteria:**

**Inclusion criteria:**

1. Higher primary and high school children of both sexes
2. Age less than 17 years.

**Exclusion criteria:**

1. Those with congenital heart disease, motor and mental retardation
2. Those with h/o epilepsy, severe exercise induced asthma
3. Fevers or infection at time of screening and recruitment
4. Pregnancy

**Sampling:** we will do a random sampling of the selected schools in each taluk and allocate yoga or physical training intervention for each school. We will adopt a block randomization design with each taluka comprising a block and randomly allocating interventions in each block.

**Randomization:** we will adopt a block randomization design for the study wherein schools will be randomly allocated to teach either yoga or physical exercise intervention. Each school will impart training and assessment to 40 students in classes between 6th-10th standard.

**Design and study procedures:** randomized controlled two arm trial. Schools will be randomized to impart either yoga intervention or physical training daily for an hour for a period of 4 months. Assessments will be done prior to intervention and after four months of intervention. Each school will be allocated a total of 40 students to assess the study outcomes and impart any one of the above intervention.

**Outcome measures:**

**Tests for physical performance [43, 44]**

1. Flamingo balance test
2. Short Broad jump test
3. Beep test
4. Sit ups in supine position
**Neurocognitive tests** [45,46,47]

1. Weschler memory scale Indian adaptation (Associated learning, digit span forward and backward) Psychomotor
2. Single letter cancellation test
3. Digit symbol substitution test

**Others:** (Will be done for a subset of a population)

1. Sit and reach test
2. Hand grip dynamometer

**Intervention:**

**Yoga program:** the intervention involves a series of asanas, pranayama, meditation and relaxation given over a one hour period daily 5 days a week for Three months. The intervention will be imparted by teachers who are trained in the yoga program

**Control intervention:** Involves one hour of physical training and play daily 5 days a week for four months. The intervention will be imparted by the physical education teachers in each school.

**Sample size:** the sample size for the study will be 500 students in each arm (Yoga vs. Physical exercise).

**Data analysis:** Data will be analyzed using SPSS version 18 for windows.