CHAPTER III

PROCEDURE AND METHODOLOGY

Present study was conducted to collect the information in the context of utility of selected asanas for the promotion of motor fitness components on boys aged 14 to 16 years. For this the researcher had chosen experimental method. The methodology adopted for collecting the data include experimental design selection of sample, selection of test, reliability of the data, criterion measure, procedure, description of tests, statistical tools etc. which have been described in this chapter.

1. Experimental Design

Two groups participated in this study. Group selection was done only after conducting one week pilot study. The design followed in this study was, thus, parallel group design, classifying the subjects in to experimental and controlled groups. The criteria for selecting parallel group design was that after dividing subjects in to control and experimental groups the average of their height and weight as well as some of their physical abilities should be similar.

2. Selection of samples

The population of the present study was Sixty (60) schools boys in the age range of 14 to 16 years. A total 60 male subjects participated in this study selected from the population. The research scholar selected 60 male students from various schools who had come for the football coaching further; the divisions of the subjects were also made by considering the age group of 14 to 16 years from the school records. The names of the students coming under the age group were selected for the study. All the subjects were clinically normal.
3. Selection of Variables

To collect data at pre and post tests the research scholar has chosen the following variables.

**Dependent Variables**

Motor fitness is important factor essential in every sport. Research works on these variables revealed that yoga contributes to improve motor fitness as well as skills of different sports and games. This is the basis on which following variables have been corporate in this present study and tests were conducted for this study is as follows.

The research scholar had selected motor fitness components which consists of speed, flexibility, endurance, with football skills like SAI Football Skill Test, 30 Meters Running with the Ball, Kicking Accuracy, Juggling. The scholar had selected the following variables which are the basic needs of the school children for their regular routine. Therefore, the scholar wants to improve the fitness level of the subjects with the help of yogic asanas which is less expensive, less energetic, and also convenient for the school students with the use of less space and facilities.

1. 50 YARDS DASH TEST FOR SPEED.
2. SIT AND RICH TEST FOR FLEXIBILITY.
3. 12 MINUTES RUN AND WALK TEST FOR ENDURANCE.
4. 30 METERS RUN WITH THE BALL TEST FOR BALL CONTROL
5. KICKING ACCURSCY TEST FOR KICKING SKILL.
6. JUGGLING TEST FOR JUGGING SKILL.

**Independent Variables**

In the present study, a set of selected asanas formed the independent variables. They are listed below:
1. TAD-ASANA  
2. TRIKONA-ASANA  
3. PADMA-ASANA  
4. VIRA-ASANA  
5. PASCHIMOTTAN-ASANA  
6. SARVANGA-ASANA  
7. HALA-ASANA  
8. BHUJANGA-ASANA  
9. DHANUR-ASANA  
10. SHAVA-ASANA

On the basis of the previous researches and with reference to the advantages and disadvantages of various Yogic exercises for the students of age group up to 14 years it was advisable to select the above set of yogic exercises for the study.

4. Selection of Tests

The dependent variables were measured with the help of the following tests:

1. **Speed** was evaluated by 50 yards dash test. Many research reports recorded its reliability and validity within an accepted limit.

2. **Flexibility** was assessed by sit and reach test. It is a reliable and valid test to measure forward flexibility. Nelson and Johnson reported its reliability coefficient as 0.99. They also mentioned that this test has its face validity.

3. The ability in **Endurance** was assessed by a 12 Minutes run and walk test. It is also a standard as well as reliable and valid test for assessing endurance.

4. Football skill like, 30 Meters Run with the Ball test suggested by SAI was for measuring **Ball control**.
5. Kicking accuracy test was measured for assessing **Kicking efficiency**.

6. Juggling skill test in football was for assessing the **balancing ability, agility, reaction ability and sense of touch of ball**.

Many research reports recorded its reliability and validity within an accepted limit.

**5. Criterion measures**

The following criterion measures were selected to record the reading on various tests:

1. Speed was measured by the standard test as 50 yards dash test and scored in seconds.

2. Flexibility was measured by Sit and Rich test and the scores recorded in centimeters.

3. Endurance measured by 12 Minutes run and walk test and the scores was recorded in distance covered in meters.

4. 30 meters run with the ball test was measured by SAI football skill test.

5. Kicking accuracy test was measured by SAI football skill test.

6. Juggling test was measured by SAI football skill test.
6. Description of the Tests

1. 50 YARDS AND DASH TEST FOR SPEED

Aim

To measure speed of the subjects.

Equipment

Minimum 60 yards open space, stop watch, clapper or whistle, marking powder, measuring tape.

Procedure

The subjects (four at a time) stood behind the starting line. On getting the starting signal (whistle), the subjects ran as fast as possible across the finish line which was at a distance of 50 Yards.

Scoring

The elapsing time from the starting signal until the runner’s torso crossed the finish line was recorded to the nearest one hundredth of a second as the final score.
50 YARDS DASH TEST (Fig. 1)
2. **SIT AND REACH TEST FOR FLEXIBILITY**

**Test Aim**

To measure the flexibility of the subjects.

**Equipment**

Test was conducted on floor. 50 cm long one line on the floor with a gap of one cm is marked. Measuring tape, marking powder and whistle.

**Procedure**

The subjects will sit on the floor at 0 cm touching the heel of the foot joined together. When the subject will be ready, they will stretch the body from the back as much as possible and touch the scale marked on the floor with the middle finger.

**Scoring**

The result is read from the scale. Two attempts are given at recovery rest at 30 seconds. In case, a subject is not able to extend his hands even to the level of line, then the distance from the 0 cm make to the tip of middle finger should be measured.
SIT AND REACH TEST (Fig. 2)
3.12 MINUTES RUN AND WALK TEST FOR ENDURANCE

Aim
To measure endurance of subject

Equipment
Stop watch, Clapper or whistle, marking powder, measuring tape.

Procedure
In the track subjects run or walk on command of order, on your mark, go. The tester starts the watch and keeps informing them, the timing after every round. The subjects are permitted to run or walk for 12 minutes. If possible, lap scorer should be used or subject can also keep the record. After 12 minutes are over, the tester ordered to stop, and the subjects stopped wherever they were.

Scoring
The total number of rounds plus additional distance covered by each subject recorded by the tester or the assistant and converted in meters.
12 MINUTES RUN AND WALK TEST (Fig. 3)
4. **30 METERS RUN WITH THE BALL TEST**

**Aim:**

To assess the speed and football control while running.

**Equipment:**

A Stopwatch, 6 Footballs, Marking powder, Clapper or whistle and Measuring Tape.

**Procedure:**

Five straight lines, 30 meters apart, are marked. The player is instructed to stand behind the marked line without touching the line, with a football placed on the line. On the signal Ready, Go, the timer starts the stopwatch and the player starts running with the ball as fast as possible to reach the 30 meters finish line, by pushing the ball with leg control and by making a minimum of four inches with the ball at each touch including the first touch.

**Scoring:**

Time is measured from the interval of starting ‘Go’ until both ball and the player reach to the finish line. Each subject is given two attempts at an interval of 30 seconds and the best performance timing is evaluated.
30 METERS RUN WITH THE BALL TEST (Fig. 4)
5. KICKING ACCURACY TEST

Aim:

To assess the kicking efficiency of football players.

Equipment:

A Football goal post, inflated footballs, marking powder, whistle, measuring tape and two ropes.

Procedure:

The goal post is divided into three equal parts by fixing two ropes as shown in the figure. A football is placed at the penalty mark (11 meters distance from the goal line). The player is given ten attempts, 4 to kick the ball in left part, 4 to right part, and two to the middle part of the goal in the following sequence- first two kicks in the right part followed by one kick in the middle of the goal to be followed by 2 kicks to the left part, and repeating the same pattern for the remaining five kicks. The ball is required to cross the goal line in the air to have the desired speed and strength in the kick.

Scoring:

The number of correct kicks into the designated parts of the goal in a 10 attempt trials, are evaluated.
KICKING ACCURACY TEST (Fig. 5)
6. **JUGGLING TEST**

**Aim:**

To assess the balancing ability, agility, reaction ability and sense of touch of the ball.

**Equipment:**

3 Footballs, marking powder, whistle, measuring tape.

**Procedure:**

The subject is instructed to keep the ball in the air by juggling continuously and is told that he may use any part of the body except hand while juggling. For starting the juggling, the subject is allowed to throw the ball in the air or to bounce the ball on floor and start juggling till the subject is able to juggle the ball without dropping it on the ground.

**Scoring:**

The number of touches made by the subject continuously in his better performance out of the two attempts is allowed to each subject. The number of touches is then converted into points.
JUGGLING TEST (Fig. 6)
7. Description of Yogic Exercises:

The training of asanas imparted on the experimental group has been described below.

A set of 10 yogic exercises was taken by the researcher in this study as independent variable in order to observe the effect of these variables on physical fitness components and football skills.

The following yogic exercise have been selected on the basis of the fact that they are beneficial as they promote more blood supply to the heart, brain, keep it healthy and alert.

1. TAD-ASANA
2. TRIKONA-ASANA
3. PADMA-ASANA
4. VIRA-ASANA
5. PASCHIMOTTAN-ASANA
6. SARVANGA-ASANA
7. HALA-ASANA
8. BHUJANGA-ASANA
9. Dhanur-ASANA
10. SHAVA-ASANA
1. TAD-ASANA: MOUNTAIN POSTURE

Pronunciation: - Ta-dah-sa-na

Translation: - The Sanskrit word tada means mountain. This posture is also known by the name samasthiti-asana. Sama means unmoved, equilibrium, and sthiti means standing upright or firmly, abiding, remaining, thus samasthiti means standing firmly without moving.

Techniques:

1. Stand with both feet touching from the heel to the big toe, keeping the back straight and the arms pressed slightly against the sides with palms facing inward.

2. Slightly tighten or flex the muscles in the knees, thighs, stomach and buttocks maintaining a firm posture. Balance you weight evenly on both feet.

3. Inhale through the nostrils and lift the buttocks off the legs arching the back and thrusting the abdomen forward and tilt the head as far back as possible.

Durations: - One repetition for several minutes is advisable.

Benefits: -

1. The regular practice of this asana helps to increase the height of the body.

2. Strengthens arms and legs and helps to remove lethargy.

3. Concentration will improve.

4. Cures indigestion.

5. It helps to keep spine healthy.
TAD-ASANA (Fig 7)
2. TRIKONA-ASANA: THE TRINGLE POSE

Pronunciation: - tri-cone-ah-sa-na

Translation: - The Sanskrit word tri means three and kona means corner or angle. Thus "three corners or three angle posture" is often called the triangle posture. This posture is also known as the utthita trikona-asana. Utthita means stretched or extended thus this is the Extended Triangle Pose.

Techniques: -

1. Stand in the tada-asana (Stand with both feet touching from the heel to the big toe, keeping the back straight and the arms pressed slightly against the sides with palms facing inward.

2. Separate the feet slightly further than shoulder distance apart.

3. Inhale and raise both arms straight out from the shoulders parallel to the floor with the palms facing down.

4. Exhale slowly while turning the torso to the left, bend at the waist and bring the right hand down to the left ankle. The palm of the right hand is placed along the outside of the left ankle. The left arm should be extended upward. Both legs and arms are kept straight without bending the knees and elbows.

5. Turn the head upward to the left and gaze up at the fingertips of the left hand. Inhale and return to a standing position with the arms outstretched.

6. Hold this position for the duration of the exhaled breath. Exhale and repeat steps 4 - 6 on the opposite side.
Duration: - Remain in the forward bending position for the duration of the exhale breath. Do two or three repetitions (one repetition consists of bending forward on both sides).

Benefits:-

1. It makes the spine flexible and develops the mental power. This asana is also beneficial to the eyes.

2. Stretches and strengthens the thighs, knees and ankles, neck and shoulders.

3. Stretches the spine, chest and abdomen, hips, groins, hamstrings and calves.

4. It helps to remove the Muscles stress and improves the appetite.

5. Helps to develop a more balanced functioning between the left and right sides of the body.

6. Gives access to the spine through freedom of movement of the hips.

7. Improves balance and concentration.
TRIKONA-ASANA (Fig 8)
3. PADMA-ASANA: THE LOTUS POSTURE

Pronunciation: - pad-mah-sa-na

Translation: - The Sanskrit word padma means lotus. Besides the obvious reference to the similarity of the folded legs to lotus petals, the lotus holds special significance in reference to Yoga and Meditation. Though rooted in the mud, the lotus blossom rises above to blossom in the sun. Although it grows in pools of water the leaves of the lotus always remain dry. The symbolism of the lotus points to the purity of consciousness and the journey of transformation from ignorance to awakening.

Techniques:-

1. Sit on the floor with the legs stretched out straight in front.

2. Bend the right knee and grasp the right foot with both hands and place it on top of the left thigh bringing the heel as close to the navel as possible.

3. Bend the left knee and grasp the left foot with both hands and place it on top of the right thigh bringing the heel as close to the navel as possible.

4. Both knees should be on the ground and the soles of the feet are pointed upward. The spine is held straight but not rigid.

5. The position of the legs may be switched after a period of time if the posture becomes uncomfortable.

Duration: - The length of time to sit in the padma-asana depends on your intention. In the course of a typical asana routine you might hold it for several minutes or until you experience discomfort in the legs. When used as a meditation posture you hold it for the duration of the meditation.
Benefits:-

1. Regular practice brings peace of mind.

2. Stretches the ankles and knees.

3. It removes diseases of heart and strengthens the muscles of the waist and lower limbs.

4. Improving flexibility of your shoulder, chest, spinal cord, waist & thigh and making it tough and strong.

5. Strengthens digestive power, removes constipation and improves appetite.

6. It is helps in relieving the physical, nervous and emotional preambles.
PADMA-ASANA (Fig 9)
4. VIRA-ASANA: THE HERO POSE

Pronunciation: - veer-ah-sa-na

Translation: - The Sanskrit word vira means hero, brave or eminent man, or warrior.

Techniques:-

1. Kneel on the floor with the calves and tops of the feet flat on the floor and the thighs touching.

2. Slowly spread the feet, about shoulder distance apart, while keeping the knees together. Place the buttocks flat on the floor. The outer sides of the thighs are touching the inner sides of the calves and the soles of the feet are exposed facing up. Place the hands palms downs, on the knees and form a circle with the thumb and forefinger (in the chin-mudra) while pointing the other fingers straight ahead.

3. Breathe slowly and deeply through the nostrils and remain motionless for six complete breaths (an inhale and exhale is one complete breath).

4. Inhale slowly and stretch the arms straight up over the head and interlock the fingers with the palms pushed upward. Remain in this position for six complete breaths.

5. Exhale slowly, releases the fingers and slowly bends forward at the waist while placing the palms of the hands flat on the soles of the feet. Place the chin between the knees.

6. Hold this position for the duration of six complete breaths. Inhale, raise the chest up, stretch the legs straight ahead and place the hands, palms down, on top of the thighs.
**Duration:** - Hold the posture from several minutes as part of an asana session or for the duration of your meditation or pranyama.

**Benefits:**

1. Increases stamina.

2. Stretches the chest and lungs, shoulders and neck, belly.

3. Strengthens the shoulders and arms, and the muscles of the back.

4. Strengthens and stretches the thighs, calves, and ankles.

5. It is believed that those practice Vera Asana, develops courage and bravery.

6. The legs, the waist, the spinal column and the neck get exercised leading to improved blood circulation in joints.

7. It also promotes the functioning of digestive organs.
VIRA-ASANA (Fig 10)
5. PASCHIMOTTAN-ASANA OR UGRA-ASANA: THE NOBLE OR POWERFUL POSE

Pronunciation: - oo-grah-sa-na

Translation: - The Sanskrit word ugra means powerful, mighty, strong or noble. We usually keep this posture untranslated but it can be called the noble or powerful posture.

Techniques:

1. Sit on the floor with the legs together and extended straight out in front. Keep the back straight, shoulders level and head straight. Place the hands, palms down, flat on top of the thighs then inhale deeply.

2. Exhale and extend the arms straight out in front, parallel with the floor with fingers pointed straight ahead and palms facing down.

3. Inhale slowly while raising the arms over the head, keeping them straight, and bending as far back as is comfortable. Tilt the head back and look up at the hands.

4. Exhale slowly bending forward at the waist and grasp the feet with the hands. Bring the head as close to the knees as possible, placing it on the knees if you can, keeping the legs straight. (If you are unable to grasp the feet then grasp the ankles).

5. Hold that position for the duration of the exhale breath.

6. Inhale slowly and return to the seated position described in step.

Duration :- This posture two or three times holding each repetition for the duration of the exhaled breath and take at least three deep breaths in-between each repetition. As you become more adept at doing the ugra-asana you may begin
breathing slowly through the nostrils while holding the posture to increase its duration.

Benefits:

1. Stretches the hamstrings on the back of the legs.

2. Stretches and lengthens the entire spine.

3. Relieves digestive problems such as constipation.

4. Invigorates the nervous system.

5. Improves concentration.

6. Calms the brain and helps relieve stress and mild depression.

7. Soothes headache and anxiety and reduces fatigue.

8. Balances the prana within the body.
PASCHIMOTTAN-ASANA (Fig 11)
6. SARVANGA-ASANA: THE SHOULDER-STAND POSE

**Pronunciation:** - sar-vong-ah-sa-na

**Translation:** - The Sanskrit word sarvaanga means limb or body. Sarvanga therefore translates as either "all-limb" or "whole-body posture". It is so named because of the benefit it provides to the entire body. It is commonly referred to as the "shoulder-stand" because one is essentially standing on one's shoulders.

**Techniques:-**

1. Lie flat on the back in the shava-asana.

2. Inhale through the nostrils. Place the palms face-down on the floor. Keeping the hips on the floor, bend the knees and bring them up toward the stomach while exhaling.

3. Inhale slowly through the nostrils, press down on the hands and lift the torso from the waist up off the floor, arching the spine backwards and straightening the arms. Keep the hips on the floor.

4. Inhale, and then while exhaling, raise the legs straight up perpendicular to the floor. You may support your hips with your hands or leave the arms flat on the floor, whichever is most comfortable.

5. The legs should be together with the knees straight and toes pointed straight up. Keep the head straight without turning it to either side. The chin should be pressed against the chest.

6. Breathe gently through the nostrils while the posture is held.

7. Reverse the steps to return to the shava-asana.
**Duration:** - Hold the sarvanga-asana anywhere from one to five minutes depending on comfort. Repeat the posture two or three times.

**Benefits:**

1. Improves digestion.
2. Reduces fatigue.
3. Calms the brain and helps relieve stress and mild depression.
4. It gives healthy stretch to the neck muscles.
5. Tones the legs and buttocks.
6. Reduce the fat of abdomen.
7. It preserves the elasticity of the spinal column and prevent it from being sluggish.
SARVANGA-ASANA (Fig 12)
7. HALA-ASANA: THE PLOW POSE

**Pronunciation:** - hull-ah-sa-na

**Translation:** - The Sanskrit word Hala means plow, as in a traditional plow that is drawn by a horse or oxen. When performing this posture your body resembles a plow.

**Techniques:**

1. Lie flat on the back in the shava-asana.

2. Inhale through the nostrils. Place the palms face-down on the floor. Keeping the hips on the floor, bend the knees and bring them up toward the stomach while exhaling.

3. Inhale, and then while exhaling, raise the legs straight up perpendicular to the floor. You may support your hips with your hands or leave the arms flat on the floor, whichever is most comfortable.

4. Exhale and continue to raise the legs over the head, bending at the waist, lifting the back and buttocks until the toes touch the floor directly in back of the head. Keep the feet together. If the lower back is supported by the hands try returning the arms flat to the floor with the palms facing down. If you are unable to comfortably place the arms on the floor continue to support the lower back with the hands.

5. Keep the knees straight. Breathe slowly through the nostrils and hold the posture for several minutes. If you cannot touch the floor with your toes hold them as close to the floor as possible and continue to exert effort to lower them.

6. Reverse the steps to return to the shava-asana.
**Duration:** - Hold the hala-asana for as long as you are comfortable. 20-30 seconds is fine for early attempts, increase the time gradually as you become more comfortable.

**Benefits:**-

1. Maintains elasticity of spine and keeps Spinal nerve in perfect health.

2. Develops strong abdominal muscles and improves digestion and excretory systems.

3. Calms the brain. Stimulates the abdominal organs.

4. Stretches the shoulders and spine.

5. Helps relieve the symptoms of menopause.

6. Reduces stress and fatigue.

7. Therapeutic for backache, headache.
HALA-ASANA (Fig 13)
8. BHUJANGA-ASANA OR NAGA-ASANA: COBRE POSE

**Pronunciation:** - na-gah-sa-na

**Translation:** - The Sanskrit word naga means snake or serpent. The naga-asana is also known as the bhujanga-asana. The Sanskrit word bhujanga, which also means snake, is derived from the root bhuj which means to bend or curve.

**Techniques:**

1. Lie on the stomach with the head turned to one side and the arms alongside the body with palms facing upward.

2. Turn the head and place the chin on the floor. Inhale then exhale slowly through the nostrils and swing the arms around until the hands are placed just below the chin with the palms down and the finger tips of each hand almost touching and the elbows on the floor.

3. Inhale slowly through the nostrils, press down on the hands and lift the torso from the waist up off the floor, arching the spine backwards and straightening the arms. Keep the hips on the floor.

4. Tilt the head as far back as possible and hold the posture for the duration of the inhaled breath.

5. Exhale and reverse the process to return to position.

**Duration:** - Hold the posture for either the duration of a held inhaled breath or from one-half to three minutes. Repeat the naga-asana two to five times.
Benefits:-

1. Muscles of abdomen and chest become supple.

2. Respiratory, digestive and excretory system improves their functioning.

3. Spinal nerves are stimulated and minor defects of spinal curvature are corrected.

4. Functional disorders of neck, back and waist are corrected.

5. It brings flexibility to the spine and corrects spinal disorders and backache.

6. It activates chest, shoulders, neck, face and head areas in an effective way and enhances facial beauty.
BHUJANGA-ASANA (Fig 14)
9. DHANUR-ASANA: BOW POSE

**Pronunciation:** - dha-noor-ah-sa-na

**Translation:** - The Sanskrit word dhanur means bow-shaped, curved or bent. The bow referred is a bow as in "bow and arrow." This asana is so named because the body mimics the shape of a bow with its string stretched back ready to shoot an arrow.

**Techniques:**

1. Lie on the stomach with the head turned to one side and the arms alongside the body with palms facing upward.

2. Turn the head and place the chin on the floor. Exhale, bend the knees, reach back with the arms and grasp the right ankle with the right hand and the left ankle with the left hand.

3. While inhaling, slowly raise the legs by pulling the ankles up and raising the knees off the floor while simultaneously lifting the chest off the floor. Hold the inhale breath. The weight of the body should be resting on the abdomen.

4. Tilt the head as far back as possible. Hold the posture as long as you can comfortably hold the inhale breath.

5. Slowly exhale bringing the knees to the floor, release the ankles, slowly bring the legs and arms straight down on the floor and turn the head to one side, assuming the prone posture you began with.

**Duration:** - The Dhanur-asana is either held for the duration of the inhaled or between one and three minutes while breathing gently through the nostrils. Repeat it two or three times.
Benefits:-

1. Spinal column becomes flexible and its nerves are simulated.

2. Certain pain and back in lumber region and rigidity of spine or round back are corrected.

3. Builds a strong abdomen and elastic rectum muscles, thereby improving functioning of digestive and excretory systems.

4. Improves breathing.

5. Improves posture.

6. Stimulates the organs of the abdomen and neck.

7. Strengthens the back muscles.

8. Stretches the entire front of the body, ankles, thighs and groins, abdomen and chest, and throat, and deep hip flexors.
DHANUR-ASANA (Fig 15)
10. SHAVA- ASANA: THE CORPSE POSE

Pronunciation: - sha-vah-sa-na

Translation: - The Sanskrit word shava means corpse hence this is the Corpse. The shava-asana is also known as the mrta-asana.

Techniques:-

1. Lie flat on your back with your legs together but not touching, and your arms close to the body with the palms facing up.

2. Keep your eyes gently closed with the facial muscles relaxed and breathe deeply and slowly through the nostrils.

3. Starting at the top of the head and working your way down to the feet, bring your attention to each part of your body, consciously relaxing it before proceeding on to the next.

4. Remain in the shava-asana for between 3 and 5 minutes or longer. If you become sleepy while in the shava-asana begin to breathe a bit faster and deeper.

Duration: - It recommends that you begin your period of yoga-asana practice with at least 3-5 minutes of shava-asana. Return to it periodically through your posture session to relax and rejuvinate the body/mind and then conclude your session with at least 3-5 minutes more.

Benefits:-

1. Shava-asana improves concentration levels.

2. It is very good for respiratory system.
3. It relaxes and rejuvenates both mind and body.

4. It promotes healthy blood circulation in the entire body. It keeps your body fit and fresh.

5. It removes disturbing thoughts and tensions.

6. It improves the functioning of the brain.

7. It improves your work efficiency.

8. It heals different pains and aches
SHAVA- ASANA (Fig 16)
8. Procedure of the study:

For the present study sixty male subjects (N=60) were chosen. The preliminary information about the subjects like name and ages were collected one week earlier than the actual day of administrating the test. The age of the subjects were confirmed also from the school register. The subjects were randomly selected as their age group was divided into two groups consisting of 30 subjects each in the experimental group and the control group.

A set of ten asanas were practiced for a total of 8 weeks period. Control Group did not receive this training. However, all the 60 subjects underwent the pre-test and post-test before and after the training programme. The pre-test data collection was completed within one day from 9.00 am to 4.00 pm. Similarly, the post-test data were collected.

9. Training programme:

Training on asanas was given to the experimental group. As per the experts opinion only ten asanas had been selected before commencement of actual training. The dosages involving frequency, repetition and maintenance of time have been fixed with several trials that are after pilot study.

The schedule of yogic exercise training has been presented below:

Schedule of 8 weeks training of yogic exercises:

A week programme (Six days in a week) of asanas, which was previously selected and approved by the experts and scholars guide as to be employed on the experimental group except the control group in the morning under the supervision of respective expert and their assistants who were previously trained and instructed, has been planned scientifically.
The training programme on experimental group was checked by the research scholar and the training schedule mentioned below was administered to the experimental group.

**Training schedule and duration:**

1. **First Week:**

   All the yoga exercises from one to nine was performed by the subjects and corrected by the scholar. On average each exercise will be of five minutes each, only Shava-asana will be of 10 minutes at the end of the training. Before Shava-asana 5 minutes rest was given.

   (Exc. 9 x 5 minutes = 45 minutes. + Shavasana 10 minutes + 5 minutes rest = 60 minutes.)

   **Total Duration =** 45+5+10= **60 minutes**

2. **Second to Fourth weeks:**

   In the second to fourth weeks two sets of yoga exercise were performed for three minutes each. Three minutes rest was given in between two sets. Shana-asana was of five minutes at the end of the training.

   (1 set. 9x3 minutes = 27 minutes x 2 sets=54 minutes + 3 minutes rest+ 5 minutes Shava-asana = 62 minutes)

   **Total Duration = 54+3+5= 62 minutes.**

3. **Fifth to Seventh weeks:**

   In fifth to seventh weeks, three sets of yoga exercise were performed for two minutes each. Two minutes rest in between the sets. Shavan-asana was of five minutes at the end of training.

   (1 set. 9x2 minutes = 18 minutes x 3 sets=54 minutes + 4 minutes of rest for two interval + 5 minutes Shava-asana = 63 minutes)
Total Duration = 54+4+5= 63 minutes.

4. Eighth Week:

In the eighth week two sets of yoga exercise were performed for three minutes each. Three minutes rest was given in between two sets. Shana-asana was of five minutes at the end of the training.

\[(1 \text{ set. } 9\times3 \text{ minutes } = 27 \text{ minutes } \times 2 \text{ sets}=54\text{minutes } + 3\text{minutes rest+ 5 minutes Shava-asana } = 62 \text{ minutes})\]

Total Duration = 54+3+5= 62 minutes

The training programme with number of sets, duration of sets, rest in between the sets and the total duration of the exercise is presented below:

<table>
<thead>
<tr>
<th>WEEKS</th>
<th>SET OF EXCS.</th>
<th>DURATION FOR SETS</th>
<th>REST</th>
<th>SHAVA-ASANA</th>
<th>TOTAL DURATION</th>
</tr>
</thead>
<tbody>
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<td>1st</td>
<td>1</td>
<td>45 minutes</td>
<td>5 minutes</td>
<td>10 minutes</td>
<td>60 minutes</td>
</tr>
<tr>
<td>2nd to 4th</td>
<td>2</td>
<td>54 minutes</td>
<td>3 minutes</td>
<td>3 minutes</td>
<td>62 minutes</td>
</tr>
<tr>
<td>5th to 7th</td>
<td>3</td>
<td>54 minutes</td>
<td>4 minutes</td>
<td>5 minutes</td>
<td>63 minutes</td>
</tr>
<tr>
<td>8th</td>
<td>2</td>
<td>54 minutes</td>
<td>3 minutes</td>
<td>3 minutes</td>
<td>62 minutes</td>
</tr>
</tbody>
</table>

10. Statistical Analysis:

The data were analyzed using the ‘t’ test as suggested by Mc Guigan,(1969) for significance of differences between the control and experimental groups.

The analysis done by, SPSS 15 (a software statistical package)