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Effect of Yogic Exercise on Selected Physical fitness & Physiological Variables among High School Boys & Girls at Secondary Educational School

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Abstract

Yoga is sometimes referred to as the science of religion with the view that the human body is a vehicle for the spirit and soul. It offers a number of tools with which to tune and rebalance the „vehicle", so that it is able to attract the appropriate level and quantity of prana, and fulfill the human function. The objective of the study is to find out the effect of Yogic practices on selected physical fitness and physiological parameters i.e. speed, endurance, and vital capacity and Resting Heart Rate among High School Boys & Girls at Secondary Educational School. Materials & Methods: The samples were collected from the 100 (50 Boys & 50 Girls) High school boys & girls in Secondary Educational School Hyderabad in the age group of 12- 16 years from Hyderabad district. Tools Used: Physical Fitness & Physiological Parameters are Speed, Endurance and Vital capacity and Resting Heart Rate was measured respectively. During the training period the subjects will undergo their respective training programme i.e. yogic exercises of 45 minutes a day for 6 days a week for 12 weeks. Yogic Exercises: Padmasana – Siddhasana – Pachimottanasana – Bhujangasana – Dhanurasana – Kurmasana - Pranayama exercises. Results & Discussions: The mean value of boys speed pre-test is 10.600 and post-test mean value is 8.879. The mean value of boy's endurance pre-test is 5020.24 and post-test mean value is 6065.84. The mean value of boy's Vital capacity pre-test is 2.354 and post-test mean value is 3.714. The mean value of boys resting heart rate pre-test is 106.34 and post-test mean value is 74.62.The mean value of girls speed pre-test is 10.481 and post-test mean value is 8.8592. The mean value of girl's endurance pre-test is 4896.72 and post-test mean value is 6035.88. The mean value of girl's vital capacity pre-test is 1.501 and post-test mean value is 2.676. The mean value of girls Resting Heart Rate pre-test is 119.68 and SD value is 6.535 and post-test mean value is 81.28 and SD value is 5.785. Hence, it is finally concluded that the Effect of Yogic Exercises on physical fitness and physiological variables have shown a positive impact among

Pre-Test and Post-Test High school boys girls in Secondary Educational School Hyderabad district in relation to their physical fitness & Physiological parameters i.e. speed, endurance, and vital capacity and resting heart rate. Keywords: physical fitness speed, endurance & Physiological

Introduction

Yoga is sometimes referred to as the science of religion with the view that the human body is a vehicle for the spirit and soul. It offers a number of tools with which to tune and rebalance the „vehicle", so that it is able to attract the appropriate level and quantity of prana, and fulfill the human function. Asana and pranayama techniques "cleanse the body of tensions, toxins and impurities and release energy blocks, which impede the harmonious flow of energy in the body." (Sunder, 2009) Meditation techniques have several benefits. For example, not only do they allow a deeper connection to the inner life, which can lead to greater understanding of the actual causes of a person"s „disease", they also allow an increase in the connection to, and sharing of, the higher levels of the life force, which are themselves healing and enlightening to the body, mind, soul and spirit. Yoga, it is believed, has been evolving and practiced for at least 3 thousand years, and inevitably many schools and disciplines have emerged differing in detail but with the central themes remaining intact. These understandings have arrived during states of deep meditation and resultant „in tuition". This has come about through connection to what Tara Patel describes as the "vast mind realm" and which in yoga literature is referred to as the "watershed of knowledge" within the ultimate state of meditation, samadhi. In psychological terminology this might be described as the higher end of the bar of Jung"s collective unconscious, or the super conscious. In some ancient writings this can be referred to as the "astral light" of which there are said to be 7 levels, from high to low. It is perhaps difficult for western minds schooled in the scientific disciplines of bio medicine to accept this yoga view of human physiology (Swami Sivanadha, 2001).

Significance Of The Study

The study investigates the existing difference between pre-test and post-test of yogic exercise in relation to their selected physical fitness and physiological parameters i.e. speed, endurance, and vital capacity and Resting Heart Rate among High School Boys & Girls at Secondary Educational Schools. The finding of the study may provide guidance to the physical education teachers and coaches to prepare training programmes on the basis of the study. It may further help the researchers who are interested in other sports and games. The findings of the study may add to the quantum of knowledge in the area of sports and physical education.

Objective Of The Study

The research will find out the effect of Yogic practices on selected physical fitness and physiological parameters i.e. speed, endurance, and vital capacity and Resting Heart Rate among High School Boys & Girls at Secondary Educational School.

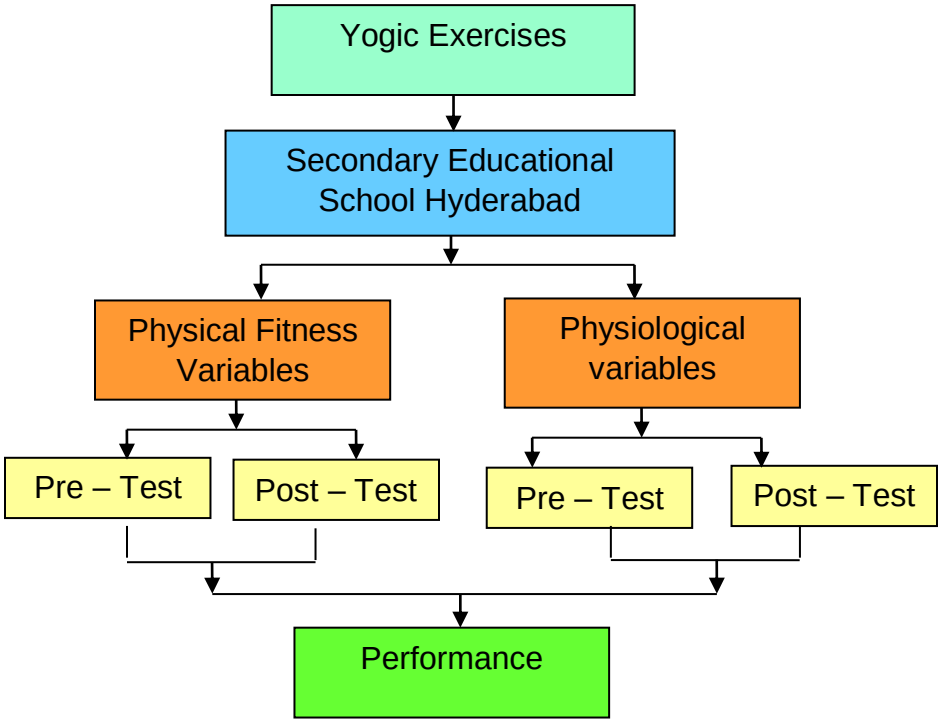
Hypotheses

The following hypotheses are formulated for the study.

- There may not be any significant difference the effect of Yogic practices between pre-test and post-test of High school boys & girls in at Secondary Educational School Hyderabad in relation to their selected physical fitness and Physiological parameters.

Design Of The Study

The diagrammatic presentation was presented hereunder.



Materials & Methods

The study was formulated based on the simple random sampling. The samples were collected from the 100 (50 Boys & 50 Girls) High school boys & girls in Secondary Educational School Hyderabad in the age group of 12- 16 years from Hyderabad district.

Tools Used

Physical Fitness & Physiological Parameters

Speed, Endurance and Vital capacity and Resting Heart Rate was measured respectively. During the training period the subjects have undergo their respective training programme i.e. yogic exercises of 45 minutes a day for 6 days a week for 12 weeks. **Yogic Exercises** - Padmasana – Siddhasana – Pachimottanasana – Bhujangasana – Dhanurasana – Kurmasana - Pranayama exercises

Data Collection Procedure

The subjects of the study consisting 100 high school students (50 Boys & 50 Girls) in the age group of 12- 16 years from Secondary Educational School Hyderabad has been selected for the study and they have undergone Yogic exercises for 45 days. Physical Fitness parameters test was administrated and the pre- test was taken, and then the post-test was administrated after the systematic training of Yogic exercises from Secondary Educational School Hyderabad.

Results & Discussions

The table showing significant difference of the effect of Yogic exercise between pre-test and post-test of boys Secondary Educational School Hyderabad district in relation to their physical fitness & Physiological parameters i.e. speed, endurance, and Vital capacity and resting heart rate.

SL. NO	**Parameters**	**N**	**Pre-test**		**Post-test**		**'t' value**
			Mean	**SD**	**Mean**	**SD**	
1.	Speed	50	10.600	0.254	8.879	0.648	3.436
2.	Endurance	50	5020.24	599.847	6065.84	613.143	4.476
3.	Vital capacity	50	2.354	0.160	3.714	0.110	6.252
4.	Resting Heart Rate	50	106.34	8.331	74.62	5.436	8.51

Results & Discussions

The table showing significant difference of the effect of Yogic exercise between pre-test and post-test of girls Secondary Educational School Hyderabad district in relation to their physical fitness & Physiological parameters i.e. speed, endurance, and vital capacity and resting heart rate.

SL. NO	**Parameters**	**N**	**Pre-test**		**Post-test**		**'t' value**
			Mean	**SD**	**Mean**	**SD**	
1.	Speed	50	10.481	0.602	8.8592	0.604	**9.618**
2.	Endurance	50	4896.72	304.966	6035.88	543.358	3.113
3.	Vital capacity	50	1.501	0.149	2.676	0.132	4.294

4.	Resting Heart Rate	50	119.68	6.535	81.28	5.785	3.820

Finding of the study

The effect of Yogic exercise between pre-test and post-test of boys Secondary Educational School Hyderabad district in relation to their physical fitness & Physiological parameters i.e. speed, endurance, and vital capacity and resting heart rate. The mean value of speed pre-test is 10.600 and SD value is 0.54 and post-test mean value is 8.879 and SD value is 0.648. the mean value of endurance pre-test is 5020.24 and SD value is 599.847 and post-test mean value is 6065.84 and SD value is 613.143. The mean value of Vital capacity pre-test is 2.354 and SD value is 0.160 and post-test mean value is 3.714 and SD value is 0.110. The mean value of resting heart rate pre-test is 106.34 and SD value is 8.331 and post-test mean value is 74.62 and SD value is 5.436.

The effect of Yogic exercise between pre-test and post-test of girls Secondary Educational School Hyderabad district in relation to their physical fitness & Physiological parameters i.e. speed, endurance, and vital capacity and resting heart rate. The mean value of speed pre-test is 10.481 and SD value is 0.602 and post-test mean value is 8.8592 and SD value is 0.604. The mean value of endurance pre-test is 4896.72 and SD value is 304.966 and post-test mean value is 6035.88 and SD value is 543.358. The mean value of vital capacity pre-test is 1.501 and SD value is 0.149 and post-test mean value is 2.676 and SD value is 0.132. The mean value of Resting Heart Rate pre-test is 119.68 and SD value is 6.535 and post-test mean value is 81.28 and SD value is 5.785.

Conclusion

Hence, it is finally concluded that the Effect of Yogic Exercises on physical fitness and physiological variables have shown a positive impact among Pre-Test and Post-Test High school boys girls in Secondary Educational School Hyderabad district in relation to their physical fitness & Physiological parameters i.e. speed, endurance, and vital capacity and resting heart rate. The poses also serve as a means to alter one's consciousness and mental focus in the spiritual quest for "enlightenment." This spiritually transformative process is, in fact, the

overriding purpose of the practice of yoga. In essence, yoga is designed to bring body, mind and spirit into balance. Through the practice of yoga, students and weekend warriors alike can benefit from this type of balance. This is especially true when students have pushed their bodies to the max, resulting in weakness or injury. Yoga can restore a weakened body and build it back up. Yoga postures breathe work and inner focus can help rebalance, strengthen and restore overtaxed muscles, joints and ligaments. Balancing the mind, body and spirit is a primary philosophical principle of yoga. It is considered the true way to honor the body.

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