

EFFECT OF YOGIC PRACTICES ON SELECTED PHYSICAL FITNESS VARIABLES OF COLLEGE STUDENTS

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Abstract

Yoga is efficient in reduces the risk of certain diseases and conditions to improved mental and physical health. The researcher is in the profession of physical education and he is also related with yoga and have keen interest in physical health. He observes that the college students as well as all age persons practice the yoga. So the researcher has taken the study entitled **Effect of Yogic Practices on Selected Physical Fitness Variables of College Students**. The aim of this investigation was to find out and analyze the effects of yogic practices on selected physical fitness variables of college students. For fulfilling the purpose, the researcher collected the data from the students of different colleges of Yavatmal city in Maharashtra affiliated under Sant Gadge Baba Amravati University of Maharashtra. The researcher has taken 40 college students of graduation and post-graduation, was selected randomly by using simple random sampling method. The age of the subjects was ranging from 18 to 24 years. The data of selected physical fitness variables i.e. agility and flexibility was collected by using standard test. The data of agility was measured with the help of Shuttle Run (10×4) and Trunk Flexibility was measured with the help of Sit and Reach test. The necessary data on the selected physical fitness variables has been collected by administering the specific test on same day. The data has been collected from the subjects before starting the yoga intervention program. After calculating the result the population was divided into two homogeneous groups viz. control and experimental group i.e. 20 in each. The experimental group was treated with yogic activities for four months (Except Sundays and holidays) and again after four months the data was collected from both the groups by administering the same test. The data of selected physical fitness variables of college students was analysed by using t-test. At last it was found that there is significant effect of yogic practices on physical fitness variables of college students, so the researcher's hypothesis is accepted.

Keywords: Effects, Yogic Practice, Physical Fitness, Agility, Flexibility, College Students, etc.

Introduction:

Yoga is a disciplined method for cultivating better perceptive awareness. It is the science of life, and an ideal way of living offers symphony to life by giving the body rhythm, the mind calm, and the soul harmony. Consequently, yoga is a means to fully realize enlightenment, happiness, and health. The physical, mental, and spiritual benefits of yoga assist one in giving their lives meaning, value, and virtue. Yoga is an art, science, and philosophy that influences people's lives on all levels. Because of this, yoga's effects must be felt in all of our daily activities. Psychology is a science of behaviour of the organization.

Physical fitness is the affirmative state of well-being allowing you adequate strength and energy to participate in a full, active life-style of your choice. Physical fitness is the general ability to adapt satisfactorily to physical effort. Persons are physically fit when they are able to meet both the usual and unusual demands of daily life, safely and effectively with undue stress or exhaustion. Physical fitness is the ability to carry out rationally well various forms of physical activities without being overly tired and includes qualities significant to the individual's fitness and well-being. The fit

individual is one who is free of limiting and debilitating ailments, who has the energies and skill to do the day's work and who has sufficient reserve of vitality not only to meet emergencies but also to participate in leisure time activities. Bodily fitness is one phase of total fitness, and it may be used inter-changeably with motor fitness. Other stages of total fitness include social fitness, emotional fitness, mental fitness etc.

Agility:

The speed with which an individual may change his body positions or fastness in changing directions while moving is known as agility. For example, shuttle run, dodging run, etc.

Agility means ability of quick and swift movements, and ability of quick apprehension of body movements. As used in physical education and sports, agility may be defined as "one's controlled ability to change body position and direction rapidly and accurately". Agility is affected greatly and differentially by the types of stimuli. Body agility is drastically better in response to an anticipated known stimulus as compared to agility performance of an individual in response to a stimulus requiring movements in the unknown directions.

Flexibility:

The range of movement in a joint or sequence of joints is known as flexibility. For example: Touching of fingers to toes while sitting or standing without bending knees.

Flexibility is generally defined a looseness or suppleness of the joint. More specially, flexibility is the range and the extent of the movement of a joint. Some individuals have a wide range of motion; others range of motion is fairly limited. Joint flexibility is controlled by a number of factors: the joint capsule contributes approximately 47 percent to the range of motion, the muscles contribute 41 percent, the tendons contribute 10 percent, and the skin contributes 2 percent. Because the joint capsule itself is rigid, the emphasis when attempting to increase or decrease flexibility is placed on the muscle and skin tissue. Stretching exercises enable these tissues to increase the range of the movement. Conversely, strengthening exercises may tighten up the muscles and tendons and can decrease the range of movement if not done correctly through the full range of motion.

Yoga is efficient in reduces the risk of certain diseases and conditions to improved mental and physical health. The researcher is in the profession of physical education and he is also related with yoga and have keen interest in physical health. He observes that the college students as well as all age persons practice the yoga. That's why he wants to know the effect of Yoga practice on physical fitness of college students and also the follow up of it. So the researcher has taken the study entitled as ***"Effect of Yogic Practices on Selected Physical Fitness Variables of College Students"***.

Objectives:

The objective of this study is to assess the effect of yoga on selected physical fitness variables (i.e. agility and flexibility) of college students.

Hypothesis:

From the scholar's understanding of the problem, it was hypothesized that yogic practices will be

significant effect on physical fitness variables of college students.

Research Methodology:**Source of data:**

For the present study the data has been collected from the students of different colleges of Yavatmal city in Maharashtra affiliated under Sant Gadge Baba Amravati University of Maharashtra, India. For this study 40 college students of graduation and post-graduation was selected randomly. The age of the subjects was ranging from 18 to 24 years.

Sampling Method:

For the present study the subjects has been selected by using Simple random sampling method.

Criterion Measure:

Criterion Measures for testing the hypothesis were as follows:

| Sr. No. | Variable | Tests |
|---------|-------------|----------------------------|
| 1. | Agility | 40 yard Shuttle Run (10×4) |
| 2. | Flexibility | Sit and Reach test |

The data of selected physical fitness variables i.e. agility and flexibility was collected by using standard test. The data of agility was measured with the help of Shuttle Run (10×4) and Trunk Flexibility was measured with the help of Sit and Reach test.

Collection of Data:

The necessary data on the selected physical fitness variables has been collected by administering the specific test on same day. The data has been collected from the subjects before starting the yoga intervention program. After calculating the result the population was divided into two homogeneous groups viz. control and experimental group i.e. 20 in each.

Now the experimental group was treated with yogic activities for four months (Except Sundays and holidays) and again after four months the data was collected from both the groups by administering the same test.

Training Schedule:

| Yogic training | Duration | Repetition | Sets | Rest between practices | Rest between Sets | Frequency/week |
|--|----------|------------|------|------------------------|-------------------|----------------|
| Sitilikarana Vyayama (loosening exercises) | 3 min | 3 | 2 | 3-6 s | | |
| Surya Namaskar | 4 min | 3 | 2 | 5-8 s | 3-5 min | 5 days/week |
| Salabasana | 2 min | 3 | 3 | 3-6 s | | |
| Halasana | 3 min | 3 | 3 | 3-6 s | | |
| Bhujangasana | 3 min | 3 | 3 | 3-6 s | | |
| Ustrasana | 3 min | 3 | 3 | 3-6 s | | |
| Vibareethakarani | 3 min | 3 | 3 | 3-6 s | | |
| Dhanurasana | 3 min | 3 | 2 | 3-6 s | | |
| Paschimotanasana | 3 min | 3 | 2 | 3-6 s | | |
| Savasana | 6 min | 1 | - | - | | |
| Nadi Shodhana Pranayama | 4 min | 3 | 1 | 3-6 s | | |
| Bhastrika | 4 min | 3 | 1 | - | | |

Table - 1: Comparison of Physical Fitness Variables between Post Tests of Control and Experimental Group

| Physical Fitness Parameters | Group | Mean | S.D. | M.D. | S.E. | Calculated t-value |
|-----------------------------|---------------|-------|------|-------|-------|--------------------|
| Agility | Post test (C) | 11.66 | 1.50 | 1.413 | 0.412 | 3.426 |
| | Post test (E) | 10.25 | 1.07 | | | |
| Flexibility | Post test (C) | 15.60 | 3.56 | 2.50 | 1.115 | 2.242 |
| | Post test (E) | 18.10 | 3.49 | | | |

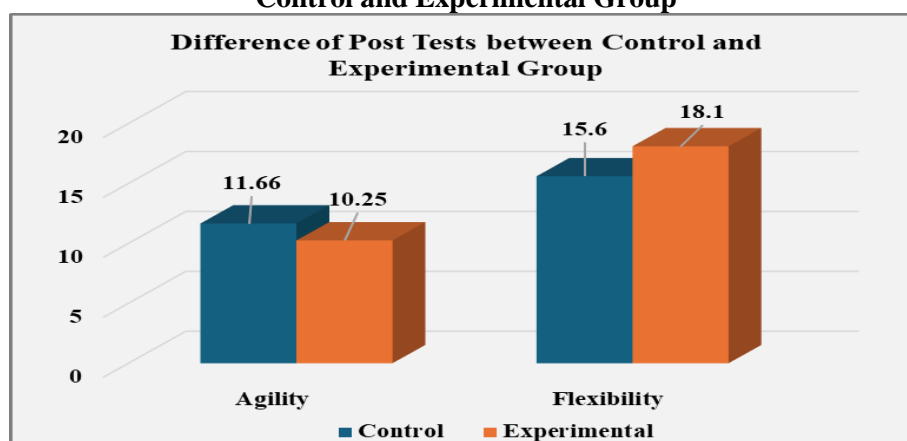
df = 39

tabulated 't' = 2.024

According to Table 1, it is found that control group post-test mean of agility of graduation and post-graduation college students (Mean=11.66) which is greater than the mean of experimental post-test group of agility of graduation and post-graduation college students (Mean=10.25). The results are interpreted as higher the score, more the agility. Now, the data was again analyzed statistically and found the 't' value is 3.426, which is greater than the tabulated value i.e., 2.024 in 0.05 level of significance in df=39. It proves that there is significant difference in agility between post-tests of control and experimental group of graduation and post-graduation college students, so the researchers pre-assumed is accepted.

It is found that control group post-test mean of flexibility of graduation and post-graduation college students (Mean=15.60) which is less than the mean of post-test of flexibility of experimental post-test group of graduation and post-graduation college students (Mean=18.10). The results are interpreted as higher the score, more the flexibility. Now, the data was again analyzed statistically and found the 't' value is 2.242, which is greater than the tabulated value i.e., 2.024 in 0.05 level of significance in df=39. It proves that there is significant difference in flexibility between post-tests of control and experimental group of graduation and post-graduation college students, so the researchers pre-assumed is accepted.

Graph - 1: Mean Difference of Physical Fitness Variables between Post Tests of Control and Experimental Group



Conclusion:

In the beginning of this study it was hypothesized by the researcher that yogic practices will be significant effect on physical fitness variables of college students. On the basis of results it can be concluded that there is significant effect of yogic practices on physical fitness variables of college students, so the researcher's hypothesis is accepted.

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