

## A study of effect of Yoga and long running training programme on physical fitness among selected students

■ VISHNUBHAI G. CHAUDHARI AND JAYENDRA SINH P. THAKOR

Received : 30.03.2012; Revised : 02.06.2012; Accepted : 06.06.2012

### ■ ABSTRACT

The purpose of the study was to find out the effect of Yoga and long running training programme on physical fitness components. 80 students (boys) of age group of 14 to 20 years were selected randomly from Nadoda Rajput Hostel, Patan to act as subjects for the study. The subjects were further divided into four groups by equating them viz., Yoga group, Long running group, Yoga and long running group and No-activity group. The experimental groups A, B and C were trained with exercises for ten weeks. The no-activity group carried out their daily normal routine work only. After 10 weeks of test, the t-ratio was used to find out the difference between pre-test and post-test of both the experimental and non-activity groups. In the non-activity group, there was no change of physical fitness between pre-test and post-test. Among the activity groups, the Yoga-long running groups, physical fitness was very high compared with other groups. In the only group and only long running group, physical fitness results were medium. So, the conclusion of this study reveals that to the long running athletes, if we provide Yoga training then the efficiency and physical fitness effect of their body increases which is very effective for the athletes.

See end of the article for authors' affiliations

Correspondence to :

VISHNUBHAI G. CHAUDHARI  
Department of Physical Education,  
Hemchandracharya North Gujarat  
University, PATAN (GUJARAT)  
INDIA

■ Key Words : Yoga, Physical fitness, Long running

■ How to cite this paper : Chaudhari, Vishnubhai G. and Thakor, Jayendra Sinh P. (2012). A study of effect of Yoga and long running training programme on physical fitness among selected students. *Internat. J. Phy. Edu.*, 5 (2) : 110-113.

The ancient science of India, "Ayurveda" says that "Health is wealth" for any Human being. As the science progressed, the information technology played vital role in the countries development. But at the same time, it is causing ill effects on human beings because of the life styles followed by them. The main reason is the static types of life style making the human beings to stick to their work, and in addition, the food habits are contributing for the unhealthy behaviour.

In this competitive world, the human beings are competing with each other causing problems of not only physical but also psychologically affecting them. Because of this life, it is very important and crucial to maintain good health. It can be achieved only through exercise, playing, sports, Yoga, meditation etc. (Prajapati, 2002). The guru of medicine "Sushruta" said doing exercise is not the solution for good

health but doing it rightly is the solution for good health. Every person needs to exercise as per his/her own body tolerance and the environment. For doing this, the human beings should consider age, energy, body structure, area, climate and food habits for doing the exercise if not, it leads to diseases (Bhatt, 1999).

### ■ METHODOLOGY

This study was mainly aimed in finding out Yoga and long running which have effect on the physical fitness of human body. For this study 80 (eighty) students were selected. From Nadoda Rajput Hostel, Patan of the age group 14-20 years. Among them, the students were given choice to choose any of the 4 groups of their wish such as Yoga group 20, Long running group 20, Yoga and long running group 20 and No activity group 20. The physical fitness of students was

checked by pull-ups. Standing broad jump, Shuttle run, were noted down. Later, among the 4 groups, the Yoga group was taught only Yoga, for the long running group only long running were taught and for combined group, both Yoga and long running was taught for ten weeks. And later, the physical fitness was checked. The pre and post-numerical results were analyzed through “t” test.

**■ OBSERVATIONS AND DISCUSSION**

The findings of the present study well as relevant discussions have been presented under following heads:

**Controlled group :**

As described in Table 1, the value of ‘t’ is 1.35 which is not significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested controlled group was not so significant.

So it can be conclude that the 600 meter run and walk of controlled group is not changed after test.

**Yoga group :**

As described in Table 1, the value of ‘t’ is 3.36 which is not significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested Yoga group was so significant.

So, it can be conclude that the 600 meter run and walk after formal training to the Yoga group was having positive change after test.

**Long running group :**

As described in Table 1, the value of ‘t’ is 3.52 which is significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested long running group was significant.

So, it can be conclude that the 600 meter run and walk after formal training to the long running group was having positive change after test.

**Combined group (Yoga and long running) :**

As described in Table 1, the value of ‘t’ is 4.03 which is significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested combined group was significant.

So, we can conclude that the 600 meter run and walk after formal training to the combined group (Yoga and long running) group was having positive change after test.

**Controlled group :**

As described in Table 2, the value of ‘t’ is 1.33 which is not significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested controlled group was not so significant.

So, it can be conclude that the shuttle run of controlled group was not changed after test.

**Yoga group :**

As described in Table 2, the value of ‘t’ is 2.89 which is

Item	Number	Group	Test	Average	S.D.	Co-relation	‘t’	Level of significance
A	20	Non-active	Pre-test	3.09	2.88	0.90	1.35	0.05 Not-significant
			Post-test	2.71	2.51			
B	20	Yoga	Pre-test	2.42	2.46	0.82	3.36	0.05 significant
			Post-test	3.66	2.86			
C	20	Long running	Pre-test	2.91	2.11	0.80	3.52	0.05 significant
			Post-test	5.85	3.26			
D	20	Yoga and long running	Pre-test	2.33	1.85	0.74	4.03	0.05 significant

Item	Number	Group	Test	Average	S.D.	Co-relation	‘t’	Level of significance
A	20	Non-active	Pre-test	4.72	3.03	0.91	1.33	0.05 Not-significant
			Post-test	5.09	2.94			
B	20	Yoga	Pre-test	4.90	3.29	0.82	2.89	0.05 significant
			Post-test	6.20	2.89			
C	20	Long running	Pre-test	4.47	2.98	0.90	5.26	0.05 significant
			Post-test	6.62	3.36			
D	20	Yoga and long running	Pre-test	5.18	3.27	0.85	5.84	0.05 significant
			Post-test	4.49	2.48			

significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested Yoga group was significant.

So, it can be conclude that the shuttle run after formal training to the Yoga group was having positive change after test.

**Long running group :**

As described in Table 2, the value of ‘t’ is 5.26 which is significant at the level of 0.05. So it is very much clear that the difference between the pre-tested and post tested shuttle running group was significant.

So, it can be concluded that the shuttle run after formal training to the long running group is having positive change after test.

**Combined group (Yoga and long run) :**

As described in Table 2, the value of ‘t’ is 5.84 which is significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested combined group was significant.

So, it can be conclude that the shuttle run after formal training to the combined (Yoga and long running) group is having positive change after test.

**Controlled group :**

As described in Table 3, the value of ‘t’ is 1.03 which is not significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested controlled group was not so significant.

So, it can be conclude that the standing broad jump of controlled group was not changed after test.

**Yoga group :**

As described in Table 3, the value of ‘t’ is 0.46 which is not significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested Yoga group was not significant.

So, it can be conclude that the standing broad jump after formal training to the Yoga group was having negative change after test.

**Long running group :**

As described in Table 3, the value of ‘t’ is 2.24 which is significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested long running group was significant.

So, it can be conclude that the shuttle run after formal training to the standing broad jump was having positive change after test.

**Table 3 : Standing broad jump**

Item	Number	Group	Test	Average	S.D.	Co-relation	‘t’	Level of significance
A	20	Non-active	Pre-test	4.34	3.51	0.96	1.03	0.05 Not-significant
			Post-test	4.12	3.44			
B	20	Yoga	Pre-test	4.20	3.90	0.77	0.46	0.05 Not-significant
			Post-test	3.94	3.53			
C	20	Long running	Pre-test	5.19	3.72	0.69	2.24	0.05 significant
			Post-test	6.58	3.23			
D	20	Yoga and long running	Pre-test	1.90	2.78	0.63	3.11	0.05 significant
			Post-test	3.87	2.58			

**Table 4 : Pull-ups**

Item	Number	Group	Test	Average	S.D.	Co-relation	‘t’	Level of significance
A	20	Non active	Pre-test	2.93	3.52	0.82	1.92	0.05 not-significant
			Post-test	2.28	2.99			
B	20	Yoga	Pre-test	2.45	3.27	0.65	6.00	0.05 significant
			Post-test	2.24	3.48			
C	20	Long running	Pre-test	2.10	2.86	0.60	4.32	0.05 significant
			Post-test	3.04	3.26			
D	20	Yoga and long running	Pre-test	2.10	2.86	0.71	7.32	0.05 significant
			Post-test	3.19	3.13			

**Combined group (Yoga and long run) :**

As described in Table 3, the value of 't' is 3.11 which is significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested combined group was significant.

So, it can be concluded that the standing broad jump after formal training to the combined (Yoga and long running) group was having positive change after test.

**Controlled group :**

As described in Table 4, the value of 't' is 1.92 which is not significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested controlled group was not significant.

So, it can be concluded that the pull-ups of controlled group was not changed after test.

**Yoga group :**

As described in Table 4, the value of 't' is 6.00 which is significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested Yoga group was significant.

So, it can be concluded that the pull-ups after formal training to the Yoga group was having positive change after test.

**Long running group :**

As described in Table 4 (C), the value of 't' is 4.32 which is significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested long running group was significant.

So, it can be concluded that the pull-ups after formal training to the long running group was having positive change after test.

**Combined group (Yoga and long run) :**

As described in Table 4 (D), the value of 't' is 7.32 which is significant at the level of 0.05. So, it is very much clear that the difference between the pre-tested and post-tested combined group was significant.

So, it can be concluded that the pull-ups after formal training to the combined (Yoga and long running) group was having positive change after test.

**Out come decision :**

The analysis of the data gave the following information about the student physical fitness :

Among the activity group, the Yoga and long running group physical fitness was high compared with other two groups.

The only Yoga group and only long running group physical fitness was less than that of combined Yoga and long running group but higher than non-activity group.

The physical fitness difference between only Yoga and

only long running groups results were almost equal to each other. By this study we can come to the conclusion that along with long running, Yoga training is very effective.

By comparing between activity group and non-activity group, the ten week of training increased the physical fitness of activity group.

Because of the 10 week training, the activity group physical fitness improved. And it was also observed that they were not getting much tired and they were able to gain the energy very fast.

**Conclusion :**

- In the non-activity group, there was no change or physical fitness between pre-test and post-test.
- Among the activity group, the Yoga and long running group physical fitness was very high compared with other two groups.
- The only Yoga group results and only long running group physical fitness results were medium.

So, the conclusion of this study reveals that to the long running athletes, if provided Yoga training then the efficiency and physical fitness of their body increased which is very effective for the athletes.

**Authors' affiliations:**

JAYENDRA SINH P. THAKOR, Department of Physical Education, Hemchandracharya North Gujarat University, PATAN (GUJARAT) INDIA

Email: j.pthakor@yahoo.in

**■ REFERENCES**

- Aayangar, B.K.(1994).** *Yog Dipika light on Yog Research trust.* Mumbai (M.S.) INDIA.
- A.I.U. (1987).** Physical fitness and sports standards in University. A.I.U. house, NEW DELHI (INDIA).
- Bhatt, Padhuman, R. (1999).** *Body science : Health science & sport Science*, Dhaval Prakashan, Ahmedabad (A.P) INDIA.
- Harshadbhai Patel (1996).** Sports Science, Krishna Graphics.
- Karana Roda Stork (1990).** Analysis of the Method of Teaching Physical fitness and their effect on strength. Dissertation Abstract, *International*, 51.
- Patel, Kantibhai R. (2001).** Sports training scientific principal, Rama Prakashan, Gandhinagar (GUJARAT) INDIA.
- Prajapati, B.A. (2002).** *Human body and Exercise.* Pathya Pustak Mandal, Gandhinagar (GUJARAT) INDIA.
- Swami, Rajarshimuni, Yogdarsika, Pancham (2000).** *Lifemision Baroda* (GUJARAT) INDIA.
- Swami, Krupalvanandji (1967).** *Aasan and Mudra.* Kavavarohan Tirth Seva Samaj, Po.Kayavarohan, (1st Ed.). Baroda (GUJARAT) INDIA.

\*\*\*\*\*

