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# **Influence of sand training on selected health related fitness and aerobic power of college men football students**

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**Abstract**---The principle of the study was to access to influence of sand training on explosive power and aerobic power of college men students. Thirty (n=30) college men football students was selected from Chennai district, TamilNadu, India the age were ranged should be 18 to 24 years. The selected subject was assigned into two equal groups with fifteen subjects with each group. The experimental group-I sand training and group-II control group. The experimental groups were under 8 weeks of training and control group was not under experimentation. Explosive power was measured by Sargent jump test aerobic power was measured by Margaria-Kalamen Test was taken for both groups. The initial and the final readings derived from the experimental and the control group underwent a procedure of statistical analysis using ANOVA. The confidence level was 0.05. Result of the investigation shows sand training have significant improvement on explosive power and aerobic power when compare to the control group

**Keywords**---sand training, explosive power, aerobic power, college men students.

**Introduction**

Fitness refers to an individual's ability to live a complete and balanced life, which includes physical, mental, emotional, social, and spiritual components, as well as the capability to express them all. A systematic process of repeating progressive

exercise or labour incorporating learning and adaptation is known as training. Speed is one of the most significant aspects of physical fitness, since it is required for many physical activities. The ability of an individual to produce successive movements of the same pattern at a high pace is known as speed.

In explosive sports like sprints, leaps, and most field sports, speed is a deciding element. Some people believe that people are either born with or without speed. Most people can only maintain maximal velocity for a short time and over a short distance. Correct running mechanics, stride length, leg cycle frequency, and hip height / posture must all be addressed during training to achieve maximal speed. Running is the foundation of many sports, and it has a ballistic element that is shared by other activities. Most sports, however, entail considerably more than linear sprinting at peak speed. It is frequently more crucial to be able to shift direction and velocity. Rapid and forcible muscular lengthening is used to accomplish explosive deceleration motions during direction changes.

### **Statement of the problem**

The purpose of the research was to find out the influence of sand training on selected health related fitness explosive power and aerobic power of college men students

### **Methods**

To achieve the motive of the prevailing take a look at, thirty (n=30) university college students turned into decided on from Chennai district, TamilNadu, India the age had been ranged ought to be 18 to 24 years. They have been assigned into same groups of 15 gamers each. Exp-I practiced as sandtraining for forty five minutes in each day of eight weeks, Exp-II will acted as a manipulate organization records were collected on explosive strength and aerobic before and after the education period.

### **Statistical Analysis**

The data collected from the both agencies as experimental groups and manage organization on explosive strength and aerobic energy statistically tested analysis of variance (ANOVA) changed into used to decide differences, if there may be any vast difference a number of the remedy means of variable zero.05 level of self assurance. The evaluation of variance on explosive energy and aerobic has been analyzed and all of the tables are cited beneath:

Table 1

Anova of explosive power and aerobic power of experimental and control group

Explosive Power						
Test	SANDTraining	Control Group	Sum of Square	Df	Mean	F ratio
Pre Test	44.52	44.00	2.13	1	2.13	0.48
			123.7	28	4.41	
Post			192.5	1	192.5	

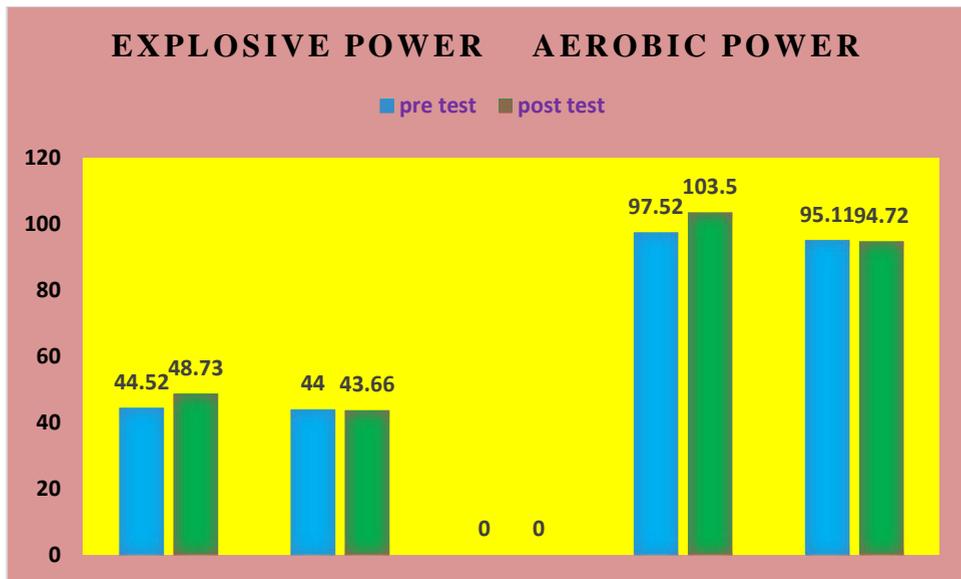
Test	48.73	43.66	96.26	28	3.43	56.00*
Aerobic Power						
Test	SANDTraining	Control Group	Sum of Square	Df	Mean	F ratio
Pre Test	97.52	95.11	43.63	1	43.63	2.59
			470.4	28	16.80	
Post Test	103.5	94.72	582.4	1	582.4	23.17*
			703.7	28	25.13	

(\*significance at 0.05 levels with df 1 and 28 is 4.17)

The acquired pre-test means for explosive power in the sand training group were 44.52 and 44.00, respectively, as shown in Table I. The desired table F-value was 4.17, while the achieved pre-test F-value was 0.48. The aerobic power on sand training group had a pre-test mean of 97.52, whereas the control group had a mean of 95.11. The obtained pre-test F-value was 2.59, whereas the needed table F-value was 4.17, indicating that the participants' initial scores were not significantly different.

The sand training group's post-test passing mean was 48.73, whereas the control group's was 43.66. The achieved post-test F-value was 56.00\*, whereas the needed table F-value was 4.17, and the post-test means of aerobic power in the sand training group were 103.5 and 94.72, respectively. The resulting post-test F-value of 23.17\* was higher than the necessary value of 4.17, indicating that substantial differences existed between the groups.

**Bar diagram of experimental and control group on sand training**



## Conclusion

The following findings are drawn from the study, which had various limitations imposed by the experimental settings. Because of the eight weeks of training, the sandtraining improved much more than the control group among college male students.

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