

A study of effect of weight training on the performance of free style swimmers

■ K.J. GOHIL AND MAHESH CHAUDHARY¹

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Members of the Research Forum

Associated Authors:

¹Shri C.P. Degree College of
Physical Education, RAJPIPLA
(GUJARAT) INDIA

Author for correspondence :

K. J. GOHIL

Shri C.P. Degree College of Physical
Education, RAJPIPLA (GUJARAT)
INDIA

■ **ABSTRACT**

To study the effect of weight training on the performance of free style swimmers was the aim of the present study. For this purpose 30 male students of Shri C.P. Degree College of Physical Education, Rajpipla, Gujarat. studying in B.P.E. Course were selected. There age was between 18-22 years. The subjects were randomly divided into two groups of 15 each. Researcher selected one group as Experimental group and the other control group. The experimental group underwent weight training of 8 weeks. Student's t-test for independent data was used to assess the differences between-group. The level of $p=0.05$ was considered significant. The results of the study showed positive effects of weight training.

■ **Key Words :** Weight Training, Free style swimming

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In today's age of scientific knowledge man is making rapid progress in all walks of life and it is true in the area of games and sports. Also scientific knowledge has revolutionalised the standards of human performance in sports disciplines. The athletes are now trained on scientific lines using highly sophisticated technology for top performance in their specific sports, with minimum expenditure of energy and time.

So, to have the utmost efficiency, consistent improvement and balanced abilities, a sportsperson must participate in year round conditioning programmes. For that they must put their bodies under a certain amount of stress to increase physical capabilities. Physical exercise is extremely important for maintaining physical fitness including healthy weight building and maintaining healthy bones, muscles and joints, promoting physiological well-being and strengthening the immune system. To improve or maintain a desired level of physical fitness, there is a need to constantly administer an adequate training intensity while exercising. Different training modalities are used for the development of

different features of physical fitness, as each sportsman requires different types and levels of physical composure.

Most weight training systems in use today is based on variation, of the De Lorne method. If properly carried out weight may improve speed, explosive power, strength and endurance.

■ **METHODOLOGY**

A total number of 30 male students were selected for the study and were divided into two groups of 15 each. 15 students were selected for control group and experimental group. A pre-test and post-test was taken before and after 8 weeks of weight training. A record of performance of 50 meter free style was taken for pre and post test. The results were recorded to the nearest 1/100th second.

The 8 weeks weight training programme was imparted to the students for 3 days a week which consisted of various weight training exercises such as single hand pulling, shoulder press, by rope exercise, good morning exercise, half squat, leg extension, leg hurling, jumping with weight and heel raise. The time selected was between 4.45 to 6.15 in the evening.

■ OBSERVATIONS AND DISCUSSION

Table 1 shows that the pre-test mean of weight training group was 46.70 and post test mean was 42.92. The mean difference was -3.78 and standard deviation was 1.52. The t-value 9.61 as shown in the table above was found statistically significant (P<.05).

Table 2 shows that the pre-test mean of control group was 57.83 and post test mean was 57.92. The mean difference was -0.09 and standard deviation was 0.80. The t-value 0.42 as shown in the table above was found statistically insignificant (P<.05).

Table 3 shows that the post-test mean of control group

Table 1 : Mean, mean difference, standard deviation and 't' value of the performance in 50 mtr free style swimming of the weight training group

Sr.No.	Test	Pre -test mean	Post-test mean	Mean difference	Standard deviation	't' value
1.	50 mtr free style	46.70	42.92	-3.78	1.52	9.61*

* indicate significance of value at P=0.05

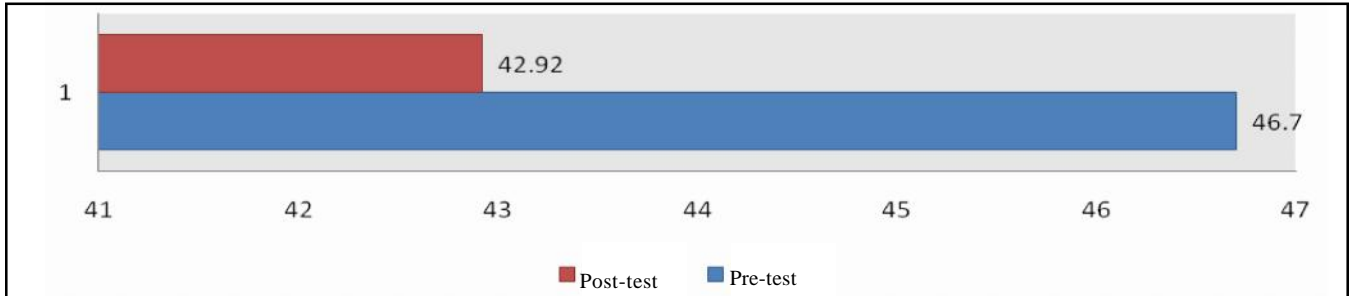


Table 2: Mean, mean difference, standard deviation and 't' value of the performance in 50 mtr free style swimming of the control group

Sr.No.	Test	Pre -test mean	Post-test mean	Mean difference	Standard deviation	't' value
1.	50 mtr free style	57.83	57.92	0.09	0.80	0.42

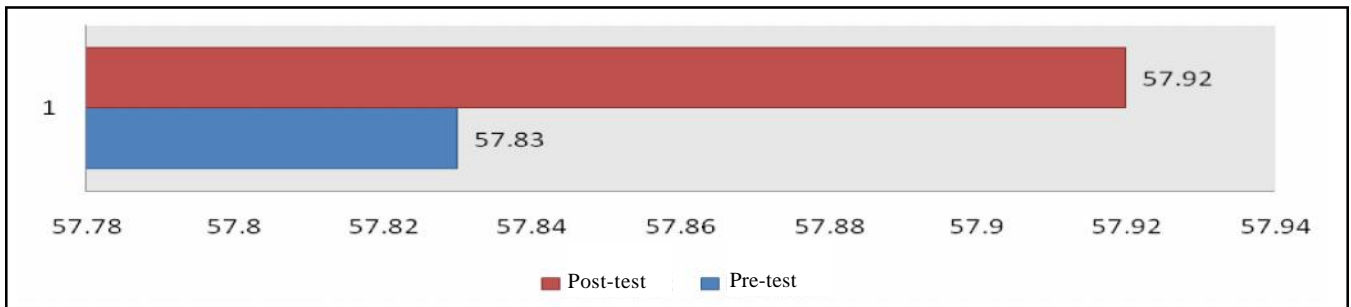
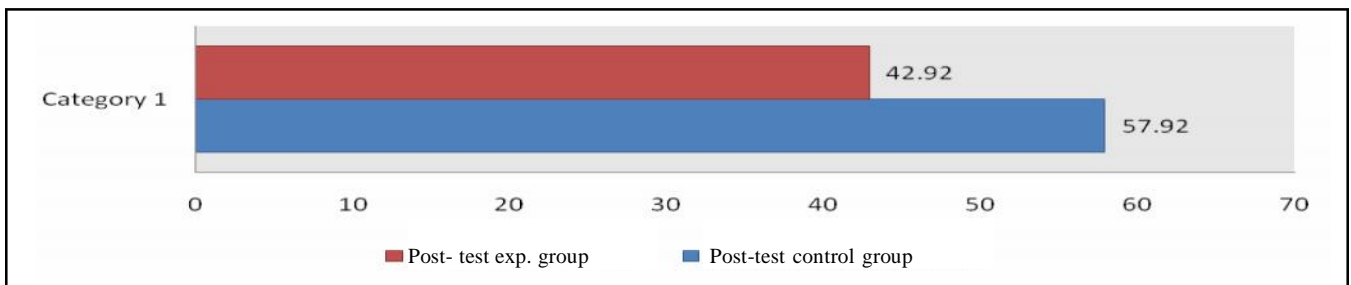


Table 3: Mean, mean difference, standard deviation and 't' value of the performance in 50 mtr free style swimming of the control group and experimental group

Sr. No.	Test	Post-test mean of control group	Post-test mean of experimental group	Mean difference	Standard deviation	't' value
1.	50 mtr free style	57.92	42.92	-15	11.05	3.77*

* indicate significance of value at P=0.05



was 57.92 and post test mean of experimental group was 42.92. The mean difference was -15 and standard deviation was 11.05. The t-value 3.77 as shown in the table above was found statistically significant ($P < .05$).

The findings showed that there was a significant difference between the pre-test and post-test of experimental group at 0.05 level. So, there was improvement in the performance in the 50 mtr free style swimming of the subjects, whereas there was no significant difference found in the pre-test and post test of the control group.

According to the above result it can be proved that through weight training there was a noticeable improvement in the free style swimmers.

Conclusion:

At the end of the training through the statistical analysis of the control and experimental group, there was positive result seen in the subjects of weight training group.

■ REFERENCES

- Bernass, Richard (1964).** The effect of weight training on speed in the 100 yard Dash, Completed Research in Health, Physical Education and Recreation, p. 46.
- Bhatt, Chhotubhai (1981).** *Vyayam Vigyan Kosh-4*, Khelkud, Rajpipla, Gujarat Vyayam Pracharak Mandal-1981.
- Clark, H. Harison (1959).** *Physical fitness news letters*. March-1959.
- Dave, Harshad (1974).** *Taran Kala*. Ahmedabad, Navjivan Prakashan Mandir, Sep.-1974.
- Fline, Paul D. (1973).** *Strength leg power and sprinting speed effected by a selected weight training programme*. Completed Research in Health, Physical Education and Recreation, p. 125.
- Foss, Fox Borrer (1989).** *The physiological basis of physical education and athletics*, Lova, 4th Ed., W.B.Standard Co. 1989.
- Gupta, J. Sen and Sinha, K.C. (1984).** Tell-Tail Fibres, Science Today, Aug-1984.
- Macderl, William D. Frand, I. Katch and Victor, L.Katch (1981).** *Exercise physiology, energy nutrition and human performance*, filodelphia, lee and febiger, 1981.
- Singh, Hardayal Singh (1984).** *Science of Sports Training*, 1st Edition, Patiala, NSNIS 1984.
- Shah, Chinubhai and Shah, P. (1928).** *Vyayam Vigyan Kosh-5* Khelkud, Rajpipla, Gujarat Vyayam Pracharak Mandal-1928.
- Sharma, Rajkumar Sharma (2000).** *Khel Training ke Vaigyanik Siddhanth*, Krida Prakashan, NEW DELHI, INDIA.

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