



# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

## INFLUENCE OF SPECIFIC TRAINING PROGRAMME ON PHYSIOLOGICAL COMPONENT OF HIGH SCHOOL LEVEL GIRLS FENCING PLAYERS

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### ABSTRACT

The purpose of this study was to find out the effect of specific training programme on selected Physiological variables of high school level Girls Fencing players. Randomly 30 Girls students were selected from Don Bosco School and Maratha High School, Nashik from Maharashtra, India. Were selected as subjects and their ages were ranged from 13 to 15 years. They were divided into two equal groups and each group consisted of 15 subjects. Group-I was performed specific training programme, and group-II was acted as a control group. The selected criterion variables are Resting pulse rate and Breath hold time were selected and measured by manual pulse test and breathing capacity for this study. The data was analyzed by the use of paired 't' test. The obtained 't' ratio was tested for significance at 0.05 level of confidence. The analysis of the data revealed that there was a significant improvement on Resting pulse rate and Breath hold time by the application of specific training programme.

**Key words:** Resting pulse rates, Breath hold time and Specific training.

### INTRODUCTION

Fencing is purely and simply an Indian game, which has been played in this country from ancient times. The game is very fascinating and exciting in nature both for players as well as audience. It is a very fast game. It is simple in its form and at the same time it improves physical fitness, agility, strength and stamina. Fencing is based on natural principles of psychophysical development. It is vigorous and fosters a healthy combative spirit among youths. It is not merely running with speed but its 'chase', a natural instinct to overtake; to pursue to catch 'a kill.' No doubt speed is the heat and to stand to a relentless pursuit of nine minutes at a stretch heart stoutness, stamina. In turn a physically fit youth enjoys it, controlled sprinting, dodging, diving are a few skills exhibited during the game. Coming to some common kinesiological need and biomechanics of Fencing game it is generally noticed that the defender (Runner / Dodger) in a stopping positing followed by sudden action e.g., swift running, turning, dodging, stopping, twisting abrupt stopping etc. Producing great psycho-Neuro-muscular strain especially there is loading over abdominal locomotive and spinal region. In the modern fast tempo of games perceptual motor skills need thorough assessment and application in the field. The game also needs more of the skillful execution such as sitting and getting up, giving "Kho", fast running, sudden stopping, freighting, covering, pole turning, diving, positioning, faking, intermittent sudden burst of speed all these activities are essential for attackers (Chasers).(Madhuri T.



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Waghchoure 2007)

## PHYSIOLOGICAL DEVELOPMENT

Like any other physical activity, during the participation and physical exertion in Fencing the endorphins are released. Endorphins tone up the entire health system. Even today no laboratory with so much of scientific advancement can manufacture endorphins, where as they can be developed only through game exertion. The best way for exertion is participation in Fencing game activities. They give recreation as well as relaxation and at the same time also help Physiological systems enrichment and thus mental efficiency. Ajmir Singh et al 2008).

## SPECIFIC TRAINING

Specificity is the principle of training that states that sports training should be relevant and appropriate to the sports for which the individual is training in order to produce a training effect. The specificity principle simply states that training must go from highly general training to highly specific training. The principle of specificity also implies that to become better at a particular exercise or skill, you must perform that exercise or skill. To be a good cyclist, you must cycle the point to take away is that a runner should train by running and a swimmer should train by swimming. (Blair,1993).

## METHODOLOGY

For this study, thirty (N=30) Girls Fencing players from Don Bosco School and Maratha High School, Nashik from Maharashtra, India. Were selected as subjects and their ages were ranged from 13 to 15 years. They were divided into two equal groups and each group consisted of 15 subjects. Experimental Group was given 8 weeks (Duration – 8 weeks, Session – 3 day/week, Duration of one session – One hour) of specific training programme and control group was not participated any specific training. Experimental Group-I (specific Training) were given to the experimental group. The subjects were tested in the selected criterion variables Resting pulse rate and Breath hold time were selected and measured manual pulse test in minute and breathing capacity in seconds for this study. Before and after the training period the data were collected. The collected data was treated by using paired t-test. The level of confidence was fixed at 0.05 level.

## RESULTS OF THE STUDY

TABLE-I

Table showing the Mean Difference, Standard Deviation and 't' Value of Experimental and Control Group in Resting pulse rate

| Group                  | Mean  | Md   | Std. deviation | Std. error of the mean | 't'  | Table value |
|------------------------|-------|------|----------------|------------------------|------|-------------|
| Experimental pre-test  | 74.60 | 2.54 | 7.17           | 1.85                   | 5.20 | 2.14        |
| Experimental post test | 72.06 |      | 5.76           | 1.48                   |      |             |
| Control pre test       | 77.53 | 1.33 | 6.75           | 1.74                   | 1.97 | 2.14        |
| Control post test      | 76.20 |      | 6.50           | 1.67                   |      |             |



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\*significance at 0.05 level of confidence

From the table to find out difference between experimental and control group of resting pulse rate. Difference in two groups 't' ratio was employed and the level of confidence was set at 0.05. Experimental group pre test and post test means were 74.60 and 72.06 respectively. In control group pre and post tests mean values were 77.53 and 76.20 respectively. In experimental group the obtained 't' ratio 5.20 was greater than the table value of 2.14 so it was found to be significant. In control group the obtained 't' ratio 1.97 was lesser than the table value of 2.14 so it was found to be insignificant.

TABLE-II

Table showing the Mean Difference, Standard Deviation and 't' Value of Experimental and Control Group in Breath hold time.

| Group                  | Mean  | Md   | Std. deviation | Std. error of the mean | 't'  | Table value |
|------------------------|-------|------|----------------|------------------------|------|-------------|
| Experimental pre-test  | 27.13 | 3.93 | 3.29           | 0.85                   | 8.50 | 2.14        |
| Experimental post test | 31.06 |      | 3.21           | 0.83                   |      |             |
| Control pre test       | 26.86 | 3.47 | 4.17           | 1.07                   | 1.69 | 2.14        |
| Control post test      | 30.33 |      | 7.48           | 1.93                   |      |             |

\*significance at 0.05 level of confidence

From the table to find out difference between experimental and control group of breath hold time. Difference in two groups 't' ratio was employed and the level of confidence was set at 0.05. Experimental group pre test and post test means were 27.13 and 31.06 respectively. In control group pre and post tests means values were 26.86 and 30.33 respectively. In experimental group the obtained 't' ratio 8.50 was greater than the table value of 2.14 so it was found to be significant. In control group the obtained 't' ratio 1.69 was lesser than the table value of 2.14 so it was found to be insignificant.

## DISCUSSION ON FINDINGS

The result of the study reveals that the eight weeks of specific training programme on selected dependent variables. There was a significant improvement on resting pulse rate through specific training. In experimental group the obtained 't' ratio 5.20 was greater than the table value of 2.14 so it was found to be significant. In control group the obtained 't' ratio 1.97 was lesser than the table value of 2.14 so it was found to be insignificant. Hence the result indicates that the significant improvement on resting pulse rate was due to the specific training alone. The result of the study reveals that the eight weeks of specific training programme on selected dependent variables. There was a significant improvement on breath hold time through specific training. In experimental group the obtained 't' ratio 8.50 was greater than the table value of 2.14 so it was found to be significant. In control group the obtained 't' ratio 1.69 was lesser than the



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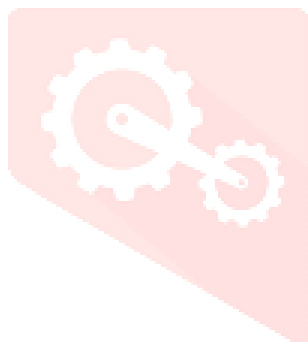
table value of 2.14 so it was found to be insignificant. Hence the result indicates that the significant improvement on breath hold time was due to the specific training alone.

## CONCLUSION

- 1.It was concluded that there was a significant improvement on resting pulse rate by the application of specific training programme.
- 2.It was concluded that there was a significant improvement on breath hold time by the application of specific training programme.

## REFERENCES

- Dr. Madhuri T. Waghchoure.(2007). Measurements and evaluation in physical education study of Fencing game. New Delhi; friend publications.
- Hardayalsingh. (1991). Science of sports training . New Delhi : D.V.S. publications.
- Dr. Ajmirsingh.Et. al. (2008).Essential of physical education.Ludhiana:Kalyani publishers.





# INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS | ISSN: 2320 - 2882

*An International Open Access, Peer-reviewed, Refereed Journal*

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Published In IJCRT ( www.ijert.org ) & 7.97 Impact Factor by Google Scholar

Volume 6 Issue 1, Date of Publication: March 2021-03-01 20:36:08



PAPER ID : IJCRT2103291

Registration ID : 202103

*[Signature]*  
EDITOR IN CHIEF

Scholarly open access journals, Peer-reviewed, and Refereed Journals, Impact factor 7.97 (Calculate by google scholar and Semantic Scholar | AI-Powered Research Tool) , Multidisciplinary, Monthly Journal

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Website: [www.ijcrt.org](http://www.ijcrt.org) | Email id: [editor@ijcrt.org](mailto:editor@ijcrt.org) | ESTD: 2013

Certificate of Publication

IJCRT | ISSN: 2320-2882 | IJCRT.ORG