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EFFECT OF TURBULENCE TRAINING ON SPEED AMONG INTERCOLLEGIATE MEN KABADDI PLAYERS

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Abstract: *To achieve the purpose of the study, twelve (12) Kabaddi players those who represented the intercollegiate tournament were selected as subjects. The age of the subjects ranged from 18 to 25 years. The speed was selected as dependent variable. The selected dependent variable for the study was assessed by the following standardized test items. The speed was assessed by 50m run and the unit of measurement in seconds. To find out the speed among Kabaddi players were tested on selected criterion variable, the data pertaining to the variable was examined by using dependent 't' test for each variables to determine the difference if any, among the means. The level of significance was fixed at 0.05 level of confidence for all cases. The result of the study it was hypothesized that the Turbulence Training had significantly increased speed level when compared to pre test.*

Key Words: *Turbulence Training, Kabaddi, Speed.*

1. INTRODUCTION:

Sport training is a systematic process extending over a long period. For best results the system of training has to be based and conducted on scientific facts and lines. Where it is not possible to do that, the training has to be based on the results of successful practice which has withstood the test of time. Sports science has still not been able to provide a scientific base for all the aspects and elements of training. Many things are still based on the results of successful practice which on deeper analysis is also a method of science to prove or disprove a theory. Moreover, the principal characteristic of a science is the existence of a systematized body of knowledge. **(Singh, 1991)** Turbulence training is a form of exercise that can be performed using bodyweight, weights or dumbles and interval training to burn fat and build muscle .It is a combination of resistance and interval training. The idea behind turbulence training is to use your body in the ways that allow it to burn the fattest. It is the mixture of resistance and turbulence that allows this to happen. Turbulence training also features variety. The body naturally hits a plateau after doing the same exercises over and over. Turbulence training features a mix of exercises that helps the body not reach that plateau. Intensity is another important factor of turbulence training. The Turbulence Training workouts are 45 minutes to 1 hour in length because they utilize super-sets, circuits and interval training. Most of the workout plans are based on 3-4 day workouts per week for 4 weeks. The design of Turbulence training is depend on the objective or goal. i.e. to improve cardiovascular fitness or to develop strength. Normally, this workout is done by order or in a consecutive sequence in which involves "super settings", where one exercise followed immediately (no rest) by the next exercise.

1.1. REVIEW ON RELATED PAPERS:

According to Jagdish Yadav, The present investigation was conducted to determine the effects of 4-week Turbulence Training on Physical Fitness of female Kabaddi players. Methods: Thirty female players were selected as subjects for the present investigation, aged were ranging from 17- 24 years. To investigate the influence, Turbulence Training was imparted to the subject of group A (Experimental group) and B (control group). The 4-week of Turbulence Training includes (i) Lying Hip Extension, (ii) Plank (iii) Prisoners Squat (iv) Bird Dog (v) Kneeling Push up (vi) Side Plank (vii) Band Pull (viii)Ab Curl-up. Statistical Analysis: In order to find out the effect of turbulence Training on physical fitness, the analysis of co-variance was applied at 0.05 level of significance. Results: The Turbulence Training leads to significant development of all physical fitness variables such as Standing broad jump (Feet & inches), Flex Arm Hang (Minutes & Seconds), Sit –ups (Minutes), Shuttle run (6*10 M) (Second), and 600 yard run/walk (Minutes). No significant differences were found in 50 M dash (Seconds) of female players at 0.05 level of significance.

1.2. STATEMENT OF THE PROBLEM:

The purpose of the study was to find out **effect of** Turbulence training **on** speed **among college men Kabaddi players.**

1.3 HYPOTHESES

1. It was hypothesized that there may be significant difference on speed due to the effect of Turbulence training among college men Kabaddi players.

2. METHODS AND MATERIALS:

To achieve the purpose of the study, twelve men inter collegiate Kabaddi players studying from St.Johns College of Physical Education, Veeravanallur, Tirunelveli were selected as subjects. The selected subjects would underwent to the Turbulence training, the duration of the training period would fixed for six (6) weeks and the number of training session per weeks were confined three alternative days. The age of the subjects were ranged from 18 to 25 years. Before and after the training period the subjects were instructed to take the pre and post test on the selected criterion variable. The criterion variable speed would select as dependent variables for the study. The Turbulence training was selected as independent variables. The investigator reviewed the available scientific literature and on the basis of discussion with experts, feasibility criteria, availability of equipment and the relevance of variables to the present study, the strength was selected for the study. The design would select for this study is pre and post test single group design. The data were collected from the experimental group prior to and immediately after the training period on selected criterion variables were statistically analyze with dependent "t" test to find out the significant improvement between pre and post-test means of experimental group. In all the cases .05 level of significant was fixed to test the hypotheses.

3. RESULTS:

The analysis of dependent 't' test on the data obtained speed among kabaddi players have been analyzed and presented in table I.

TABLE I

THE SUMMARY OF MEANS, STANDARD DEVIATIONS AND DEPENDENT't'-TEST FOR THE PRE AND POST TESTS ON SPEED OF EXPERIMENTAL GROUP

Test		Number	Mean	Standard Deviation
Speed	Pre test	12	7.231	0.260
	Post test	12	7.193	0.258
	't'-test	**14.165***		

***Significant at .05 level.**
(Speed in Seconds)
(The table value required for .05 level of significance with df 11 is 2.201)

The table I shows that the obtained pre and post test mean values of experimental group was 7.231 and 7.193 respectively and the obtained dependent 't'-ratio values between the pre and post test means of experimental group was 14.165 The table value required for significant difference with df 11 at .05 level is 2.201. Since, the obtained 't' ratio value of experimental group are greater than the table value, it is understood that Turbulence training had significantly improve the performance on speed among college men kabaddi players.

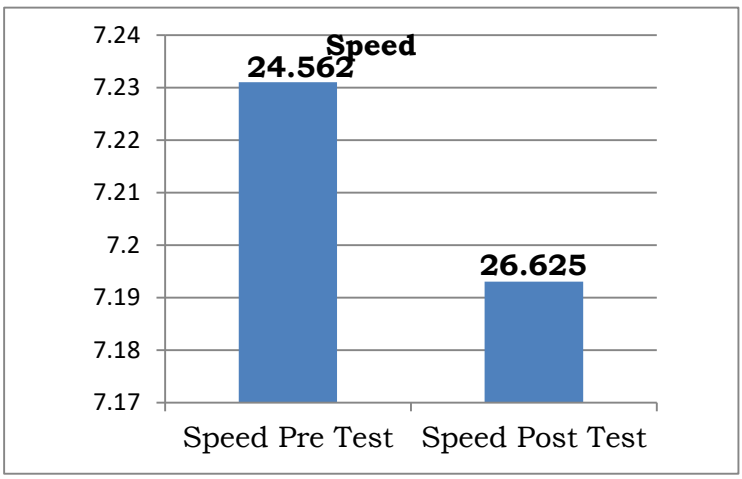

FIGURE 1. MEAN VALUES OF TURBULENCE TRAINING GROUP ON SPEED

3.1. RESULTS OF THE STUDY:

The table I shows that the obtained pre and post test mean values of experimental group was 7.231 and 7.193 respectively and the obtained dependent 't'-ratio values between the pre and post test means of experimental group was 14.165. The table value required for significant difference with df 11 at .05 level is 2.201. Since, the obtained 't' ratio value of experimental group are greater than the table value, it is understood that Turbulence training had significantly improve the performance on speed capacity among men college Kabaddi players.

3.2. SUMMARY OF TESTING HYPOTHESIS

The statistical results confirmed the hypothesis showing that there would be significant improvement on speed between pre and post tests means among college Kabaddi players. Hence, the researcher's hypothesis was accepted and null hypothesis was rejected

3.3. DISCUSSION ON FINDINGS

The results of the study indicated that there was significant difference exists between pre and post test on speed due to Turbulence Training.

3.4. DISCUSSION ON HYPOTHESIS

In the beginning of the study, in the first hypothesis it was hypothesized that there would be significant difference between pre and post test on speed. The results of the study showed the results accordance with researcher research hypothesis, there was significant difference exists between pre and post test on speed the post test had better performance on speed when compared to pre test. Hence, the researcher first research hypothesis was accepted and the null hypothesis was rejected.

4. CONCLUSION:

From the results of the study, following conclusion was drawn

1. The experimental group namely Turbulence training has made significant improvement on speed among men college Kabaddi players.

4.1. RECOMMENDATION:

The results of the study necessitate the following recommendations.

- It is recommended to the coaches, trainers and physical educators to adopt these findings to improve the selected parameters among their Kabaddi players.
- A similar study may be attempted by selecting the state or national level Kabaddi players as the subjects.
- A similar study may be conducted on the female subjects.
- A similar study may be conducted by selecting the Physiological, bio chemical, hematological and psychomotor variables as criterion variables.

REFERENCES

1. Singh, H. (1991), '*Science of Sports Training*,' New Delhi D.V.S Publication.
2. Craig Ballantyne, (2007), 'Turbulence training: 4-week bodyweight program for beginners', intermediate & advanced fitness levels, cb athletic consulting, inc. King, J.W. East Tennessee State University.
3. Barry L.Johnson and Jack K., Nelson, (1988), '*Practical Measurement for Evaluation in Physical Education*,' New Delhi: Surjeet publication.
4. Jagdish Yadav A.K., (2018), 'Effect of Turbulence Training on the Selected Physical Fitness Variables of Female Kabaddi Players', Shikohabad, Firozabad, Uttar Pradesh (INDIA).
5. Gabler M, Prieske O, Hortobágyi T and Granacher U, (2018), 'The Effects of Concurrent Strength and Endurance Training on Physical Fitness and Athletic Performance in Youth', Frontiers in Physiology, 9:1057.
6. O' Connor, A., & Kearney, D, (2018), Evaluating the Effect of Turbulence on Aircraft during Landing and Take-Off Phases,. *International Journal of Aviation, Aeronautics, and Aerospace*, *5*(4).

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