

A study of Aerobic Endurance among Judo Players and Wrestlers of Akola City

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Abstract

Aerobic endurance is part of our life even if we are not aware of it. In any sports you are not able to implement sport skills properly at the time of competition or practice schedule without aerobic endurance. Aerobic endurance is one of the main fitness components. Judo is such a dynamic and combative sport. Some judo players are all about speed so the fight is based around aerobic fitness while others are slow and all strength so the fight then spills over into the anaerobic category. Wrestling is one of the ancient sports in world. Wrestling is a dynamic, high-intensity and combative sport. Wrestlers need very high levels of complex skills, tactical excellence and physical fitness to success on the world stage. The main purpose of the present study was to find out the Aerobic Endurance between Male Judo Players and Wrestlers of Akola City. It was hypothesized that there may be significant difference in the Aerobic Endurance between Male Judo Players and Wrestlers of Akola City. 20 Judo players and 20 Wrestlers of Akola city who had participated in University Level Tournaments were taken as subjects in the age group between 20 to 25 years at random. 12 Minutes Cooper Test is used for collection data. Running distance was measured in meter. For comparison of aerobic endurance of Judo Players & Wrestlers 't' test was used. As the above table Judo Players mean performance is 2211 meters and Wrestlers mean performance is 2152 meters. There is mean difference of 59 between Judo Players and Wrestlers. The calculated t-value of 1.055 is not more than the tabulated t- value of 1.685 at 0.05 level of significance of 38 degree freedom. Hypothesis was rejected on the basis of statistical analysis. It is concluded that there is no significant difference found in performance of aerobic endurance of Judo players and Wrestlers of Akola City

KEYWORDS: Aerobic Endurance, Judo Players, Wrestlers, Akola City, Cooper Test

Introduction

Aerobic endurance is part of our life even if we are not aware of it. After exercise you will be in struggling to control your breathing. This struggle shows your endurance or stamina of your body. This type of level and indicators shows that how healthy you are. Oxygen consumption rate varies with age, gender and activities. Oxygen consumption is highest when you are in your age 20s. The level of oxygen consumption in your body plays a key role in aerobic endurance. Your Body's ability to supply necessary oxygen and energy during any physical activity defines aerobic endurance. In any sports you are not able to implement sport skills properly at the time of competition or practice schedule without aerobic endurance. Aerobic endurance is one of the main fitness components.

Players of various require endurance, strength, power, speed, agility, flexibility, nerve, durability, hand-eye coordination and analytic aptitude.

Judo is such a dynamic and combative sport. It requires very hard training for one certain component. For this purpose judo players need a lot of different styles of fitness covering all energy systems. Some judo players are all about speed so the fight

is based around aerobic fitness while others are slow and all strength so the fight then spills over into the anaerobic category.

Wrestling is one of the ancient sports in world. Wrestling is a dynamic, high-intensity and combative sport. Wrestlers need very high levels of complex skills, tactical excellence and physical fitness to success on the world stage. Wrestling demands all qualities of fitness: Maximal strength, aerobic endurance, anaerobic power and anaerobic capacity. To be effective, wrestling techniques must also be executed with high velocity.

Purpose of the Study

The main purpose of the present study was to find out the Aerobic Endurance between Male Judo Players and Wrestlers of Akola City.

Hypothesis

It was hypothesized that there may be significant difference in the Aerobic Endurance between Male Judo Players and Wrestlers of Akola City.

Methodology - Source of Data

For the present research study, 20 Judo players and 20 Wrestlers of Akola city who had participated in University Level Tournaments were taken as subjects in the age group between 20 to 25 years at random.

Collection of Data

The Cooper test is a test of physical fitness. It was designed by Kenneth H. Cooper in 1968 for US military use. The Cooper 12 minute run is a popular maximal running test of aerobic fitness, in which participants try and cover as much distance as they can in 12 minutes. 12 Minutes Cooper Test is used for collection data.

Statistical Analysis

Running distance was measured in meter. For comparison of aerobic endurance of Judo Players & Wrestlers 't' test was used. The level of significance was set at 0.05 levels.

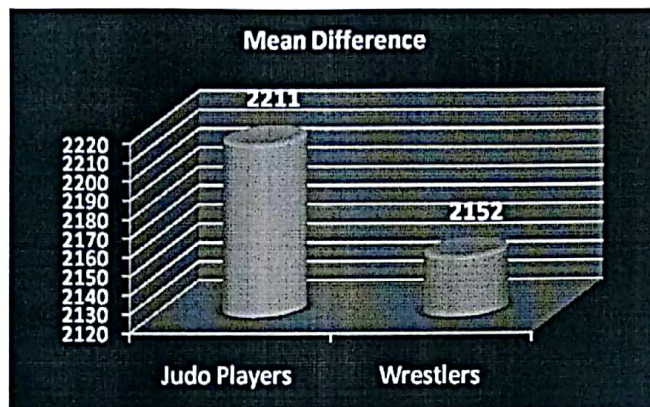
Table No. 1:

Showing the statistical analysis of Cooper Test

Group	N	Mean	S.D.	Mean Difference	S.E.	't' ratio	P value
Judo Players	20	2211	178.204	59	39.847	1.055	0.148
Wrestlers	20	2152	175.307		37.199		
Tabulated 't' ratio=1.685		Degree of freedom=38		Significant Level= 0.05			

As the above table Judo Players mean performance is 2211 meters and Wrestlers mean performance is 2152 meters. There is mean difference of 59 between Judo Players and Wrestlers. There is no significant difference related aerobic endurance among Judo players and Wrestlers of Akola city because the calculated t-value of 1.055 is not more than the tabulated t- value of 1.685 at 0.05 level of significance of 38 degree freedom.

**Graph No. 1:
Mean Difference of Judo Players & Wrestlers**



Discussion of Hypothesis:

Hypothesis was rejected because there is no significant difference related aerobic endurance among Judo players and Wrestlers of Akola city.

Conclusion:

It is concluded that there is no significant difference found in performance of aerobic endurance of Judo players and Wrestlers of Akola city.

Reference:

- (2017). Retrieved 29 June 2017, from <https://simplifaster.com/articles/concurrent-training-freestyle-wrestling-performance><http://www.sfu.ca/~leyland/Kin143%20Files/Cooper.pdf>
- Cardio Training for Judo – Judo Info. (2017). *Judoinfo.com*. Retrieved 30 June 2017, from <http://judoinfo.com/cardio/>
- Cooper Fitness Test. (2017). *Topendsports.com*. Retrieved 30 June 2017, from <http://www.topendsports.com/testing/tests/cooper.htm>
- Guide, B., & Five, F. (2017). *Concurrent Training: Implications for Freestyle Wrestling Performance – Striving for Optimal Training Practice - SimpliFaster. SimpliFaster Blog*. Retrieved 28 June 2017, from <https://simplifaster.com/articles/concurrent-training-freestyle-wrestling-performance/>
- Rogers, C. (2017). *Aerobic Endurance. Love To Know*. Retrieved 29 June 2017, from http://exercise.lovetoknow.com/Aerobic_Endurance
- Which Sport Requires the Most Athleticism. (2017). *Examined Existence*. Retrieved 30 June 2017, from <https://examinedexistence.com/which-sport-requires-the-most-athleticism/>