Original Research Paper

Volume - 13 | Issue - 12 | December - 2023 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Physical Education

A COMPARATIVE STUDY OF PHYSICAL VARIABLES OF WRESTLING AND TAEKWONDO PLAYERS

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ABSTRACT

Aim: The Purpose of the study was to compare the physical variables of wrestling and taekwondo players. **Methods:** The study was delimited to the twenty players who had study G.T. G. Degree. College, Karwi, Chitrakoot were selected randomly as the subjects for the study. The age of the subjects were ranging from 17 – 25 years. The Study was further delimited to the selected physical variables (Standing Broad Jump and Sit-Ups only). It was hypothesized that there would be no significant difference between in Standing Broad Jump and Sit-Ups of wrestling and taekwondo players. For the purpose of analysis of data 't' test was employed to compare the physical variables of wrestling and taekwondo players. **Result:** There was an insignificant difference between the means of Wrestling and Taekwondo in Sit-Ups since the obtained value of 't' (.254) was lower than the tabulated value and a significant difference in Standing Broad Jump (2.630) was higher than the tabulated value. **Conclusion:** The Sit-Ups, subject showed in no significant difference and Standing Broad Jump, subject showed in a significant difference between Wrestling and Taekwondo Players.

KEYWORDS : Standing Broad Jump and Sit-Ups

INTRODUCTION

Sport is as old as the human society and it has achieved a universal status in the modern society. It now enjoys a popularity which outstrips any other form of social activity. It has become an integral part of the educational process as physical education and sports have been included in the regular curriculum. The students are taught various games and sports in a systematic manner. Besides teaching the students are evaluated in their performance. Many people participate in games and sports for getting enjoyment besides deriving physical, mental social and emotional benefits.

Due to involvement of numerous agencies like state departments of physical education & sports, military personnel, colleges and universities, multiple terminology of physical fitness, motor fitness, motor ability, general and sports specific physical fitness came into existence where many items appeared in both physical fitness and motor ability test batteries. In the earliest test batteries the components of motor ability or those of physical fitness were selected arbitrarily. However, during 1950's these components were selected more scientifically through factor analysis whereby the principle components are factored out or selected from a matrix of inter-correlations so as to eliminate the repetition of items measuring the same components of fitness or motor ability (Baxo and Gustafson, 1983).

The fitness components are traits that athletes must develop to physically prepare for sport competition. Sports training programs are designed to build these mechanism in the proper proportions that match the requirements of each sport. A basic definition of physical fitness is "the ability to complete daily tasks with energy, reduce health risks due to inactivity, and be able to participate in a variety of physical activities. Five fitness components that are deemed health-related are: cardio, strength, endurance, flexibility, and body composition In addition, speed, agility, power, balance, and coordination have been identified as performance-related. All of these traits exist to some degree in most sports, but developing certain combinations is important in any given sport. While definitions are assigned to qualities that represent what "fitness" is, it can be operational zed in different ways for each sport. In other words, fitness for one sport is somewhat different for another. In today's society, sports and physical fitness play essential role in physical well-being. In this material world man does not get enough time for doing physical activity. Spectral concept of health emphasize that the health of an individual is not static it is a dynamic phenomenon and a process of continuous change. The physical aspect of health is probably the easiest to understand. The state of physical health implies the concept of perfect functioning of the body. (N. Anil Kumar, 2013)

The purpose of the present study is to compare the physical variables of wrestling and taekwondo players. To compare the selected physiological variables (Standing Broad Jump and Sit-Ups) of wrestling and taekwondo players.

The following delimitations will be noted as they may have affected the outcome of the study:

1. The present study was restricted to 20 junior boys players.
2. The study was delimited to the junior male of wrestling and taekwondo players in Karwi, Chitrakoot.
3. The study was further delimited to following Physical Variables:

a) Standing Broad Jump
b) Sit-Ups

It was hypothesised that there would be no significant difference in Standing Broad Jump and Sit-Ups of wrestling and taekwondo players.

Methodology

For the purpose this study twenty (N=20) male students were selected randomly from Stadium, G.T. G. Degree. College, Karwi, Chitrakoot, U.P. India. Their age was between 17 to 25 years. These subjects participated voluntarily in this programme and before the start, all of them were examined by the physician to ascertain that they were free from any medical problem. The purposive sampling technique was employed to select the subjects.

In order to acquaint the subjects with the specific purpose of the research being conducted, all the subjects were assembled in the athletic track of Stadium, G.T. G. Degree. College, Karwi, Chitrakoot All the necessary information pertaining to the requirement of the procedure was imparted to them. To make the research findings more authentic, positive attitude towards investigation was emphasized.

The Data collection was planned for one days and only twenty subjects were taken. before of the respective training their data was collected on Standing Broad Jump and Sit-Ups. The data were taken in the morning session only.

Criterion Measures

1. Explosive leg strength measured by standing broad jump was recorded in meters.
2. Abdominal strength measured by sit-ups was recorded in Numbers.

Administration Of The Test

Standing Broad Jump

Equipments: A marking tape, long jump pit.

Description: Each subject was asked to stand behind a take offline with his feet comfortable apart. Before jumping, the subject was allowed dipping at the knees and swings the arms backward and then jumps forward by simultaneously extending the knees and swinging arms forward to cover maximum possible horizontal distance, landing on both the feet.

Scoring: The recommended procedure was to administer three trials and award the student the best of the three trials. The test was scored in feet and inches to the nearest inch.

Sit-Ups

Equipments: A clean surface and a stopwatch.

Description: The student lied on his back with the knees bent, feet on the floor, and heels no more than 12 inches from the buttocks. The angle at the knees was less than 90-degrees. The students hands was on the back of the neck with fingers clasped and elbows touching the surface. By tightening the abdominal muscles, the student brought the head and elbows forward as he curls up to touch their elbows to their knees. This action constituted one sit-up. The student return to the starting position before executing another sit-up. The students began on the command "Go", and stops on the command "stop".

Scoring: The students score was the number of correctly executed sit-ups performed in 60 seconds.

Statistical Procedure

For analysis of the data, Mean and SD were computed. Independent t-test was applied to find the significant difference between wrestling and taekwondo players. For testing the hypothesis the level of confidence was set at .05 level of significance.

Data Analysis

Table- 1 Significance Of Difference Of Mean Of Wrestling And Taekwondo Players In Standing Broad Jump

Groups	Mean	SD	SE Mean	DM	SE Mean Diff.	"t" ratio
Wrestling	2.19	.140	.0445	.209	.079	2.630*
Taekwondo	2.39	.208	.065			

*Significant at 0.05 level

$t_{.05}(18) = 1.96$

It is evident from Table-1 that there was a significant difference between the means of Wrestling and Taekwondo in Standing Broad Jump. The mean difference was calculated as .209 and standard error of difference was .079 since the obtained value of independent 't' (2.630) was higher than the tabulated value of 't' (1.96) which was required to be significant at (18) degree of freedom with 0.05 level of confidence.

The graphical representation of mean and standard deviation of means of Wrestling and Taekwondo in Standing Broad Jump has been presented in figure 1.

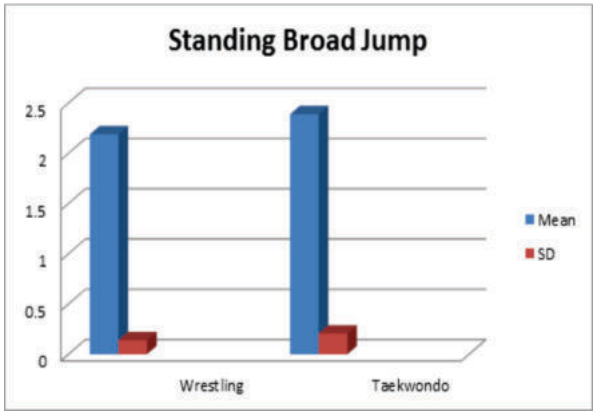

Figure 1 -comparison Of Mean And SD Scores Of Means Of Wrestling And Taekwondo In Standing Broad Jump

Table-2 Significance Of Difference Of Mean Of Wrestling And Taekwondo Players In Sit-Ups

Groups	Mean	SD	SE Mean	DM	SE Mean Diff.	"t" ratio
Wrestling	11.26	2.66	.266	.270	.368	.254
Taekwondo	10.99	2.54	.254			

*Significant at 0.05 level

$t_{.05}(18) = 1.96$

It is evident from Table-1 that there was an insignificant difference between the means of Wrestling and Taekwondo in Sit-Ups. The mean difference was calculated as .270 and standard error of difference was .368 since the obtained value of independent 't' (.254) was lower than the tabulated value of 't' (1.96) which was required to be significant at (18) degree of freedom with 0.05 level of confidence.

The graphical representation of mean and standard deviation of means of Wrestling and Taekwondo in Sit-Ups has been presented in figure 2.

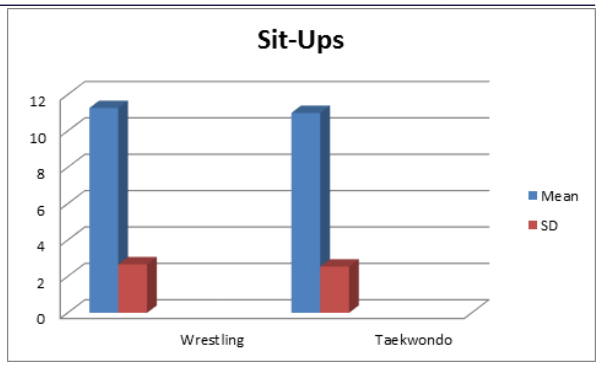

Figure 2-comparison Of Mean And SD Scores Of Means Of Wrestling And Taekwondo In Sit-Ups

Discussion of Findings

Mean value indicates that in physical variables Standing Broad Jump taekwondo players are better than wrestling players.

Mean value indicates that in physical variables Sit-Ups wrestling players are better than taekwondo players.

Discussion of Hypothesis

1. It was hypothesised that there would be no significant Standing Broad Jump of wrestling and taekwondo players was rejected.
2. It was hypothesised that there would be no significant Sit-Ups of wrestling and taekwondo players was accepted.

CONCLUSION

1. In Standing Broad Jump, subject showed in a significant difference between Wrestling and Taekwondo player.
2. In Sit-Ups, subject showed in no significant difference between Wrestling and Taekwondo player.

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