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A COMPARISON OF ATHLETIC POWER AMONG SELECTED COMBAT SPORTS

G. Shrinivasa Reddy¹, Dr. Chandrakant Karad²

Research Scholar – Swami Ramanand Teerth Marathwada University, Nanded¹ Principal, College of Physical Education, Udgir²

Abstract: The purpose of the study was to compare Athletic Power in Power lifting, Judo and Weight Lifting. The 40 players were selected for sample size of each group of the study and their age ranged between 20 -25 years. Exclusion criteria were the presence of chronic medical conditions such as asthma, heart disease or any other condition that would put the subjects at risk when performing the experimental tests. Athletic Power measured by using the Standing Broad Jump. The mean, S.Ds and ANOVA and LSD Post hoc Test was utilized the level of significant was set up at 0.05 level. The result shows significant difference of Athletic Power among three groups of Combat Sports. The findings of the study show that Power lifting players was found to have less Athletic Power abilities as compare to their counterparts of Weight lifting. the findings of the study show that Weight lifting players was found to have good Athletic Power abilities as compare to their counterparts Judo Players.

Keywords: Power lifting, Judo and Weight Lifting, Combat, Athletic Power.

INTRODUCTION

Athletic power is particularly relevant in combat sports , and is directly linked to the performance in various situations (Menzel, et.al. 2010, Sheppard etl.al 2008). optimal muscle strength and power, together with technical and tactical skills are necessary to practice the sport at a high level of performance (Marques, 2009). A combat sport is a competitive contact sport that usually involves one-on-one combat. In many combat sports, a contestant wins by scoring more points than the opponent or by disabling the opponent. The sports performance in sports depend upon the level of Athletic power a player posses. Fitness has been defined as the state which characterizes the degree to which the person is able to function the term fitness is perhaps the one of the most nebulous in the area of sports. Fitness is a product of exercise and training has been shown through research to posse's important implications in the general health of people. (H.M. Barrow 1983). Athletic power is gauged by performance and this performance is based on a composite of many factors. The most commonly mentioned fitness factors are strength, endurance, power, speed, agility, flexibility, balance and stamina. Combat sports are generally more popular among men, both as athletes and as spectators. For many years, participation in combat sports was practically exclusive to men.

METHODS

Purposive sampling method was used, as the researcher selected Power lifting, Judo and weight lifting players with a specific purpose. Three groups were targeted, Power lifting players' judo and weight lifting player. 40 Power lifting players and 40 Power lifting, 40 Judo and weight lifting players selected for this present study. All data collected in Telangana state. This study involves a cross sectional, comparative study of Power lifting, Judo and weight lifting player. Since no experimental groups was taken by the investigator and there was no control group so this study was conducted in a descriptive research design.

Tools of the study:

Athletic Power

Athletic Power measured by using the Standing Broad Jump. This test measures the power of legs in jumping horizontal distance and may be applied to both sexes aged seven years above.

Equipment

Long jump pit was used, measuring tape, marking tape.

Demonstration

A demonstration of the standing Broad jump is given to a group of Subjects to be tested. The Subject is then asked to stand behind the starting line with the feet parallel to each other. He is instructed to jump as farthest as possible by bending knees and swinging arms to take off for the broad jump in the forward direction.



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PROCEDURE

The subject is given three trials. The distance between the starting line and the nearest point of landing provides the score of the test. The best trial is used as the final score of the test.

Statistical Analysis

The mean, S.D. and ANOVA and LSD Post hoc Test was utilized the level of significant was set up at 0.05 level.

Results and Discussion

Table-1

Mean scores and Standard Deviation of skill related abilities with respect to Athletic Power among three groups of Combat Sports

Abilities	players	Number	Mean Scores	Standard Deviations
Athletic Power	Power lifting	40	216.78	18.40
	Judo	40	217.17	18.91
	Weight lifting	40	219.67	18.98

As per Table-1, shows that the mean scores and standard deviations of skill related abilities with respect to Athletic Power among three groups of Combat Sports.

Figure – 1 Shows the Mean scores and standard deviation of skill related abilities with respect to Athletic Power among three groups of Combat Sports

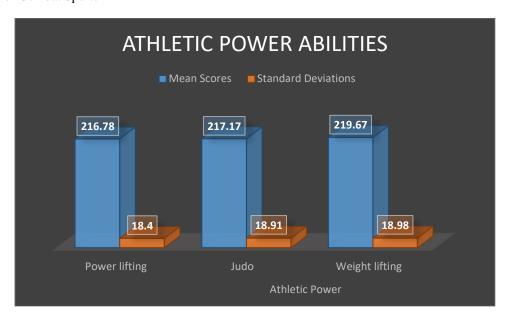


Table-2

Analysis of variance of skill related abilities with respect to Athletic Power among three groups of Combat Sports.

Components	Source of Variance	SS	DF.	MSS	F- ratio
Athletic	Between Groups	5.67	2	2.83	
Power	Within Groups	42.56	117	.36	7.86 *

^{*} Significant at .05 level.

Table-2, Indicated that statistically significant difference of skill related abilities among three groups of Combat Sports as above observed in F-ratio was 7.62 at .05 level of significance. In order to located the statistically difference of skill related abilities among three groups of Combat Sports; LSD post hoc statistical comparison test was used to compare the skill related abilities among three groups of Combat Sports



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Table - 3

LSD post hoc Statistical comparison for mean difference among skill related abilities among three groups of Combat Sports

Mean Scores								
Power lifting	Judo	Weight lifting	Mean difference	C.D. at 5% level				
216.78	217.17		39	1.56				
216.78		219.67	2.89	1.56*				
	217.17	219.67	2.5	1.56*				

^{*} Significant at .05 level.

As per Table 3, shows that the LSD post hoc statistical comparison for mean difference of skill related abilities among three groups of Combat Sports.

RESULTS AND DISCUSSION

The mean scores and the standard deviations obtained from Table 2, the highest mean score is in Weight lifting Players (219.67) and the lowest mean score is in power lifting players (216.78) and the mean scores of the rest falls between these two sports.

The sample of combat sports indicated by the standard deviation which is not higher than (18.98) in case of Weight lifting players and not lower than (18.40) in case of Power lifting. In order to find out the differences of Athletic power among Weight lifter, power lifter and Jodo players; F-ratio (One way analysis of Variance with LSD Post Hoc Test) was computed for find out the differences in Athletic power, where results of the study shows that there were significant differences in Athletic power among Weight lifter, power lifter and Jodo players. The LSD post hoc test shows that differences in the ability of athletic power among powerlifting and weight lifting and judo and power lifting.

CONCLUSIONS

The following conclusions were found out are as:

- 1. The results show that no statistically significant difference of skill related abilities with respect to Athletic Power between power lifting and Judo.
- 2. The results show that statistically significant difference of skill related abilities with respect to Athletic Power between power lifting and weight lifting.
- 3. The findings of the study show that Power lifting players was found to have less Athletic Power abilities as compare to their counterparts Weight lifting.
- 4. The findings of the study statistically significant difference of skill related abilities with respect to Athletic Power between Weight lifting and Judo;
- 5. The findings of the study shows that Weight lifting players was found to have good Athletic Power abilities as compare to their counterparts Judo Players .

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