

CORRELATION OF MOTOR FITNESS COMPONENTS AND KINANTHROPOMETRIC PARAMETERS AMONG STATE / INTER COLLEGE LEVEL MEDALIST JAVELIN THROWERS WITH THEIR SKILL PERFORMANCE

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ABSTRACT

The main purpose of the study was to find out the relationship of motor fitness components and kinanthropometric parameters among State / Inter College level Medalist Javelin Throwers with their skill performance. Results showed that there was a significant association of Agility with skill performance. On the other hand results shows that insignificant association of Explosive Arm Strength, Explosive Leg Strength, Total Body Fat, Sitting Height, Total Arm Length, Leg Length, Shoulder Width, Elbow Width, Chest Circumference Inspiration, Chest Circumference Expiration, Upper Arm Circumference Relaxed and Upper Arm Circumference Flexed with skill performance of State / Inter College level Medalist male Javelin Throwers..

Keywords: *Motor Fitness, Anthropometric, Explosive Leg Strength, Agility, Total Body Fat, Sitting Height*

INTRODUCTION: Javelin throwing belongs to the group of cyclic-acyclic track and field disciplines, for which linear and translator type of movement is characteristic. The result in

javelin throwing is well- defined mainly by proper technique, specific motor abilities, aerodynamic causes and anthropometric characteristics of the athlete. The javelin was made of a length of wood approximately six feet long and had either a metal tip or a sharpened end point. The thrower held the javelin by his fingers using a leather thong attached to the pole's center of gravity. The thong was meant to improve the thrower's aim, precision and distance. In ancient Greece, javelin throwers competed on horseback, which further increased the skill required in the sport. The modern Olympic Games don't use horses for the javelin throw. In 1840, the first recorded "meet" date for a pentathlon-type event occurred in Shropshire, England, according to Olympic.org. During the 1880s, events that included javelin throwing, running, jumping and walking were held throughout Europe, the U.S. and other Western countries. The pentathlon events, including javelin throwing, were featured in the first modern Olympic Games in 1896. Throughout history, javelin-throwing competitions have typically been held as part of several track and field events. (Encyclopedia)

Purpose of study: The aim of the research was to analyze the relationship of Motor fitness components and Kinanthropometry parameters among State / Inter College level Medalist Javelin Throwers with their skill performance.

Method and Procedure Sample size: The study was conducted on 20 javelin throwers in age group of 18 to 38 year State / Inter College level Medalist Javelin Throwers.

Sampling area: was recruited as subjects from the Punjab, Haryana, Delhi, Rajasthan, U.P states. All subjects were given an informed consent letter to sign to be a subject for the present study with their own will.

SELECTION OF VARIABLES AND TEST MOTOR FITNESS COMPONENTS

Strength Explosive arm strength: Softball Throw

Explosive leg strength: Standing broad jump

Agility: Illinois Agility Test (10 X 5 Meters)

Kinanthropometric parameters

Total Body Fat, Sitting Height, Total Arm Length, Leg Length, Shoulder Width, Elbow Width, Chest Circumference Inspiration, Chest Circumference Expiration, Upper Arm Circumference Relaxed Upper Arm Circumference Flexed

Skill performance Statistical procedure In order to find out the relationship of selected Motor fitness and Kinanthropometric parameters among Javelin Throwers in relation to their skill performance, the Pearson product- moment correlation was employed. The level of significance chosen to test the hypothesis was 0.05. Accordingly, a statistical software package (SPSS) was used.

Table 1:Correlation Analysis of Motor Fitness Components and Anthropometric Parameters with skill Performance of State / Inter College level Medalist Javelin Throwers.

Variable 1		Variable 2	'r' Values	Sig.
	Motor Fitness Components	Explosive Arm Strength	.194	.413
		Explosive Leg Strength	-.400	.081
		Agility	.616*	.004
		Total Body Fat	.354	.126
		Sitting Height	-.284	.225

Skill Performance	Anthropometric Parameters	Total Arm Length	.304	.193
		Leg Length	.063	.792
		Shoulder Width	.075	.754
		Elbow Width	.212	.369
		Chest Circumference Inspiration	.144	.545
		Chest Circumference Expiration	.199	.399
		Upper Arm Circumference Relaxed	-.065	.784
		Upper Arm Circumference Flexed	-.150	.528

***Significant at .05 level of significance**

r.05 (18) = .444

Table displays the correlation coefficients (r) of the Motor Fitness and Anthropometric Parameters with relation skill performance of State / Inter College level Medalist male Javelin Throwers. The outcome of the study display that there was a significant association of Agility (r=.616) with skill performance of State / Inter College level Medalist male Javelin Throwers.

On the other hand results shows that insignificant association of Explosive Arm Strength, Explosive Leg Strength, Total Body Fat, Sitting Height, Total Arm Length, Leg Length, Shoulder Width, Elbow Width, Chest Circumference Inspiration, Chest Circumference Expiration, Upper Arm Circumference Relaxed and Upper Arm Circumference Flexed (.194, -.400, .354, -.284, .304, .063, .075, .212, .144, .199, -.065 and -.150) with skill performance of State / Inter College level Medalist male Javelin Throwers

FINDINGS OF THE STUDY

The result of the study showed that there was a significant association of Agility with skill performance and insignificant association of Explosive Arm Strength, Explosive Leg Strength,

Double Blind Peer-Reviewed Refereed Indexed On-Line International Journal

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Total Body Fat, Sitting Height, Total Arm Length, Leg Length, Shoulder Width, Elbow Width, Chest Circumference Inspiration, Chest Circumference Expiration, Upper Arm Circumference Relaxed and Upper Arm Circumference Flexed with skill performance of State / Inter College level Medalist male Javelin Throwers.

CONCLUSIONS OF THE STUDY

Based on the findings of this study, the following conclusions were drawn:

To conclude, It is evident that the results of correlation coefficients (r) of the Motor Fitness and Anthropometric Parameters with relation skill performance of State / Inter College level Medalist male Javelin Throwers. The outcome of the study display that there was a significant association of Agility ($r=.616$) with skill performance of State / Inter College level Medalist male Javelin Throwers. On the other hand results shows that insignificant association of Explosive Arm Strength, Explosive Leg Strength, Total Body Fat, Sitting Height, Total Arm Length, Leg Length, Shoulder Width, Elbow Width, Chest Circumference Inspiration, Chest Circumference Expiration, Upper Arm Circumference Relaxed and Upper Arm Circumference Flexed (.194, -.400, .354, -.284, .304, .063, .075, .212, .144, .199, -.065 and -.150) with skill performance of State / Inter College level Medalist male Javelin Throwers

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