

CORRELATIONS OF BODY DIAMETER MEASUREMENTS TO EXPLOSIVE ARM STRENGTH OF BOXERS

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Abstract

Background: To correlate body diameter measurement with explosive arm strength of Boxers.

Methods: A sample of 50 senior male Boxers of Haryana the ranging of 18 to 25 years were selected for the study. Random sampling method was used to select the sample.

Results: For analysis and interpretation of data, the investigator was used Pearson Product Moment Correlation statistical techniques with the help of SSPSS analytic software. There were significant relationship found between body diameters with explosive arm strength of boxers accepts foot length.

Keywords: Anthropometry, explosive strength, bodyweight.

Introduction

Today, anthropometry has many practical uses, most of them benign. For example, it is used to assess nutritional status, to monitor the growth of children, and to assist in the design of office furniture. Anthropometry is also used to measure nutritional status in patients. Indices include: Bodyweight, Body height, Skin-fold thickness, Midarm circumference, Hand-grip dynamometry. Anthropometric is used in many areas as a factor to provide information for the design of products such as clothing, footwear, safety equipment, furniture, vehicles and any other objects with which people interact.

Method and Procedure

Sample:

A sample of 50 Boxers was selected from the different part of Haryana. The investigator approached the coaches of the team for approval to select players from are gladly scheduled practice time. After approval, the Investigator collected the data related to anthropometric measurement and Explosive arm strength.

Tools Used: The following standard tools were used for data collection of study.

Shot Put: Used to measure the Explosive arm strength.

Steel tape: Used to measure the measurements.

Weight Machine : Used to measure weigh to particular players.

The following standardized anthropometric measurements were used by Weiner and Lourie (1969) method for data collection.

1. Weight (kgs): Weight is the name given to the force on a weighing machine due to gravity.

2. Height (cms): Height was measured by stadiometer. The height rule is taped vertically to the hard flat platform.

3. Arm Length (cms): The vertical distance between a cromioandradial.

4. Leg Length (cms): The straight distance between head of the femur and later alveolus of fibula.

Statistical Analysis:

To determine whether relationship among these elected variables exists or not, Pearson Product correlation method was applied. The data was computing the spss Statistical Package for the Social Sciences for Windows.

TABLE-1
CORRELATIONS OF BODY DIAMETER MEASUREMENTS TO
EXPLOSIVE ARM STRENGTH OF BOXERS

Sr. No	Variables correlated with arm strength	Co- efficient of Correlation
1.	Wrist Diameter	.564**
2.	Elbow Diameter	.610**
3.	Shoulder Diameter	.514**
4.	Hip Diameter	.525**
5.	Knee Diameter	.274
6.	Ankle Diameter	.260

**The result is significant at $p < 0.01$.

*The result is significant at $p < 0.05$

Table:1 clearly shows that the correlations of Wrist Diameter Shoulder diameter and Hip diameter (.564, .610, .514 and .525) respectively, with explosive arm strength was high positive and significant at .01 and 0.5 level of significance, where as other diameter Knee Diameter (274), Ankle Diameter (260) have positive correlation but not significant correlation with explosive arm strength .It suggests that Wrist Diameter, Elbow, Shoulder Diameter and Hip Diameter contribute to explosive arm strength of Boxers.

As per above inter predation the researcher showed that the anthropometric Variables i.e. body weight, standing height, sitting height, trunk length, and total Arm length, upper arm length, Fore Arm Length, leg length, thigh length, lower Leg Length are important for performance of boxers, because explosive arm Strength are improve the performance of boxers and explosive arm strength and Above Kin-anthropometric variable are direct and positive correlation.

Main Finding of the study

In the light of inter predation of their sults of the present investigation as discussed in the previous chapter, the following findings are stated:

1. Elbow and hip diameters have positive and significant correlations with explosive arm strength of Boxers.

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