



A Comparative Study of Anthropometrical Profile of National Level Junior Wuhu Players

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Abstract:

Background: The purpose of this study was to examine the anthropometrical profile of junior level national Wuhu players to compare the anthropometrical variables among different weight categories.

Methods: The sample was composed by 153 junior male national level wushu players represent to state of Maharashtra, Gujarat, Goa, Rajasthan, Madhya Pradesh, Chhattisgarh, Delhi, Punjab, Jammu & Kashmir, Assam, Manipur. from belonging to 10 different weight categories: (below 45kg, -48kg, -52kg, -56kg, -60kg, -65kg, -70kg, -75kg, -80kg, -85kg). The following anthropometric measurements were carried out: Body Weight, Standing Height, Chest Circumference, Upper Arm Circumference, Forearm Circumference, Thigh Circumference, Calf Circumference, Abdominal Circumference, Body Composition were assessed and compared among different weight categories.

Result: while comparing the selected components of anthropometrics variables between different weight categories of national level junior Wuhu players, it was observe that the national

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level Wuhu players was founded significant difference in Body Weight, Chest Circumference, Upper Arm Circumference, Forearm Circumference, Thigh Circumference, Calf Circumference, Abdominal Circumference, Body Composition, among different weight categories. Were there was no significant difference in Standing Height among different weight categories

Keywords: Wuhu, Anthropometry, Profile, national, junior

Introduction:

Wushu: Wushu, which is also referred to as kung-fu, is the collective term for the martial art practices which originated and developed in China, and Wushu is the well-spring of all Asian martial practices. Over its long history, Wushu has developed into numerous distinct styles and systems, each incorporating their own techniques, tactics, principles and methods, as well as the use of a wide variety of traditional weaponry. The differing styles that have emerged focus on many aspects of combat, but more importantly they have absorbed the popular philosophies and moral practices of the people in China over the past 5000 years of development. With that, Wushu has developed into more than just a simple system of attack and defense and has become a way to cultivate the body, mind and spirit in a positive way that is beneficial to all that practice it.

The majority of previous research has investigated the effects of wushu training on physical fitness in general populations. While a number of studies have reported fitness profiles of a variety of martial arts athletes (e.g., judo, karate, taekwondo), research that examines the fitness characteristics of wushu athletes is scarce. Currently, only one study has targeted wushu team athletes as research participants. Artioli et al. examined the physiological, nutritional, and performance profile of the Brazilian National Wushu team and reported that the wushu athletes have high flexibility, high leg anaerobic power and isometric strength, as well as moderately high arm anaerobic power, compared to elite judo and taekwondo athletes.

Aim: The aim of the study is to assess Anthropometrical variables of male National level junior Wushu players.

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Objectives:

- To conduct the Anthropometrical test and collect the Anthropometrical measurements of National level Junior Wushu players.
- To compare among the different weight categories of National level junior Wushu players regard to their anthropometrical measurements.

Hypotheses of the Study:

H₀₁ There may be no significant difference among the different weight categories of national level junior wushu players in their anthropometric variables.

Material and method:**Participants:**

The sample was composed by 153 junior male national level wushu players represent to state of Maharashtra, Gujarat, Goa, Rajasthan, Madhya Pradesh, Chhattisgarh, Delhi, Punjab, Jammu & Kashmir, Assam, Manipur. from belonging to 10 different weight categories: (below 45kg, -48kg, -52kg, -56kg, -60kg, -65kg, -70kg, -75kg, -80kg, -85kg).data was collected during the competition 63rd Junior National School Game 2016-17 at M.A stadium Jammu dates 19to 23 December 2017.

Measures:

Anthropometrical Measurements: The following anthropometric measurements were carried out: Body Weight, Standing Height, Chest Circumference, Upper Arm Circumference, Forearm Circumference, Thigh Circumference, Calf Circumference, Abdominal Circumference, Body Composition were assessed and compared among different weight categories.

Measurement of body weight by measure standardized electronic weighing machine, standing height by Stadio-meter and all body circumference by measure Non stretchable measuring tape.

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Statistical Analysis:

Descriptive statistics were performed for all measures of the participants. The Mean, Standard Deviation and “t” test were calculated as descriptive statistics. Technique of One-Way Analysis of Variance (ANOVA) was also used to study the significance of difference in selected Anthropometrical, Physical fitness Variables between different weight categories. Scheffe Post-hoc test was applied to find out Mean Differences among different weight categories. In order to check the significance, level of significance was set at 0.05.

Analysis of data:

1. While comparing the selected components of anthropometrics variables between different weight categories of national level junior wushu players, it was observed that the national level wushu players was found significant difference in Body Weight, Chest Circumference, Upper Arm Circumference, Forearm Circumference, Thigh Circumference, Calf Circumference, Abdominal Circumference, Body Composition among different weight categories.
2. While comparing the selected components of anthropometrics variables between different weight categories of national level junior wushu players, it was observe that the national level wushu players founded were there was no significant difference in Standing Height among different weight categories.

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