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ANALYSIS ON ANTHROPOMETRICAL ASPECTS OF NAGALAND AND MAHARASHTRA SOCCER PLAYERS

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ABSTRACT:

The purpose of the study is to compare the selected Anthropometric Measurements of Nagaland and Maharashtra soccer players. Researcher hypothesised that H1 There might be significant difference in Anthropometric Measurements between Nagaland and Maharashtra Students.30 male players were selected as subjects from Nagaland and Maharashtra from Degree College of Physical Education, Amravati. The Age was ranged between 18 to 25 years. Simple random sampling technique was adopted to select the subjects Selection of variables in Anthropometric variables are Standing height, Body weight, Leg Length, Calf Girth, Shoulder width, Hip width, Arm Length, Thigh Girth of the selected subjects. Independent't' test statistical techniques has been deployed for the analysis of the data. To test the hypotheses level of significance was kept at 0.05.The conclusion of the study are Maharashtra State Students leg length is better than the Nagaland State Students. Calf girth of Nagaland State Students are better than the Maharashtra State Students. Nagaland and Maharashtra State Students shows similarities in Standing height, body weight, Shoulder width, Arm length and thigh Girth.

KEYWORDS:

ANTHROPOMETRIC MEASUREMENTS, ASSAM, MAHARASHTRA, SOCCER PLAYERS.

INTRODUCTION:

Soccer requires intermittent physical activity in which sequences of actions requiring a variety of skills of varying intensities are strung together. Running is the predominant activity, yet explosive type efforts such as sprints, jumps, duels, and kicking are important factors for successful soccer performance. These efforts depend on maximal strength and anaerobic power of the neuromuscular system, more particularly of the lower limbs. Maximal strength refers to the highest force that can be performed during one maximum voluntary contraction, and is considered important for soccer performance. By increasing the available force of muscular 3 contraction in appropriate muscles or muscle groups, acceleration and speed in skills critical to soccer such as turning, sprinting, jumping, and changing pace may improve. The evaluation of muscle strength of the lower extremities in soccer has been performed using is okinetic peak torque and free weights. Anaerobic power refers to the ability of the neuromuscular system to produce the greatest possible impulse in a given time period. Sprint performance, vertical jumps, and kicking performance have been used to test the anaerobic power of soccer players. Indeed, in many studies some strength and anaerobic power characteristics differentiated elite from non-elite soccer players.

Soccer belongs to an aerobic-anaerobic (stop-go) type of sport with alternate phases of high load as sprints, fast zigzag running, jumps, sudden stops, etc. Practically in all activities a player carries his mass, moves it against the force of gravity so that each excess of body fat represents an overload which additionally burdens the energy mechanisms and makes the execution of a whole series of activities, especially the jumps and sprints, more difficult.

STATEMENT OF THE PROBLEM

Researcher the undertaken the problem stated as **"Analysis on anthropometrical aspects of Nagaland and Maharashtra soccer players."**

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PURPOSE OF THE STUDY

The purpose of the study is to compare the selected Anthropometric Measurements of Nagaland and Maharashtra soccer players.

HYPOTHESIS

Researcher hypothesised that:

H_1: There might be significant difference in Anthropometric Measurements between Nagaland and Maharashtra Students.

DELIMITATIONS:

Subjects were selected from Shree H. V. P. Mandal's Degree College of Physical Education, Amravati. The Age of subjects ranged from 18 to 25 years. A total of 30 male players were selected as subjects from Nagaland and Maharashtra of Degree College of Physical Education, Amravati.

LIMITATIONS:

The non-availability of sophisticated equipment's for measuring criterion is the major limitation. There were no control on the diet and other training etc. No motivational

technique was adapted while collection of data.

METHODOLOGY:

The required data were collected on the Nagaland and Maharashtra soccer players from Degree College of Physical Education, Amravati. For the study 30 male soccer players of Degree College of Physical Education, Amravati were selected as the subjects. The age of the subjects is ranged between 18-25years.Simple random sampling technique was adopted to select the subjects from Degree College of Physical Education, Amravati. Selection of variablesin Anthropometric variables are Standing height measured by standiometer in centimetres, Body weight on weighing machine in Kg, Leg Length, Calf Girth, Shoulder width, Hip width, Arm Length, Thigh Girth are measured by using flexible steel tape in centimetres.

ANALYSIS AND INTERPRETATION

Keeping in view the objective of the study and the hypotheses independent 't' test statistical techniques has been deployed for the analysis of the data. To test the hypotheses level of significance was kept at 0.05.The data collected from 30 students (15 from each state i.e. Nagaland and Maharashtra) was computed by using independent't' test statistical treatment. The result pertaining to the data are:

TABLE-1

SHOWING MEAN, STANDARD DEVIATION, MEAN DIFFERENCE, 'T' RATIO FOR THE DATA ON ANTHROPOMETRIC MEASUREMENTS OF NAGALAND AND MAHARASHTRA STATE STUDENTS

Variables	Group	Mean	Standard Deviation	Mean Difference	Standard Error	t-ratio
Standing Height	Nagaland	165.27	6.29	0.97	1.60	0.607@
	Maharashtra	166.25	6.12			
Body Weight	Nagaland	64.75	10.92	0.90	2.40	0.376@
	Maharashtra	63.84	7.45			
Leg Length	Nagaland	36.22	2.86	1.3	0.56	2.455*
	Maharashtra	37.62	1.26			
Calf Girth	Nagaland	13.50	1.00	0.82	0.21	3.771*
	Maharashtra	12.67	0.70			
Shoulder Width	Nagaland	42.139	26.78	0.088	2.82	0.031@
	Maharashtra	42.05	28.93			
Hip Width	Nagaland	27.01	2.40	1.93	0.49	3.938*
	Maharashtra	28.94	3.001			
Arm Length	Nagaland	27.03	1.27	0.5	0.28	1.785@
	Maharashtra	27.53	0.86			
Thigh Girth	Nagaland	48.88	33.83	3.868	2.78	1.391@
	Maharashtra	45.01	32.07			

@ Not Significant at 0.05 level

* Significant at 0.05 level

Tab $t_{0.05(28)} = 2.048$

FINDINGS OF THE STUDY:

- In anthropometric measurements of Nagaland and Maharashtra State Students shows significant difference in Leg strength, Calf girth and Hip width only.
- Standing height, body weight, Shoulder width, Arm length and thigh Girth shown insignificant difference in anthropometric measurements of Nagaland and Maharashtra State Students.

CONCLUSIONS:

- It is concluded that Maharashtra State Students leg length is better than the Nagaland State Students.
- Calf girth of Nagaland State Students are better than the Maharashtra State Students.

Nagaland and Maharashtra State Students shows similarities in Standing height, body weight, Shoulder width, Arm length and thigh Girth

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