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Research Paper

A Comparative Study on B.m.i. of Club And Non-Club Cricketers In Kolkata

Physical Education

KEYWORDS : Cricketers, Club, Non-Club, B.M.I

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ABSTRACT

The purpose of the study was to compare the body mass index among the club and non-club cricketers. 30 (15 club & 15 non-club) cricketers were selected as subjects. The age of the subjects was 17 to 28 years. Height and Weight were taken by standard tests. The subject was taken randomly. Data were collected in the afternoon (3-4:30 p.m.). Mean, Standard Deviation and independent t-test was used. Significant level was set at 0.05 levels. Club cricketers were significantly better than non-club cricketers. But there were insignificant difference between club and non-club cricketers on B.M.I.

Introduction:
Body mass index is one of the factor that determines health of an individual being over fat or having a higher than desirable content of that has a negative effect on person's health. The impact of either excess or less body fat is deter mental to health.

Nowadays, obesity is the worrying factor due to sedentary lifestyle and bad eating habits. Dietary and lifestyle practices are directly related to obesity, the most important cause in imbalance between the energy intake and output. It is determined by measuring body weight and fat, but BMI (Body Mass Index) is one of the best methods to calculate obesity.

It is given as, B.M.I. = Weight (in kgs) / [Height (in meters)]

Modern demands in one day competitions, especially for training of fast bowlers, batsman, fielders and wicket-keepers adequate emphasis is given for the development physical characteristics. Therefore the modern trend in the field of cricket is to assess the related components successfully as a part of total body and size of each cricketer and interpret how far each of these components are helpful in the performance of a cricketer under match condition

Today, in the modern competitive cricket era , every cricket player is in a race to excel others , and cricket competitions have become fundamental mode of human expression as they are one of the very important functions by which National and International recognition and prestige is gained. From its very simple from cricket has emerged into highly organized activity of Indian society and it has become a complex social and cultural phenomenon. Cricket has permeated most of our social institutions including education, economics, art, politics, law, mass communication and international diplomacy.

Objectives: The objective of the study was to compute the comparison between club and non-club cricketers in relation to B.M.I.

Methodology: In methodology involves selection of the subject; criterion measures and statistical techniques.

Selection of the subject: Thirty Male Cricketers (fifteen pace bowlers and fifteen batsmen) were selected as subjects for this study. The age ranged 17-28 years were selected randomly as subjects. Data were collected in the afternoon (3-4:30 p.m.). The necessary data on the physical variables are collect Visva-Bharati cricket ground and Bira school ground.

Criterion Measures: height and weight were collected. All the components were measured by standard tests.

Statistical techniques: To compute mean difference between club and non-club cricketers in relation to selected physical components mean, standard deviation and independent t-test was used (Statistical Package for the Social Sciences, version 17.0, SPSS Inc, Chicago, IL, USA). Significant level was set at 0.05 levels.

Results & Discussions: To find out the mean, standard deviation (SD) and mean difference between club and non-club cricketers in relation to physical components was employed. Findings pertaining to those were presented in table 1.

Table 1: Mean Difference Between club & non-club cricketers on Physical Components

Physical Fitness Components	Groups	Mean ± SD	Mean Difference	t-Ratio	p-Value
WEIGHT	Club	65.06±3.89	4.86	3.61	0.001
	Non Club	60.20±3.46			
HEIGHT	Club	170.13±4.68	2.73	1.29	0.205
	Non Club	172.86±6.68			
B.M.I	Club	22.52±1.85	2.33	3.74	0.001
	Non Club	20.19±1.54			

*** Significant at 0.05 level**

Table 1 shows that mean value of weight, height and B.M.I of club cricketers were 65.06 ± 3.89 kg, 170.13 ± 4.68cm, 22.52 ± 1.85kg/m^2 respectively. On the other hand the mean value of weight, height and B.M.I of non-club cricketers were 60.20 ± 3.46 kg, 172.86 ± 6.68cm, 20.19 ± 1.54 kg/m^2 respectively.

The t-ratio between club and non-club cricketers on physical components (weight, height and B.M.I) were 3.61 (>0.05), 1.29 (>0.05), 3.74 (>0.05) respectively.

Graphical representation of deference in mean scores

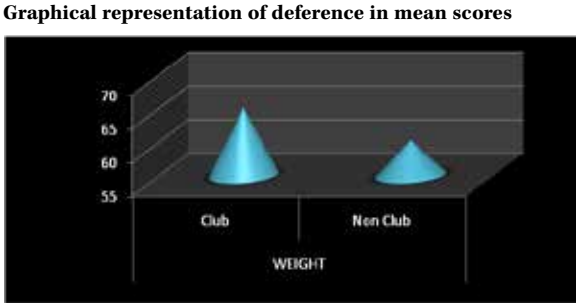

Fig1. Graphical representation of deference in mean for club and non-club cricketers in weight.

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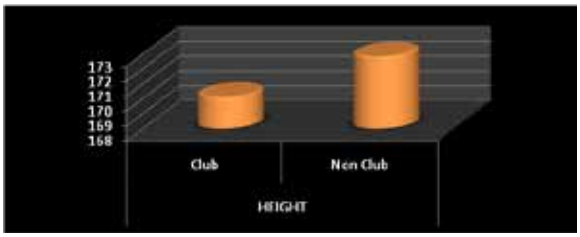

Fig2. Graphical representation of deference in mean for club and non-club cricketers in height.

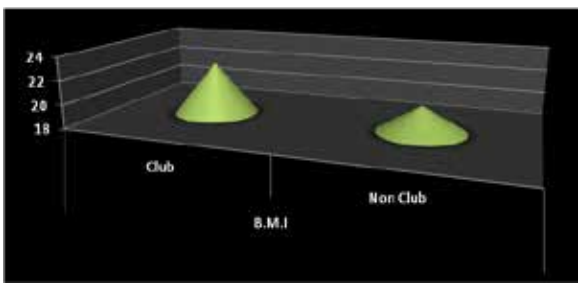

Fig3. Graphical representation of deference in mean for club and non-club cricketers in B.M.I.

The above findings in respect of the physical variables appear to be very logical. This study was aimed to the find out comparative relationship BMI between club and non-club cricketers. There are various factors that influence BMI. These factors include physical activity, environment, heredity and maturation. In developing countries, activity patterns for cricketers in club cricketers are different from those in non-club cricketers. The result shows that club cricketers are higher then non-club cricketers in weight and B.M.I. But non-club cricketers are higher then club cricketers in height.

The club cricketers are better B.M.I from the non-club cricketers because they train under the supervision of experts in throughout a year. But there were insignificant difference between club and non-club cricketers on B.M.I.

Conclusions: Within the limitation of the present study, it was concluded that club cricketers had significantly better B.M.I than non-club cricketers. Future Research needed on club and non-club cricketers are large sample. There are hardly any studies on comparison of club and non-club cricketers. More research needed to validate its effects.

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