A COMPARATIVE STUDY OF BMI AND AGE BETWEEN SCOTLAND AND INDIAN FEMALE HOCKEY PLAYERS

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Abstract:-Background-The purpose of study was to find out the difference between Scotland and Indian female Hockey Players in relation to BMI (Body Mass Index) and Age. Procedure and Methodology- For purpose of the study thirty two (16 from India and 16 Scotland) female Hockey players were selected randomly. The selected variable of Hockey Players was BMI and Age was measured by team chart of India and Scotland. Statistical Technique- t-test was computed to compare of (Body Mass Index) and Age between Scotland and Indian female Hockey Players. Result- clearly indicates that there is significant difference between Scotland and Indian female Hockey Players in relation to BMI (Body Mass Index) and Age Conclusions: There was a significant difference was found between Scotland and Indian female Hockey Players in relation to BMI (Body Mass Index) and Age.

Keywords: BMI, Age, Hockey.

INTRODUCTION

Hockey is a dynamic field game, played by male and female, requiring high level skills, excellent conditioning and well co-ordinated team efforts (Dubey, H.C.1999).

Field hockey, a team sport is played comparatively on a large population for active as well as secondary participation. The participation of players is active participation, while of audience, spectators, coaches, scientists, organizers, national federations and media are secondary participators. If we trace the history of field hockey, evidences show that some form of ball and club game is as old as human themselves. A most of writers have tried to pin down the origin of hockey, using the writings and paintings of the ancients as evidence and have advanced some very plausible theories.

Anthropometric measurements, body composition, body size and proportions are playing an important role in physical performance and fitness of the sportsman. Height and weight both are the indicators of overall body size and have been used for the grouping of children and youth in various kinds of activity according to their age and sex.

METHODOLOGY:

SAMPLE: For the purpose of the study 32 (16 from India and 16 from Scotland) female hockey players were selected from commonwealth games.

TOOLS: For measuring the Height, Weight and Age of the subjects, team chart was used. It is a chart in which players height, weight and date of birth is mention.

DATA COLLECTION: The data was collected during the commonwealth games by team chart of Scotland and Indian hockey players.

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DATAANALYSIS: The collected data were put to statistical treatment by computing "to find out the differences if any, between the Scotland and Indian female hockey players in relation to BMI and Age. The result has been presented in the following table:

RESULTS:

Table 1
Showing the mean difference between Scotland and Indian female Hockey Players in relation to BMI (Body Mass Index)

Players	N	Mean	SD	SE	t- value
Scotland	16	22.70	1.22	.31	3.23
India	16	21.29	1.23	.31	

^{*}Significant at 0.05 level of Significance with 30 df. Tabulated, t-value = 2.04

An examination of table 1 revealed that there was significant difference found between Scotland and Indian female hockey players in relation to BMI at 0.05 level of significance with 30 degree of freedom because calculated t-value (3.23) is higher than tabulated t-value (2.04).

Mean and Standard Deviation of BMI between Scotland and Indian female Hockey Players

23
22.5
22.69
21.5
21.5
Scotland
India

Graph-1

Table 2 Showing the mean difference between Scotland and Indian female Hockey Players in relation to Age

Players	N	Mean	SD	SE	t- value
Scotland	16	25.56	3.05	.76	2.09
India	16	22.81	4.29	1.07	

^{*}Significant at 0.05 level of Significance with 30 df. Tabulated, t-value = 2.04

An examination of table 2 revealed that there was significant difference found between Scotland and Indian female hockey players in relation to Age at 0.05 level of significance with 30 degree of freedom because calculated t-value (2.09) is higher than tabulated t-value (2.04).



Graph-2

DISCUSSIONS ON FINDINGS

The results clearly indicate that there was significant difference found between Scotland and Indian female hockey players in relation to BMI and Age. Results of the present study indicate that Scotland female hockey players have higher BMI and Age in compare to Indian female hockey players.

CONCLUSION:

There was a significant difference found between Scotland and Indian female hockey players in relation to BMI and Age.

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