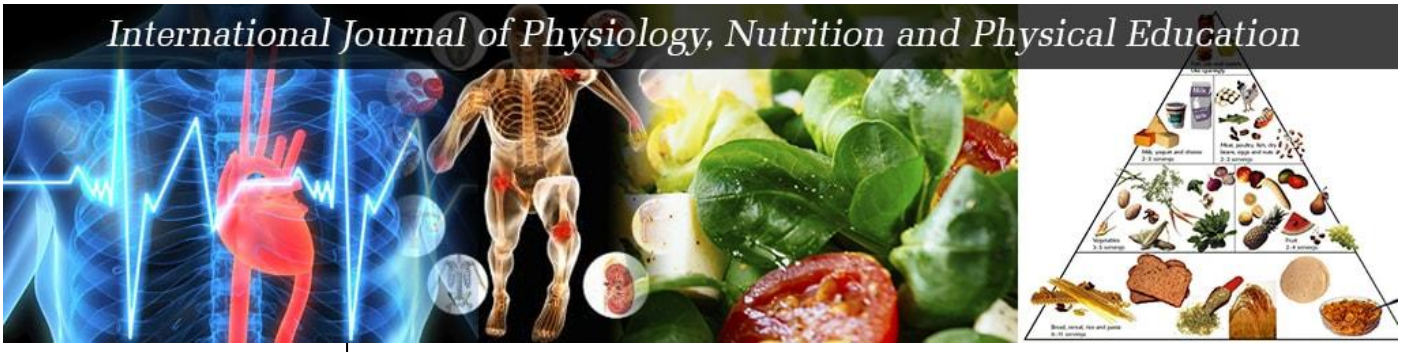

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Motor fitness variable among state and national hockey players, a comparison

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Abstract
The aim of the study was comparison of motor fitness variable (Abdominal strength, Speed and Agility) among state and national level hockey players. For the specific purpose of this study 50 hockey player with age ranged from 17 to 25 years were selected on the basis of simple random sampling from different two categories, i.e. state and national level Hockey players were selected as the subject of the present study, each group consists of equal number of subjects. For the present study all the subjects were gone through a Motor Fitness Test. The Motor Fitness of the subjects were measures using the 'slandered test procedure' which consist of three test items, shuttle run in second, 50-meter dash in second and bent leg sit ups in no/min. Shuttle Run was conducted to measure agility, 50 mtr run for speed and sit ups for abdominal strength. All the tests were conducted through standard procedure. After collecting the data, mean, SD, T value were calculated to observe the differences between groups. The level of significance was set at 0.5%. On the basis of the results of the study the conclusion may be made that the motor fitness variable (abdominal strength, Speed and Agility) has the significant difference in relation to state and national level hockey players.

Keywords: Abdominal strength, speed, agility

Introduction
Fitness is a condition of the entire organism, characterized by energy and efficiency but also guided by attitudes and habit patterns that contribute to mental and emotional poise. It is the ability to perform muscular work satisfactorily and ability to carry out our daily tasks without undue fatigue. Physical Fitness is one of most important aspects in the field of physical education. Physical Fitness may be defined as the ability to carry out daily tasks with alertness without undue fatigue and having simple energy to enjoy leisure time pursuit and meet unforeseen emergencies. Motor fitness is a limited phase of physical fitness and it concerns the capacity to move the body efficiently with force over a reasonable length of time. It refers an efficient performance of an individual in such basic requirement as jumping, running, falling in a variety of situation. It is the limited phase of general motor ability. Motor ability has been defined as the present acquired and innate ability to perform motor skills of a general and fundamental nature exclusive of highly specialized sports and gymnastic techniques. Now it is as competition as any other highly competitive sport and requires motor fitness for its successful performer. But at present it is a competitive as any other highly competitive sport. Today any sport at its top level, requires motor fitness for its successful performer, hockey is no exception to that. Fitness is one of the important components of individual performance. But demand of different sports is somewhat different from one another.

Procedure
For the specific purpose of the this study 50 hockey player with age ranged from 17 to 25 years were selected on the basis of simple random sampling from different two catogries, i.e. state and national level Hockey players were selected as the subject of the present study, each group consists of equal number of subjects. For the present study all the subjects were gone through a Motor Fitness Test. The Motor Fitness of the subjects were measures using the 'slandered test procedure' which consist of three test items, shuttle run in second, 50 meter dash in second and bent leg sit ups in no/min. Shuttle Run was conducted to measure agility,

50 mtr run for speed and sit ups for abdominal strength. All the tests were conducted through standard procedure. After collecting the data, mean, SD, T value were calculated to observe the differences between groups. The level of significance was set at 5%.

Table 1: Descriptive Statistics of motor fitness variable of State and National level Hockey players.

Descriptive Statistics	State Level			National Level		
Variable	**strength**	**Speed**	**Agility**	**strength**	**Speed**	**Agility**
Mean	45.480	6.892	9.996	51.800	6.564	9.472
Standard Error	1.98	.078	.110	1.75	.054	.110
Standard Deviation	9.912	.394	.550	8.774	.270	.662
Sample Variance	98.260	.154	.304	77.000	.073	.306
Kurtosis	.080	.076	-.913	.033	-.628	-.466
Standard Error of Kurtosis	.902	.902	.902	.902	.902	.902
Skewness	-.751	-.380	.011	-.798	.402	.111
Standard Error of skewness	.464	.464	.464	.464	.464	.464
Range	38.00	1.60	1.99	33.00	1.01	2.01
Minimum	20.00	6.09	9.06	30.00	6.09	8.53
Maximum	58.00	7.69	11.05	63.00	7.10	10.54

Table.1 revealed that the mean (± standard deviation) of state and national level hockey players in relation to Abdominal strength, Speed and Agility were 45.480 (± 1.98), 6.892(±.078) and 9.996 (±.110) of state level hockey players and 51.800 (±1.75), 6.564(±.054) and 9.472 (±.110) respectively. The table also showed other descriptive statistics i.e. standard error and sample variance along with the range showing minimum and maximum score of the subjects. The value of kurtosis and skewness along with the standard error of kurtosis and standard error of skewness itself indicates the normality (scientific authenticity) of the data.

Table 2: Descriptive Statistics of motor fitness variable of State and National level Hockey players.

Group	Mean	Standard Deviation	t-value	sig.
State	45.480	9.912	2.387	.021
National	51.800	8.774		

Significant at.05 $t_{0.05}$ (48) = 2.01

Table 3: t-Test of Speed of State and National level hockey players.

Group	Mean	Standard Deviation	t-value	sig.
State	6.893	.392	3.450	.001
National	6.564	.270		

Significant at.05 $t_{0.05}$ (48) = 2.01

Table 4: t-Test of Agility of State and National level hockey players.

Group	Mean	Standard Deviation	t-value	sig.
State	9.996	.550	3.354	.002
National	9.472	.552		

Significant at.05 $t_{0.05}$ (48) = 2.01

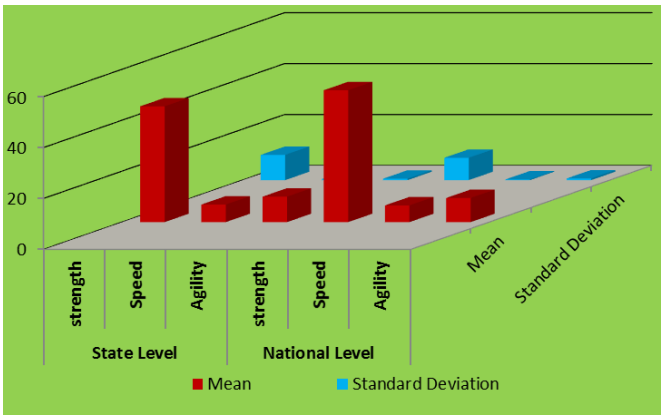

Fig 1: Graphical Representation of Mean and S.D of Achievers and Non-Achievers on lifestyle Assessment.

Discussion of Finding

In the light of obtained data it can be seen that there was a significant effect of motor fitness variable is seen on State and National level hockey players in relation to abdominal strength, Speed and Agility, National level hockey player's possessed greater motor fitness in comparison to State level hockey players. On the basis of this study the significant difference was seen in relation to abdominal strength (p>.021, speed (p>.002) and agility (p>.001) respectively which is found lower than (p<.05). The finding may be attributed to the fact that National level hockey players have a different playing condition, training schedule and game strategies.

Conclusion

On the basis of the results of the study the conclusion may be made that the motor fitness variable (abdominal strength, Speed and Agility) has the significant difference in relation to state and national level hockey players.

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