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COMPARATIVE STUDY ON MOTOR ABILITIES AMONG SPORTSMEN AND NON-SPORTSMEN OF KANPUR UNIVERSITY, UTTAR PRADESH

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ABSTRACT

Physical Fitness is one's richest possession; it cannot be purchased but can be earned through a daily routine of physical exercise. As it is self-evident that fit citizens are nation's best asset and weak ones its liability. Therefore it is the responsibility of every country to promote the physical fitness of its citizens because it is the basic requirement for most of the tasks to be undertaken by an individual in his daily life. The purpose of this study, physical fitness is understood to comprise of Motor abilities namely Speed, Endurance, Flexibility, Agility, Strength, and cardiovascular endurance. among Sportsmen and Non- Sportsmen of Kanpur University, Uttar Pradesh. The present study was carried out of 80 students (Physical Education) college 40 sportsmen and 40 Non-sportsmen selected sample's motor fitness was measured in five motor ability tests like Speed, Endurance, Flexibility, Agility, and Strength. The score for each test item was collected for all subjects. The comparison of the performance of subjects of various test items of the AAHPER Youth Fitness Test, t-Test was used to analyze the data with the level of significance at 0.05 Level. The results revealed that there was a significant difference in a motor test of speed, agility, between before and after training, trained samples both sportsmen and non-sportsmen has significantly higher performance in a speed test. There was a significant effect of training on the motor test of endurance and flexibility of both groups. There was a significant difference between sportsmen and non-sportsmen in their all motor components like Speed, Endurance Flexibility, Agility, and Strength.

Keywords- Speed, Endurance, Flexibility, Agility, Strength, sportsman, non-sportsman, males.

1. INTRODUCTION

Physical fitness is more than cardiovascular fitness. Most experts agreed that fitness has many different components of which cardiovascular fitness is simply one. From a public health perspective strength, muscular endurance flexibility and body composition additionally benefit thought.

When properly instructed, education for physical activity , with its stress on building a physically, showing emotion, mentally, and socially fit society, plays a vital role within the instructed educational process **(Bucher and Wuest, 1976).**

Main aims of Physical education is to guage good body condition, has become a continuing challenge to the current profession. General test norms are evolved to assess physical or motor fitness throughout the globe. Vried normative studies ensure the requirement for norms for specific target populations. Physical fitness is on positive quality, extending on a scale from death to "abundant life" All living people, therefore have an some amount of fitness, that varies significantly in several humans and within the same person from time to time. good condition is an important quality of man **(Clarke, 1976).**

The world's leading philosophers have stressed the importance of good condition in living a productive and meaningful life. The Greek thinker, Aristotle expressed that the body is that the temple of the soul, and to achieve harmony of body, mind, and spirit, the body should be physically fit. A sound mind in exceedingly in a sound body briefly was wrote by an English thinker (John Locke) for the total description of a contented state during this universe. **(https://www.johnlocke.org/a-sound-mind-in-a-sound-body).**

Physical fitness indicates the general health of a human, but the physical demands in competitive sports is highly required professions. As a results of current work, significantly within the field of applied science and physical education, it's changing into more and more obvious although, not usually appreciated that the action and maintenance of high levels of physical fitness manufacture vital efforts on the operating of the human body **(Williams , 1962).**

Physical fitness could be a ability and capability for daily routine works with alertness while not fatigue and with ample energy to entertain leisure-time activity and to satisfy unforeseen emergencies **(Clarks , 1976).**

Physical fitness as the capability of an individual to perform a given physical task involving muscular effort **(Mathews and Fox ,1973).**

Physical fitness in on a time and is commonly outlined in relevancy a person's lifestyle and energy wants. Physical fitness is usually outlined because the ability to handle normal physical demands of life, to own ample energy to perform a spread of time off activities, and still be able to operate effectively in emergency conditions **(Swegin et. al. 1989).**

The AAHPER defines fitness as a state. that characterizes the degree to that someone is in a position to operate expeditiously. Fitness is a personal matter. It implies the flexibility of every person to measure most effectively among his potentialities. the flexibility to operate depends upon the physical, mental, emotional, social, moral, and non secular elements of fitness all of that are associated with one another and are mutually interdependent **(AAHPER, 1967).**

Cardiovascular fitness is one amongst the foremost vital elements of physical fitness as mentioned in agreement with most of the consultants in world . From a public health perspective, strength muscular endurance flexibility, and body composition additionally benefit consideration **(AAHPER, 1980).**

For the purpose of this study, physical fitness is understood to comprise of Motor abilities namely Speed, Endurance, Flexibility, Agility, Strength, and cardiovascular endurance. among

Sportsmen and Non- Sportsmen of Kanpur University, Uttar Pradesh. It was also hypothesized that there is a significant difference between the motor abilities among Sportsmen and Non-Sportsmen of Kanpur University, Uttar Pradesh.

2. METHODOLOGY

2.1 Sample

The present study was carried out of 80 students (Physical Education) college 40 sportsmen and 40 Non-sportsmen selected sample's motor fitness was measured in five motor ability tests like Speed, Endurance, Flexibility, Agility, and Strength. The sample was given training for four weeks. After the training motor fitness was again measured in terms of the performance of the players in the five motor ability tests used in pre-training conditions. The performance of the sample before and after the training conditions was taken to assess the motor fitness ability. The data of pre and post-training conditions were analyzed statistically.

2.2 Tools and Technique

Motor ability tests were used to analyzed the data.

Sl. No.	Motor Ability	Test	Unit of Measure
1.	Speed	50 yard dash	Time
2.	Endurance	12 min. Run & Walk	Distance
3.	Flexibility	Sit & Reach Test	Inches
4.	Agility	Shuttle Run 10x4 yards	Time
5.	Strength	Pull-ups	Score

2.3 Statistical Analysis

The score for each test item was collected for all subjects. The comparison of the performance of subjects of various test items of AAHPER Youth Fitness Test, t-Test was used to Analysis of Variance with the level of significance at 0.05 Level

3. RESULTS

To assess the performance of subjects of various test items of AAHPER Youth Fitness Test, t-Test was used to Analysis of Variance with the level of significance at 0.05 Level and data pertaining to this has been presented in table 1 and 2.

TABLE 1

MEAN SD AND T-VALUES OF MOTOR FITNESS TESTS OF SPORTSMEN AND NON SPORTSMEN GROUPS (PRE- TRAINING)

Groups		Speed	Endurance	Flexibility	Agility	Strength
Sportsmen	M	10.00	417.4	2.10	12.50	16.30
	SD	1.40	150.8	1.01	1.21	2.61
Non-Sportsmen	M	9.48	310.9	2.13	11.50	14.40
	SD	1.59	155.6	1.68	1.59	2.16
t-values		2.13*	2.78*	0.19	2.11*	2.74*

*Significant at 0.05 level, t.05 (118)=1.98

Table-1 clearly reveals that the mean scores of both sportsmen and non sportsmen in all the five motor ability tests pre-training were given. It shows that the endurance of the sportsmen and agility test non-sportsmen have is significantly higher than the sportsmen.

TABLE 2
MEAN SD AND T-VALUES OF MOTOR FITNESS TESTS OF SPORTSMEN AND NON SPORTSMEN GROUPS (POST-TRAINING)

Groups		Speed	Endurance	Flexibility	Agility	Strength
Sportsmen	M	11.50	221.3	3.39	17.44	11.70
	SD	1.23	173.3	1.21	2.23	2.45
Non-Sportsmen	M	10.48	201.4 151.6	3.49	16.40	10.41 2.22
	SD	1.70		1.36	1.78	
t-values		3.18*	4.30*	0.366	2.57*	2.31*

*Significant at 0.05 level
t.05 (118)=1.98

Table-2 clearly reveals that there were significant differences in the motor ability test like speed, endurance, agility, and strength after training. T-values on these tests are significant differences in the ability.

4. DISCUSSION

The statistical analysis of data collected on 80 male students of colleges of Kanpur, Uttar Pradesh has been presented in two sections, pre and post-training. The purpose of the study has been compared in different items of physical fitness test using analysis. The score for each test item were collected for all subjects separately. The compare the performance of subjects of different test items of AAHPER Youth Fitness Test, Analysis of Variance was used with the level of significance at 0.05

5. CONCLUSIONS

1- There is a significant difference in a motor test of speed between before and after training, trained samples of both sportsmen and non-sportsmen have significantly higher performance in a speed test.
2- There is a significant effect of training on the motor test of endurance of both groups.
3- There is a significant difference in a motor test of agility between pre and post-training; sportsmen have significantly higher performance in agility than non-sportsmen.
4- There is a significant effect of training on the motor ability test of the flexibility of the samples.
5- There is a significant difference in motor ability test of strength between sportsmen and non-sportsmen.
6- There is a significant difference between sportsmen and non-sportsmen in their all motor components like Speed, Endurance Flexibility, Agility, and Strength.

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