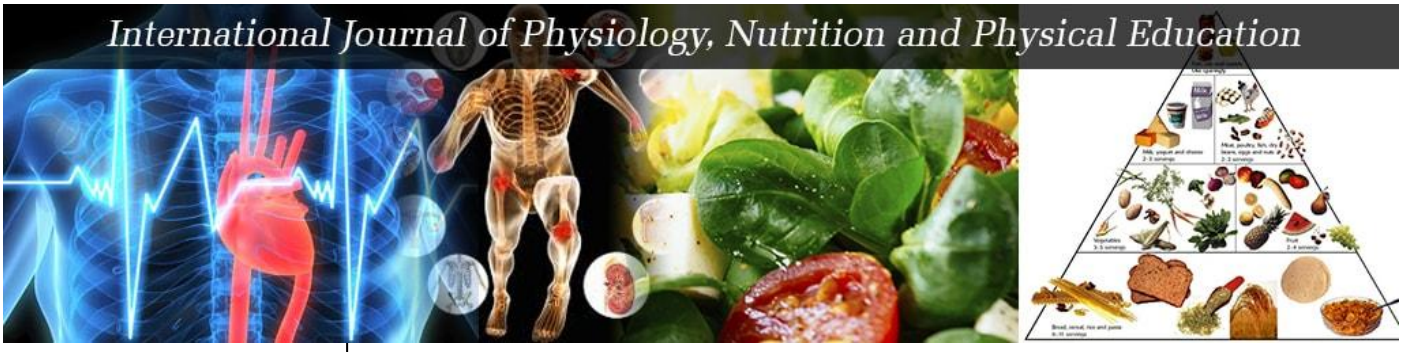

ISSN: 2456-0057
IJPNPE 2019; 4(2): 554-557

www.journalofsports.com
Received: 16-05-2019
Accepted: 20-06-2019

Nasreena Rasool
M phil. Rabindranath Tagore University, Madhya Pradesh, India

Shahnaz Sarwar
Lecturer, Govt. Dept. of Jammu and Kashmir, Jammu and Kashmir, India

Dr. Manoj Kumar Pathak
Guide M. Phil, Rabindranath Tagore University, Bhopal, Madhya Pradesh, India

Corresponding Author:
Nasreena Rasool
M Phil. Rabindranath Tagore University, Madhya Pradesh, India

The comparison of selected motor fitness components between physical education students and other faculty students

Nasreena Rasool, Shahnaz Sarwar and Dr. Manoj Kumar Pathak

Abstract
"The main purpose of the study is to determine, the Comparison of selected Motor fitness components between physical education and other faculty students" To fulfill this aim, 30 students of physical education and 30 students of other faculty were selected as subjects of the study and their age was ranged from 22-28 years. The main source of data was the students of physical education and other faculty students of Kashmir University. The following variables were selected as present study. Motor fitness variables:- 50 yard dash. (Speed), Standing broad jump (Power) and Bass stick test (Balance). For the present study, modified tools were used for data collection like stopwatch, measuring tape, scale and wooden stick. (4×1 inch). To analysis of data mean, standard deviation and t-ratio were used to significant value of 0.05 levels. The following conclusions drawn from the study

1. There was no statistically significant difference of speed among physical education and other faculty students.
2. There was statistically significant difference of balance among physical education and other faculty students.
3. There was statistically significant difference of power among physical education and other faculty students.

Keywords: Physical fitness, components of physical fitness, stop watch, measuring tool, speed, balance

Introduction
Human life is based upon the body he keeps. All the activities of life are done with the help of body. Nature has created humans to perform various activities efficiently. Today modernization has made human life easier, as most of the work is performed by the machines. The sedentary life style of man has reduced the efficiency of humans. The less working capacity of humans has caused many problems like weakness, illness, chronic diseases, etc. In past our ancestors were quite healthy and fit. The big reason was that, they had to perform a lot of hard physical activity, like running, walking, jumping etc. The environment in past was less polluted. Moreover, they had less stresses in their life. Today it is all opposite, i.e., physical activity is less, environment is polluted, unhygienic conditions exist all around, life is full of stresses, unbalanced diet etc. All these factors have reduced the efficiency of humans. Today, we desperately require physical fitness not only to improve our abilities but also to improve our health and wellness. This will also help to develop healthy environment around us along with community health, thus nation will be benefited. By die physical fitness programmes, we can improve our fitness, wellness and health.

Definitions of physical fitness
- According to Webster Encyclopedia "It is the ability of a person to do daily routine work without fatigue; moreover, to Participate in Playful activity and still reserve enough capacity to meet any emergency."
- According to David R. Lamb "Physical fitness is the capacity to meet the present and potential physical challenges of life with success."
- According to Kroles "Successful adaptation to the stress of one's life style.

Importance of physical fitness
There are some points which highlight the importance of physical fitness. Total efficiency is improved A physical fit person has better response. He is more accurate. Therefore, there is less wastage of energy. There is better quality of work. It improves nerve muscular co-ordination.

Factors affecting physical fitness
Regular exercise, heredity: Proper Training, Environment, Profession, Heath Problems, Age and Sex, Diet, Physical exercise.

The components of physical fitness

- **General physical fitness**
  - **Strength**: Muscular Strength
  - **Stamina:** Muscular endurance
  - Cardio pulmonary Endurance
  - **Suppleness:** Flexibility

- **Health-related physical fitness components**
  - Muscular Strength
  - Flexibility
  - Muscular Endurance
  - Freedom from obesity
  - Cardio-Vascular

- **Motor performance components**
  - Power
  - Agility
  - Flexibility
  - Speed
  - Reaction

- **Time motor fitness**
  10. Components motor fitness components
  - Muscular Strength
  - Muscular Endurance
  - Cardio-Vascular Endurance
  - Freedom From
  - Flexibility
  - Power
  - Speed
  - Agility
  - Balance Obesity
  - Reaction time

- **Motor coordinating or motor control**
  - Hand eye co-ordination
  - Foot eye co-ordination
  - Whole Body co-ordination
  - General Moor Ability (GMA) (113 items
  - General Motor Ability13 (items) Skill ability or motor Educability

There are five physical fitness components. They are directly or indirectly interrelated with each other. Each component has its own importance in different game and sports.

Strength
It is an ability of muscle to overcome resistance. Strength can be defined as the amount of force a muscle and exert.

Endurance
It is the ability to sustain or continue activity. In other words, it is the ability to resist fatigue. It is one of the important components for middle and long distance races.

Speed
It is the ability to perform movement at faster rate. In other words, it is the ability to move as fast as possible.

Flexibility
It is the ability of joints to move in maximum range. In other words, this is the range of a joint to move maximum.

Co-ordinate ability or agility
It is the ability of the body to perform movement with perfection and efficiency. It is the ability of the human body to change direction quickly and effectively. In other words is a ability in the shortest time without getting on balance.

Performance
The study of sports performance in other countries of the world has not yet received due attention and it is mostly limited to a superficial level. This state of affairs hopefully will give way to more serious and scientific approach. In these countries there is not even a serious effort to define the term sports performance which is the logical first step towards study of performance. It however, does not mean that there is no awareness about the nature and importance of sports performance.
It is not easy to define sports performance because of its complex and multidimensional nature. Sports performance in simple words is the process of lacking given sports or demand. Normally, however, it is understood to be degree or extent to which a certain task has been tackled.

- **Muscular Strength**: Muscular strength is ability of a muscle to exert a maximal force through a given range of motion or at a single given point.
- **Muscular Endurance**: Muscular Endurance refers to the capacity of a muscle to exert a sub maximal force through a given range of motion or at a single point over a given time.
- **Cardiovascular Endurance**: Cardiovascular Endurance is the ability to continue training the cardiovascular system for a period longer than twenty minutes (on average)
- **Flexibility:** Flexibility is the ability of a joint to move through a full range of motion.

Balance
The ability to hole the body position in comparatively less stable positions, is known as body balance. Balance is of two types' static balance and dynamic balance.

Reaction time
The interval between presentation of stimulus and the first response is called Reaction Time. In other word it is the time taken in responding to a visual or auditory stimulus. It may also be divided into two categories. Visual Reaction Time and Auditory Reaction Time.

Body composition
Body Composition is the ratio of lean body mass to fat body mass.

Motor fitness

Motor fitness is a term that describes an athlete's ability to perform effectively during sports or other physical activity. An athlete's motor fitness is a combination of five different components, each of which is essential for high levels of performance. Improving motor fitness involves a training regimen in all five.

There are many different manifestations of fitness. Some examples include strength, stamina, speed, and flexibility. Certain types of fitness, such as an athlete's cardiac fitness level, are more important than others. An athlete needs to be aware of the various types of fitness to develop an effective training program that focuses on weak or important areas.

Motor fitness, or motor physical fitness, refers to how an athlete can perform at his or her sport, and involves a mixture of agility, coordination, balance, power, and reaction time. Improving this form of fitness is an indirect result of training in any of these attributes. All five components of motor fitness are essential for competing at high levels, which is why the concept is seen as an essential part of any athlete's training regime.

Agility refers to the body's ability to perform quick movements in different directions. It is sometimes described as how fast an athlete is able to change direction while competing on the field or on the court. Improving agility often involves sprinting between cones that are placed at a variety of angles.

Purpose of the study

"The main purpose of the study is to determine, the Comparison of selected Motor fitness components between physical education and other faculty students"

Objectives of the study

1. To measure the motor fitness components of physical education students in Kashmir University Jammu and Kashmir.
2. To measure the motor fitness components of other faculty students in Kashmir university Jammu Kashmir.
3. To compare the motor fitness components between physical education and other faculty students in Kashmir university Jammu Kashmir.

Significance of the study

1. The study may be helpful to physical education teachers and coaches.
2. The study may be helpful to physical education teachers and coaches to improve better motor fitness among students.
3. The study may be helpful to coaches for providing well training program to achieve motor fitness.
4. The study may help physical education teachers, coaches, trainers for developing further study.

Methodology

"The main purpose of the study is to determine, the Comparison of selected Motor fitness components between physical education and other faculty students" To fulfill this aim, 30 students of physical education and 30 students of other faculty were selected as subjects of the study and their age was ranged from 22-28 years. The main source of data was the students of physical education and other faculty students of Kashmir University. The following variables were selected as present study. Motor fitness variables: - 50 yard dash. (Speed), Standing broad jump (power) and Bass stick test (Balance). For the present study, modified tools were used for data collection like stopwatch, measuring tape, scale and wooden stick. (4×1 inch). To analysis of data mean, standard deviation and t-ratio were used to significant value of 0.05 levels.

Table 1: Shows statistical comparison of speed with 50 yard dash between physical education and other faculty students group is as under:

Group	Mean	SD	T Ratio
Physical Education	7.76	0.92	0.14Ns
Other Faculty	7.73	0.76	

Not significant

From the above table it is observed that the mean of physical education and other faculty students is 7.76 and 7.73 respectively. After applying "t" test it is found that the t-ratio is 0.085 which was not significant at the 0.14 level of significance. So the hypothesis was rejected.

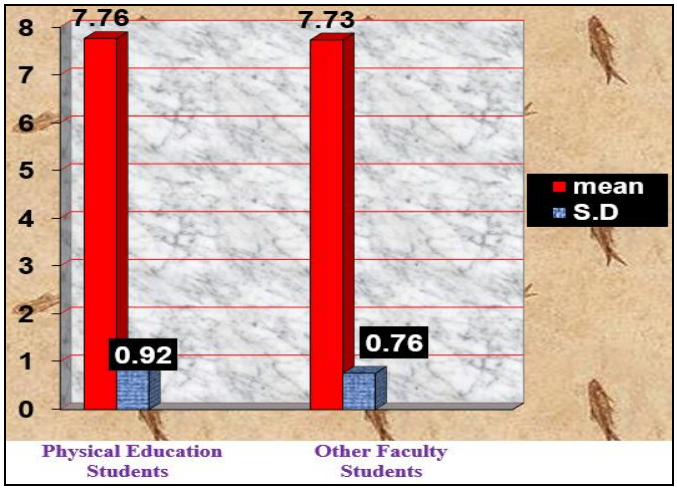

Fig 1: Figure showing the Mean difference of speed between physical education and other faculty students in 50 yard dash.

Table 2: Shows statistical comparison of balance with bass stick test between physical education and other faculty students group is as under:

Group	Mean	SD	T-ratio
Physical education	30.81	11.88	5.56*
Other faculty	18.12	4.01	

*significant

From the above table it is observed that the mean of physical education and other faculty students is 30.81 and 18.12 respectively. After applying "t" test it is found that the t-ratio is 5.56 which were significant at the 0.05 level of significance. So the hypothesis was accepted.

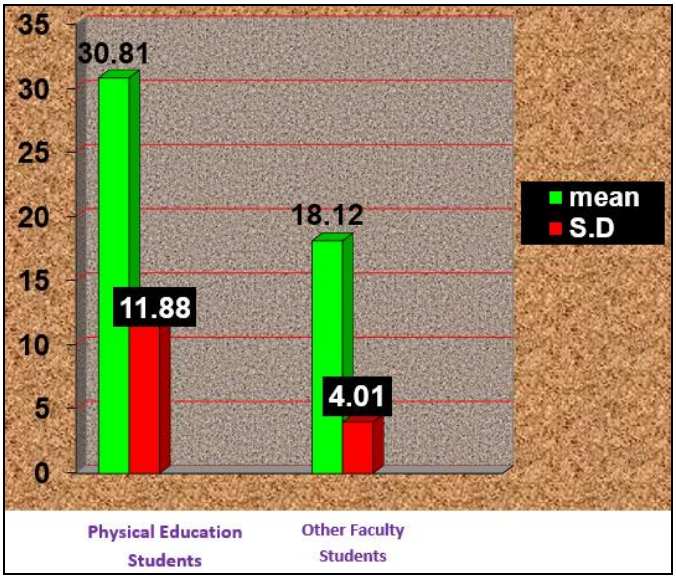

Fig 2: Figure showing the Mean difference of balance between physical education and other faculty students in brass stick test.

Table 3: Shows statistical comparison of power with standing broad jump between physical education and other faculty students group is as under:

Group	Mean	SD	T-ratio
Physical education	1.90	0.19	8.11*
Other faculty	1.47	0.23	

*significant

From the above table it is observed that the mean of physical education and other faculty students is 1.90 and 1.47 respectively. After applying "t" test it is found that the t-ratio is 8.11 which was significant at the 0.05 level of significance. So the hypothesis was accepted.

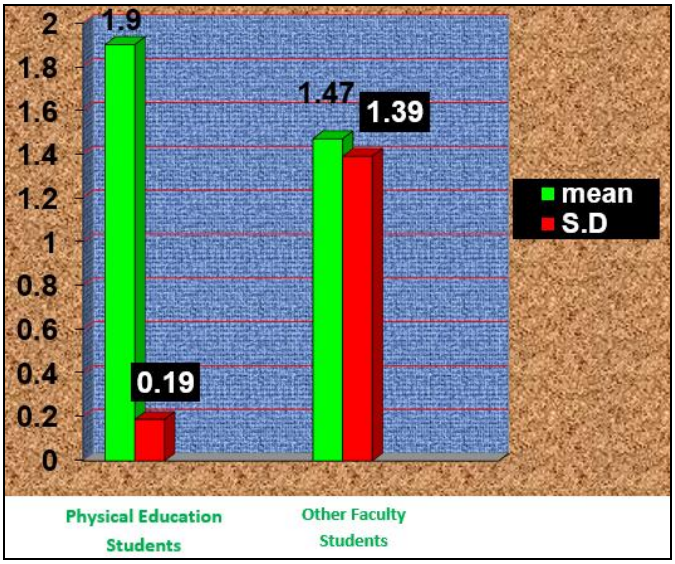

Fig 3: Figure showing the Mean difference of power between physical education and other faculty students in standing broad jump.

Conclusion

The following conclusions drawn from the study

1. There was no statistically significant difference of speed among physical education and other faculty students.
2. There was statistically significant difference of balance among physical education and other faculty students.
3. There was statistically significant difference of power among physical education and other faculty students.

Acknowledgement

Authors acknowledge the great help received from the scholars whose articles cited and included in references of this manuscript. The authors are also grateful to authors / editors / publishers of all those articles, journals and books from where the literature for this article has been reviewed and discussed. Authors are grateful to IJPEJB editorial board members and IJPEJB team of reviewers who have helped to bring quality to this manuscript.

References

1. Anderson D. The Discipline and the Profession. Foundations of Canadian Physical Education, Recreation, and Sports Studies. Dubuque, IA: Wm. C. Brown Publishers, 1989.
2. Stampfer *et al*. 2000
3. Hu Manson F *et al*. 2001
4. O'Connor D. 2005.
5. Garstecki MA, Latin RW, Cuppett MM. Comparison of selected physical fitness and performance variables between NCAA Division I and II football players. J Strength Cond Res. 2004; 18(2):292-7.
6. Manmeet Gill, Nishan Singh Deol, Ramanjit Kaur SGGS. College, Sector 26, Chandigarh, India, ** Department of Physical Education, Punjabi University, Patiala, Punjab, India, (2010) Comparative Study of Physical Fitness Components of Rural and Urban Female Students of Punjabi University, Patiala, Kamla-Raj Anthropologist. 2010; 12(1):17-21.
7. Borremans E, Rintala P, McCubbin JA. Physical fitness and physical activity in adolescents with asperger syndrome: a comparative study. Adapt Phys Activ Q. 2010; 27(4):308-20.