IJFANS INTERNATIONAL JOURNAL OF FOOD AND NUTRITIONAL SCIENCES

ISSN PRINT 2319 1775 Online 2320 7876

 UGC CARE Listed (Group -I) Journal Volume 11, S . Iss 11A, 2022

A COMPARATIVE STUDY OF SELECTED HEALTH RELEATED FITNESS VARIABLES BETWEEN GOVERNMENT AND PRIVATE PHYSICAL EDUCATION TEACHERS OF PUNJAB

[*]Neelam [**] Dr. Nishan Singh Deol

[*] PhD Scholar, Department of Physical Education, Punjabi University Patiala

[**] Professor and Head, Department of Physical Education, Punjabi University Patiala

ABSTRACT

The aim of this study was to find out the difference in Flexibility and Body Mass Index between government and private physical education teachers of Punjab. One hundred physical education teachers (50 government + 50 private) were selected from Punjab for this study. The age of the subjects was ranged between 30 to 40 years. Selected variable Flexibility was measured by Sit and reach test and Body Mass Index was calculated using Height and Weight of the subjects. Descriptive statistics and comparative statistics (t-test) was employed by 'SPSS Version-23'. The results showed that there was an insignificant difference in flexibility and a significant difference in body mass index between government and private physical education teachers of Punjab.

Keywords: Body Mass Index, Flexibility, Fitness.

INTRODUCTION

Physical fitness is that condition of the body which will permit the youngster to maintain good health, respond favorably to physical effort and physical stress, enjoy the sensation of his/her own body and function at an optimal mental and physical level. (Martin, 1978)Fitness means the ability of an individual to live a happy and well balanced life. Physical fitness is the capacity of the heart, blood vessels, lungs and muscles to function at optimal efficiency. (Getchell, 1965)Basically fitness means being in good physical condition and being able to function at one's best level. Total fitness for living involves spiritual, mental, emotional and social as well as physical qualities (Frank , 1973). Physical fitness is a term used to refer to the functional capacity of an individual to perform certain kinds of tasks requiring muscular activity (Bucher & Wiiliam , 1985). Physical fitness is the ability of the body to adopt and recovery from strenuous exercise. It is the relation of one's ability to work and play with vigour and pleasure without undue fatigue and with sufficient energy for unforeseen emergencies. Physical fitness is the ability to last to bear up and to preserve under

ISSN PRINT 2319 1775 Online 2320 7876

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difficult circumstances. Where an unfit person would give up. It is the opposite of being fatigued from ordinary efforts. (Fleishman, 1985).

Health related physical fitness is important to everyone and should be stressed by physical educators and medical people alike. Health related fitness is defined as the ability to perform strenuous activity without excessive fatigue showing evidence of traits that limit the risks of developing diseases and disorders which affect a person's functional capacity. Components of health-related physical fitness are identified as muscular strength, endurance, flexibility, cardiorespiratory endurance and body composition (Nichol, 1986). To enjoy an optimum state of health and physical fitness, exercises are quite necessary. Exercises are helpful in maintaining the sound body throughout life. Health and fitness afford the people an opportunity to live longer and they add to the quality of everyday life (Greenberg & Pargnam, 1986).

Physical education has long believed that exercise is essential to maintain good health. During the past twenty years a great deal of evidence has been reported by the medical researches supporting the value of vigorous exercise for the promotion of health. Health-related physical fitness components are those, development of which enrich one's health and on the other hand which are related to certain diseases (Baumgartner & Jackson, 1987).

AIM OF STUDY

The aim of the present study was to find out the difference in flexibility and body mass index between government and private physical education teachers of Punjab.

MATERIAL AND METHODS

Total hundred physical education teachers (50 government + 50 private) were selected as subjects from Punjab for this study. The age of subjects was ranged between 30-40 years. Selected variable: body mass index was calculated using height and weight. Weight was measured using digital weighing machine in kilograms. Height was measured using stadiometer in centimeters. Flexibility was measured by sit and reach test is a universally used test of trunk flexibility.

ISSN PRINT 2319 1775 Online 2320 7876

 UGC CARE Listed (Group -I) Journal Volume 11, S . Iss 11A, 2022

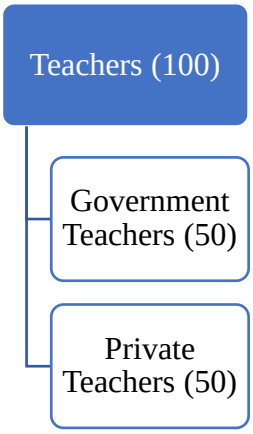

FIGURE I

DESCRIPTION OF SUBJECTS

PROCEDURE

BODY MASS INDEX

Body mass index was calculated using height and weight. BMI was designed to be used as a simple means of classifying average sedentary (physically inactive) populations, with an average body composition. The purpose of this test is to measure the height and weight to measure the BMI. Body mass index was calculated by dividing body weight in kilograms by the square of body height in meters.

The body mass index was measured through the body mass index formula.

Body Mass Index = Weight (kg) / Height (m)^2.

FLEXIBILITY

The Flexibility of the subject was measured with sit and reach Test'. Sit and reach test is a universally used test of trunk flexibility (James Rmarrow Jr, 1995).

Demonstration of the testing protocol was given to the subjects by the researcher. Three trials were given and highest reading was taken as score. To obtain flexibility score 9 inches (21 cm) were subtracted from highest reading which would be the final flexibility score taken in centimeters (Kansal,2012).

STATISTICAL TECHNIQUE

Descriptive statistics i.e., mean and standard deviation were calculated. As per objective of the study, independent 't-test' was applied to find out the difference between various groups. All tests were employed with the help of SPSS-software version 23. Level of significance was set at 0.05.

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RESULTS

TABLE-1

DESCRIPTIVE STATISTICS AND T-VALUE FOR FLEXIBILITY VARIABLE

Group Name	Mean	SD	t-value	Sig.
Government Teachers	24.88	4.38	1.67	.099
Private Teachers	26.35	4.45		

***Significant at 0.05 level** **Tabulated value at DF 98 = 1.984**

Table-1 shows the Mean and SD values with regard to government physical education teachers is 24.88 ± 4.38 whereas in the case of private physical education teachers is 26.35 ± 4.45 respectively. The calculated t-value (1.67) which is less than the tabulated t-value (1.984) at .05 level. So, it demonstrates that there is an insignificant difference between government physical education teachers and private physical education teachers for their flexibility variable.

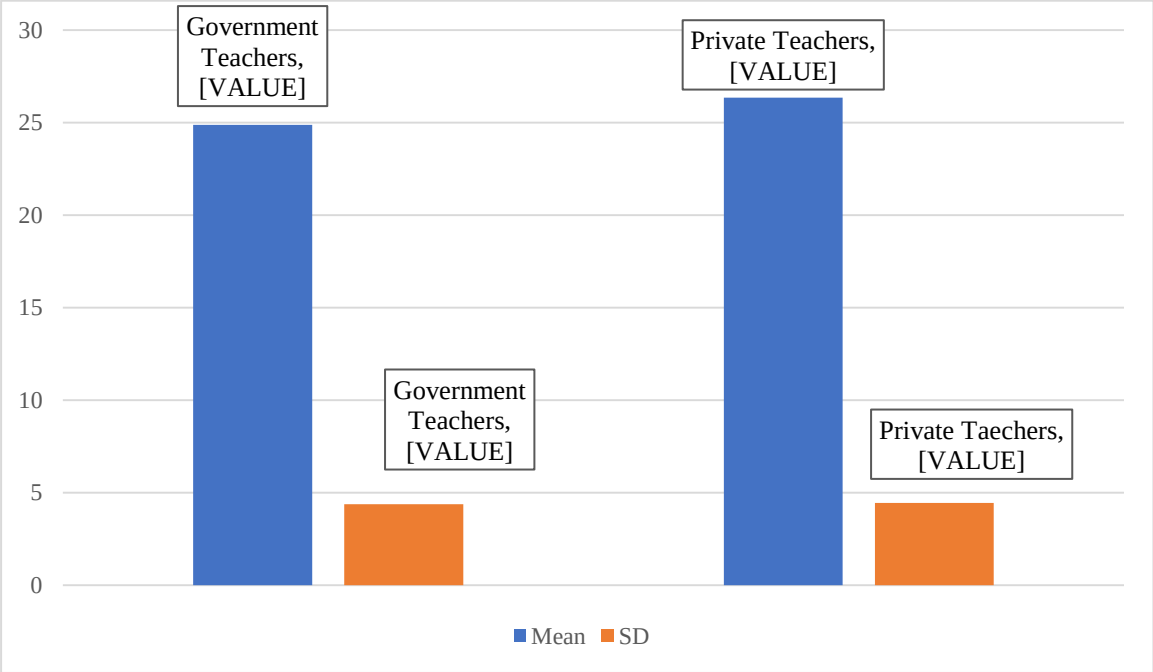

FIGURE-II

GRAPHICAL REPRESNTATION OF DESCRIPTIVE STATISTICS FOR FLEXIBILITY VARIABLE

ISSN PRINT 2319 1775 Online 2320 7876

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TABLE-2

DESCRIPTIVE STATISTICS AND T-VALUE FOR BODY MASS INDEX VARIABLE

Group Name	Mean	SD	t-value	Sig.
Government Teachers	24.62	1.98	2.41	.018*
Private Teachers	23.62	2.15		

SD = Standard Deviation * Indicate significant at 0.05 level

Table-2 shows that values of mean and standard deviation for body mass index variable for government physical education teachers' group and private physical education teachers' group are 24.62 ± 1.98 and 23.62 ± 2.15 respectively. It also shows that p-value (p = .018) is less than 0.05 which means that there exists a significant difference between government physical education teachers and private physical education teachers in case of body mass index variable.

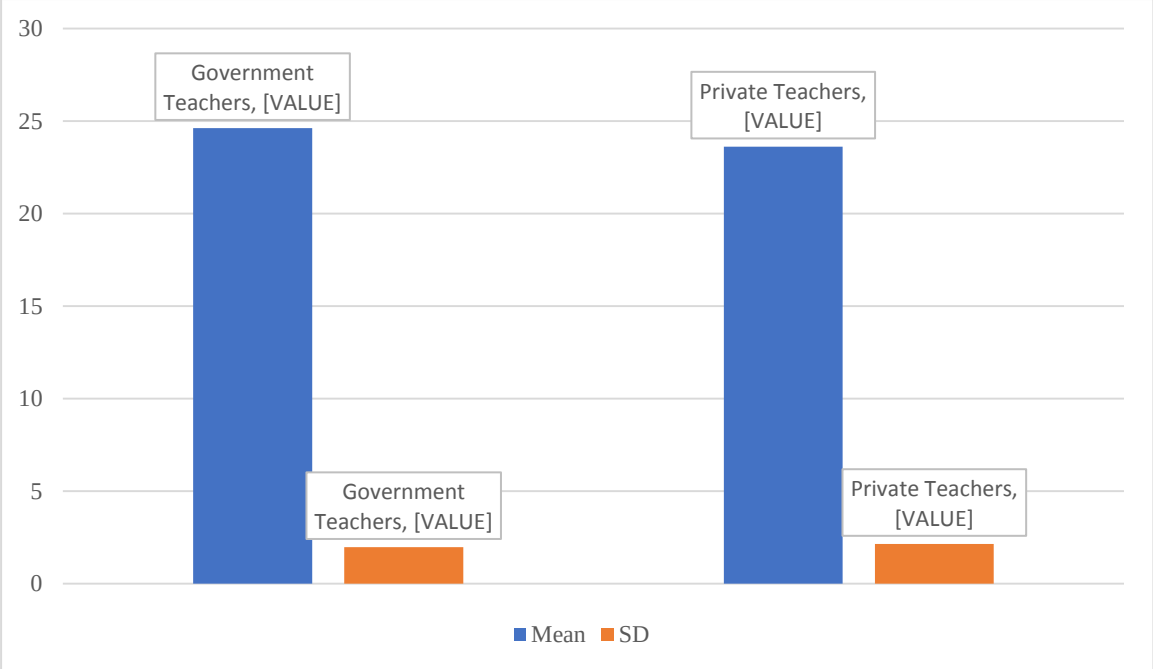

FIGURE-III

GRAPHICAL REPRESNTATION OF DESCRIPTIVE STATISTICS FOR BODY MASS INDEX VARIABLE

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 UGC CARE Listed (Group -I) Journal Volume 11, S . Iss 11A, 2022

DISCUSSION

In the present study, the assumption was that there will be no significant difference in flexibility and body mass index between government and private physical education teachers of Punjab.

The result of the study showed that there was an insignificant difference between government and private physical education teachers in case of flexibility variable. Flexibility is an important component of physical fitness in the personality of physical education teachers. Physical education teacher requires to perform various kinds of practical activities i.e. 'aerobics, yoga, gymnastics etc. The reason behind insignificant statistical difference between government and private sector physical education teachers might be that both sector teachers perform same activities prescribed by educational boards who does not discriminate between government and private schools' curriculum activities. The result of this finding is supported by the study conducted by Salim and Rajbal (2018) who compared the flexibility and strength between attacker and defender players of soccer of Amravati city. For this study hundred (50 defender and 50 attacker) soccer players were randomly selected from Amravati. The age of the subjects was ranged between 25-35 years. Goniometer and dynamometer equipment's were used to measure the flexibility and strength of leg and back. of both attacker and defender players of soccer. For statistical analysis of data 't'- test was used. The results of the study showed that there was no significant difference among attackers and defenders soccer players of Amravati city for their strength and flexibility variables.

The result of the study showed that there was a significant difference between government and private physical education teachers in case of body mass index variable. Body mass index is the ratio between height and weight. The reason behind significant statistical difference between government and private sector physical education teachers might be the life style of government teachers. Government teachers as compare to private sector teachers so they might access better which might lead them towards more calorie intake which may enhance their body mass index score. The result of this finding is supported by the study conducted by Basumatary and Gogoi (2022) who compared government school children and private school children for their BMI status. For this study they were selected 120 male participants with random sampling. For statistical purpose independent t-test used to compare the BMI between Government and Private school children. The results of the study found a significant difference among government school

ISSN PRINT 2319 1775 Online 2320 7876

 UGC CARE Listed (Group -I) Journal Volume 11, S . Iss 11A, 2022

children and private school children in the case of their body mass index.

CONCLUSION

The present study concluded that male government and private teachers of Punjab significantly differ for their body mass index and do not vary in the case of flexibility variable**.**

CONFLICT OF INTEREST

The authors declare no potential conflicts of interest with respect to research, authorship and/or publication of this article.

ACKNOWLEDGEMENT

The authors want to acknowledge all participants who participated in this study and their teachers who gave permission for data collection.

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