

## The Comparison Of Health Status Between Active And Non Active Girls Student Of MVS Govt. Arts & Science College, Mahabubnagar District

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#### Abstract:

Health-related fitness relates to those components of fitness that are affected by habitual physical activity and relate to health status. The primary role of physical activity is the conditioning benefit it provides in developing health related physical fitness. The study is to determine the Comparison of Health Status between Active and Non Active Girls Student of MVS Govt. Arts & Science College, Mahabubnagar District. There may not be any significant difference between active and non active girls students of MVS Govt. Arts & Science College, Mahabubnagar District in relation health status. Material and Methods Total 100 girl students was selected as sample further these were divided into 50 active and 50 non active girl students were selected from the MVS Govt. Arts & Science College, Mahabubnagar District. The age ranges between 18 to 22 years. Findings of the study: the visceral fat of active students Mean is 3.186, S.D. 1.702 and non-active students Mean 2.971, S.D. 1.294. The Trunk subcutaneous fat of active and non-active students Mean is 20.4, 20.79 and S.D. 4.24, 3.34. The Body fat % of active and non-active students Mean is 28.11, 29.37 and S.D. 4.20, 3.56. The BMI of active and non-active students Mean is 21.84, 21.56 and S.D. 3.21, 2.48. The BMR of active and non-active students Mean is 1182.74, 1194.66 and S.D. 128.22, 95.21. The Skeletal muscle % of active and non active students Mean is 26.514, 26.20 and S.D. 1.62, 1.54. Conclusion The analysis of data revealed that there was no significant difference was found in all the body composition variables (Visceral fat level %, Trunk subcutaneous fat %, Body fat %, Body mass index (BMI), Basal Metabolic rate (BMR), Skeletal Muscle %).

#### Introduction

Physical fitness refers to a set of attributes that people have or achieve that relate to the ability to perform physical activity. These attributes include components of fitness that may or may not relate to health-related physical fitness. Health-related fitness relates to those components of fitness that are affected by habitual physical activity and relate to health status. As mentioned above, they include aerobic functioning, body composition, and musculo skeletal functioning. The BPFT includes test items that measure the extent to which these attributes are achieved. Physical activity consists of bodily movement produced by skeletal muscle. The primary role of physical activity is the conditioning benefit it provides in developing health related physical fitness. Types of activities include exercise, sport, training, dance, and play.

In the recent decade, a decline in physical activity and beginning of a sedentary lifestyle among college students has been observed. Sedentary lifestyle and overweight issues are major public health, clinical, and economical problems in modern societies. (Sukanta Saha 2013). in the present age of science and technology people are very alert their health and physical fitness. Each nation is encouraging games and sports to get apex performance at

# © 2023 IJNRD | Volume 8, Issue 3 March 2023 | ISSN: 2456-4184 | IJNRD.ORG international level. The standard of games and sports has gained new heights in every country. Our country is also trying to get the good results to improve the health status of each citizen that is why physical education has been introduced at grass root level as a part of school curriculum, which will help the students to keep them healthy and physically fit. (Deol N.S. and Kang G.S. 2010) . Sukanta Saha (2013) conducted the study, "Somatic, body composition and anthropometric characteristics of college level men students". The independent sample t-test revealed that there were significant differences between physical education and nonphysical education students were showed better somatotype and body composition variables than the non-physical education students. Singh M. H. and Singh K. (2009) conducted study on "The Analytical Study of Health Related Fitness of Different Types of Schools in Punjab "Keeping in mind that the Health related fitness is an important antecedent to good performance, the present study was undertaken to find out the Health related fitness between Boys and Girls of Governments and Non-Governments Schools in Punjab states.

#### **Objective of the study**

The study is to determine the Comparison of Health Status between Active and Non Active Girls Student of MVS Govt. Arts & Science College, Mahabubnagar District

#### Hypothesis:

There may not be any significant difference between active and non active girls students of MVS Govt. Arts & Science College, Mahabubnagar District in relation health status.

#### **Material and Methods**

The purpose of the study was to find out the difference of selected body composition variables between active and non active girls student of MVS Govt. Arts & Science College, Mahabubnagar District. Total 100 girl students was selected as sample further these were divided into 50 active and 50 non active girl students which were selected from the MVS Govt. Arts & Science College, Mahabubnagar District. The age ranges between 18 to 22 years. Variables and criterion measures Body composition Variables: Trunk subcutaneous fat %, Body fat %, visceral fat level, Body mass index (BMI), Basal Metabolic rate (BMR), Skeletal Muscle % It was measured with the help of HBF-361 bio electrical impedance machine. Statistical Consideration: The 't' test was applied to compare the mean scores of the two groups.

#### **Explanation of Terms**

Active student: Active students are those who are associated and involves in physical activities. Non-Active Student: Non active students are those who does not involve actively in physical activities but carry out their work in routine basis.

#### **Results & Discussion:**

The t-test was applied to the selected Body composition variables and the results pertaining to it are presented below in tables & graphs.

Table 1 showing the Visceral Fat Level % Body Composition of Active and Non Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

Group	Mean	S.D.	't' Value
Active Students	3.186	1.702	0.5928
Non Active students	2.971	1.294	

Level of significance is 0.05 Tabulated Value = 1.667 (df = 98)

The Graph shows Visceral Fat Level % Body Composition of Active and Non Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

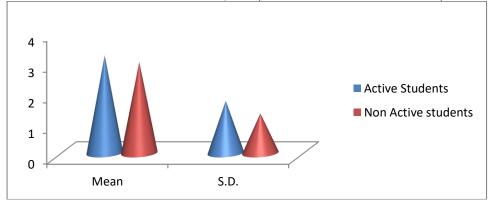


Table 2 showing the Trunk Subcutaneous Fat % Body Composition of Active and Non-Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

Group	Mean	S.D.	't' Value
Active Students	20.4	4.24	0.435
Non Active students	20.79	3.34	

Level of significance is 0.05 Tabulated Value =1.667 (df =98)

The Graph shows Trunk Subcutaneous Fat % Body Composition of Active and Non-Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

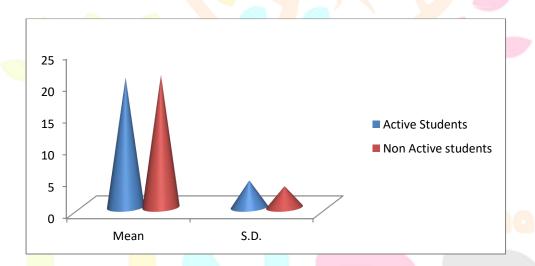


Table 3 showing the Body Fat % Body Composition of Active and Non-Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

Group	Mean	S.D.	't' Value
Active Students	28.11	4.20	1.3522
Non Active students	29.37	3.56	

Level of significance is 0.05 Tabulated Value =1.667 (df =98)

Graph showing the Body Fat % Body Composition of Active and Non-Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

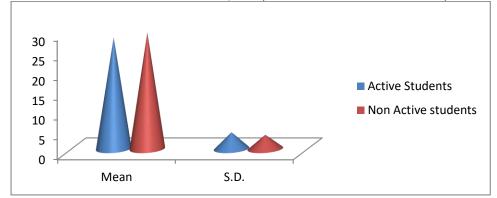


Table 4 showing the Body Mass Index (BMI) Body Composition of Active and Non Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

Group	Mean	S.D.	't' Value
Active Students	21.84	3.21	0.407
Non Active students	21.56	2.48	

Level of significance is 0.05 Tabulated Value =1.667 (df =98)

Graph showing the Body Mass Index (BMI) Body Composition of Active and Non Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

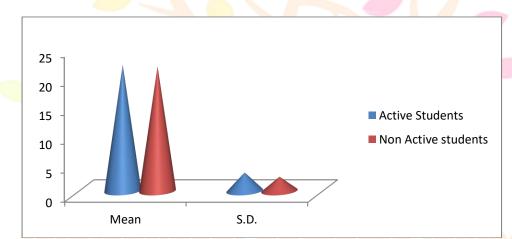


Table 5 showing the Basal Metabolic Rate BMR Body Composition of Active and Non-Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

Group	Mean	S.D.	't' Value
Active Students	1182.74	128.22	0.4413
Non Active students	1194.66	95.21	
Figure is 0.05 Tabulated			

Level of significance is 0.05 Tabulated Value =1.667 (df =98)

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Graph showing the Basal Metabolic Rate BMR Body Composition of Active and Non-Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

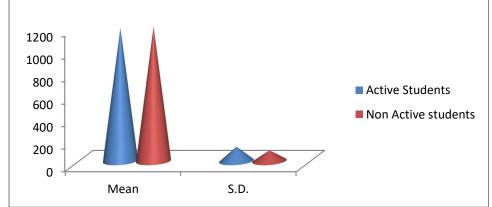
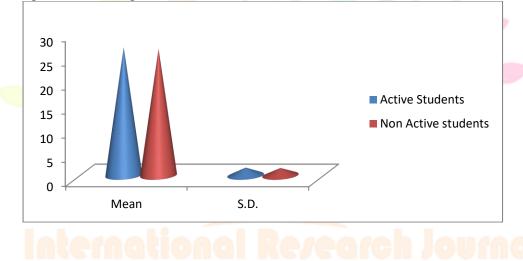


Table 6 showing the Skeletal Muscle %Body Composition of Active and Non Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.

Group	Mean	S.D.	't' Value
Active Students	26.514	1.62	0.829
Non Active students	<mark>26</mark> .20	1.54	

Level of significance is 0.05 Tabulated Value =1.667 (df =98) Graph showing the Skeletal Muscle %Body Composition of Active and Non Active Girl Students of MVS Govt. Arts & Science College, Mahabubnagar District.



#### Findings of the study

The table 1 reveals that the Visceral fat of active students Mean is 3.186, S.D. 1.702 and non-active students Mean 2.971, S.D. 1.294 and 't' value is 0.5928. There was no significant difference found between active and non-active girl students. The table 2 show that the Trunk subcutaneous fat of active and non-active students Mean is 20.4, 20.79 and S.D. 4.24, 3.34 and 't' value is 0.435. There was no significant difference found between active and non-active girl students. The table 3 show that the Body fat % of active and non-active students Mean is 28.11, 29.37 and S.D. 4.20, 3.56 and 't' value is 1.3522. There was no significant difference found between active and non-active girl students. The table 4 show that the BMI of active and non-active students Mean is 21.84, 21.56 and S.D. 3.21, 2.48 and't' value is 0.407. There was no significant difference found between active and non-active girl students. The table 5 show that the BMR of active and non-active students Mean is 1182.74, 1194.66 and S.D. 128.22, 95.21 and't' value is 0.4413. There was no significant difference found between active and non-active girl students. The table 6 show that the Skeletal muscle % of active and non active students Mean is 26.514, 26.20 and S.D. 1.62, 1.54 and't' value is 0.829. There was no significant difference found between active and non-active girl students.

#### Conclusion

The analysis of data revealed that there was no significant difference was found in all the body composition variables (Visceral fat level %, Trunk subcutaneous fat %, Body fat %, Body mass index (BMI), Basal Metabolic rate (BMR), Skeletal Muscle %). The reason of the insignificant difference in above mention variables may be the non-active girls are not directly involved in physical activities but they are indirectly involved in physical activities in their daily routine work such as playing in peer group, walking, cycling and doing domestic work.

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