Todays the world is a competitive place, Sports teach to strive and compete for what a person wants out of life. By being introduced to compete at a young age, sportsmen are able to pursue their dreams. The longer part of their life is being healthy through exercise. In youth sports is essential contributor to lifestyle of exercise and eating right. As well as introduce to alternative ways to stay fit physically as well as mentally. If you are satisfied with yourself on the outside it influences to have a positive outlook of yourself on the inside which could lead to find true happiness. Those who are not active in sports need to realize what they are missing. Those who are active must be encouraged to remain so. Sports should become integral part of every ones life in schools and in home as well. Generally a healthy person is gifted with a will stronger than a physically weak person. The world of games and sports has crossed many milestones, as a result of different achievements in sports and games in general and their adjustment in society in particular. Adjustment is a behaviourial process by which humans maintain equilibrium among their various needs or between their needs and the obstacles of their environments. Participation in Sport and games activities has its affect on different factors of adjustment. The present study is an attempt to find out comparison among Sports Persons and Non-sports persons of District Srinagar Kashmir on Body Mass Index (BMI), body fat Percentage (BF %), Components of Physical Fitness and factors of adjustment. The physical Fitness components include Strength, Speed, agility and Flexibility while as the
Abstract

factors of Adjustment include, Social adjustment, Emotional Adjustment, Health Adjustment, Home Adjustment and Financial Adjustment.

Need and Importance

Since some studies have been conducted on sports and games, it has been reported that sports has a profound effect on physical fitness and on some adjustment behaviours of an individual whether male or female/young or old, it was decided to study the physical fitness and adjustment problems of the sports and Non-sports persons of Srinagar. Adjustment here has a special connotation representing its four aspects viz. social, emotional, health, home and financial aspects as given in the Bell’s Adjustment Inventory translated by Qadri (1967). Some Researchers like Bisht (2015), Neha et al (2014), Sushma & Kumar (2013), Liao et al (2013), Roger (2007), Khan & Gillani (2004), Ganai & Zargar (2004), Sandhu (1988), Bhullar (1982), Russell (1977), Mary (1970) etc have studied social adjustment, Physical Fitness abilities & Adjustment, Adjustment of High and Low Achievers, Personal-Social Adjustment, Attitude toward Physical Education, Behavioural Adjustment & Attitude towards physical activity and Physical & Social contexts of children’s nonschool sedentary behaviour etc. These studies highlight the Research Gap in the area of physical education and sports and signify the need of the study to be taken in relation to adjustment. Few studies have been conducted on physical fitness, but no study has been conducted in this regard in Srinagar. Thus it is hoped that this study may contribute to the literature. It may be concluded that Comparative study of Adjustment among Sports and Non-sports persons of District Srinagar is one of the most crucial issues that needs to be investigated intensively and purposefully. Hence it acted as a great motivating force to the investigator to conduct research in this area. With this back ground it was decided to study the physical fitness and adjustment among Sports Persons and Non Sports Persons of Srinagar.
Statement of the Problem

The problem proposed for the study was formulated as under:

“A Comparative Study of Physical Fitness and Adjustment among Sports Persons and Non-sports Persons of Srinagar”

Operational Definition of the Terms used

i) Physical Fitness: For the purpose of present study, Physical Fitness is operationally defined as the total number of scores gained by the sample subjects while performing Pull Ups, 50-Yard Dash, Shuttle run, and Modified sit and reach tests involving different muscles, to determine Strength, Speed, agility/Coordinative abilities and flexibility respectively.

ii) Adjustment: For the purpose of present study, Adjustment is operationally defined as the scores investigator derived by administration of Bell’s Adjustment Inventory translated into Urdu by Qadri (1964).

iii) Sports Persons: Those subjects were considered as Sports Persons who had participated in different sports competitions from Inter School level to the National level competitions organized by Youth Services & Sports Department or Sports Council of J & K State which are recognized by School Games Federation of India/ All India Council of Sports.

iv) Non-Sports Persons: Those subjects who had not participated in Sports Competitions organised by Department of Youth Services & Sports or Sports Council of J & K State which are recognised by School Games Federation of India/ All India Council of Sports, were considered as Non-sports persons.

Objectives

The following objectives were formulated for the present study:

1. To identify Sports and Non-sports Persons of District Srinagar.

2. To study the Physical fitness profile of Sports Persons with a view to determine the extent to which sports participation influences the changes in the components of Physical fitness of the subjects.
3. To compare different Physical fitness components between Sports persons and Non-sports persons.


5. To study Adjustment problems of Sports Persons and Non-sports Persons and to compare them on various areas of Adjustment.

Hypotheses

The following hypotheses were formulated for the present study:

1. Sports Persons and Non Sports Persons differ significantly so far as their Physical fitness is concerned.

2. All the Physical fitness components such as Speed/ Endurance, Strength, Flexibility and Agility (Coordinative ability) of Sports Persons and Non-sports Persons differ significantly.


4. Sports Persons and Non Sports Persons differ significantly on Composite score of Adjustment.


6. Rural and Urban Sports Persons differ significantly in Composite score of Adjustment.


8. Rural and Urban Non-sports Persons differ significantly in Composite score of Adjustment.
METHODOLOGY
The present study was analyzed by using descriptive method.

Sample
The students enrolled in different schools and Colleges of District Srinagar were included in the sample, which covers all classes from secondary level to Post Graduate level. The sample size of three hundred and twenty (320) subjects for the present study were selected randomly, comprising of 160 Sports persons and 160 Non Sports Persons who were in the age group of 15-28 years. Sports and Non-sports persons were identified with the help of their Teachers/Sports Instructors and Physical Education Directors of schools and College respectively for the said purpose. The subjects were further divided into two more categories viz. Rural Sports & Rural Non Sports persons and Urban Sports and Urban Non Sports Persons. Out of these selected 320 subjects, three (3) sports persons and fifteen (15) Non-sports persons did not co-operate during administration of the physical fitness tests.

<table>
<thead>
<tr>
<th>Group</th>
<th>Rural</th>
<th>Urban</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports</td>
<td>71</td>
<td>86</td>
<td>157</td>
</tr>
<tr>
<td>Non-sports</td>
<td>72</td>
<td>73</td>
<td>145</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>159</td>
<td>302</td>
</tr>
</tbody>
</table>

Tools Used
The following tools were used for the proposed study:
1. Shuttle Run to measure the Coordinative abilities while running and changing quick directions and body positions in speed.
2. 50 Yards Dash/Run to measure the speed capacity of the subject.
3. Pull-Ups to measure the muscular strength
4. Modified Sit and Reach to measure Flexibility.
5. **Anthropometry** (Anthropometric rod and weighing machine) to measure the height and weight of the subjects respectively to calculate of Body Mass Index (BMI).

6. **Skin Fold calliper** to measure the subcutaneous adipose tissue (Fat%).

7. **Bell’s Adjustment Inventory** translated into Urdu by Qadri (1964) comprised of five factors: i. Social, ii. Emotional, iii. Health, iv. Home and v. Financial to measure Adjustment level of subjects. This inventory was adopted because it was felt that this will suite Kashmiri students as most of them read and write Urdu easily as compared to other languages and in view of the fact that the areas and items included in the inventory were such that it could provide us with a basis for identifying the well adjusted and maladjusted students of District Srinagar.

Following parameters such as body weight, standing height and body mass index (BMI) was computed by applying **Adolphe Quetelet (1968)** method. Body Density and Body Fat percentage was calculated by using **Durnin & Womersley (1974)** and **SIRI, (1965)** equations. In the study it has been endeavoured to evaluate the contribution of motor fitness components for predicting the performance of Sports and Non-sports persons. After discussing with the experts in the field, important fitness components were selected, which contribute directly to the performance factors.

**STATISTICAL TREATMENT**

The data was analyzed by using mean, S.D and t test. Following results were indicated: In light of the old findings and with the support of above studies the **Hypotheses** which read as:

1. Sports Persons and Non Sports Persons differ significantly so far as their Physical fitness is concerned”, Stands accepted.

2. All the Physical fitness components such as Speed/Endurance, Strength, Flexibility and Agility (Coordinative ability) of Sports Persons and Non Sports Persons differ significantly”, Stands accepted.

4. “Sports and Non-sports persons differ significantly on Composite score of Adjustment”, Stands accepted.


6. “Rural and Urban Sports person differ significantly on Composite score of Adjustment”, stands rejected.


8. “Rural and Urban Non-sports persons differ significantly on Composite score of Adjustment”, Stands rejected.

**MAJOR FINDINGS**

The following major findings of the study have been drawn as under:

**Sports and Non-sports Persons**

1. It has been found that there is significant mean difference between Sports and Non-sports persons on Body Mass Index of Fat dimension level. Sports Persons were found to posses less Body Mass Index (BMI).

2. It has been found that there is significant mean difference between Sports and Non-sports persons on Fat percentage level. Recommended fitness category of Fat (adipose tissue) percentage ranges from 14% to 17%.

3. It has been found that there is significant mean difference between Sports and Non-sports persons on factor Shuttle Run (Agility, a measurable component of Physical fitness scale). Sports persons were found to posses’ agile body, having good coordinative abilities and flexibility as compared to Non Sports persons who were found to posses’ stiff body.
4. It has also been found that there is significant mean difference between Sports and Non-sports persons on factor 50 Yard Dash test, (Speed, a measurable component of physical fitness scale). Sports persons were found to have more speed than their counterparts. Sports persons were found to be habitual runners. On the other hand Non Sports persons experience breathlessness and second wind due to lack of fitness and speed.

5. It has been found that there is significant mean difference between Sports and Non-sports persons on variable of Pull-Ups test (strength, a measurable component of physical fitness scale). Sports persons were found to posses’ muscular body. Their upper body was found to have good shoulder strength. In the contrary, Non-sports persons were found to have weak upper body.

6. It has been found that there is significant mean difference between Sports and Non-sports persons on variable of Modified Sit and Reach test (flexibility, a measurable component of physical fitness scale). Sports persons were found to have flexible body. On the other hand Non Sports persons have stiff muscles in their body.

7. It has been found that there is significant mean difference between Sports and Non-sports persons on factor Social Adjustment. Sports persons were found more social, because they get more exposure of participating in different Sports/Social activities with different people of community. On the other hand Non-sports persons were found socially maladjusted, avoid social gatherings, shy and having feeling of loneliness. They are unable to express their point of view in social functions.

8. It has been found that there is significant mean difference between Sports and Non-sports persons on factor of Emotional Adjustment. Sports persons were found emotionally well adjusted than their counterparts. In contrary Non-sports persons remain confined to the four walls, were found depressed, unstable, irritating with full of worries and anxieties.
9. It has been found that there is significant mean difference between Sports and Non-sports persons on factor of Health Adjustment. Sports persons were found healthier and well nourished as compared to their counterparts Non-sports persons who suffer from many ailment and abnormal physique due to their sedentary life.

10. It has been found that there is significant mean difference between Sports and Non-sports persons on factor of Home Adjustment. Sports persons were found well adjusted at home than their counter parts. On the other hand Non-sports persons were found having many problems like inter-family attachments, fixation, and un-pleasant home life which are an outcome of peculiar and weird family circumstances.

11. It has been found that there is not significant mean difference between Sports and Non-sports persons on factor of Financial Adjustment.

12. It has been found that there is not significant mean difference between Sports and Non-sports persons on Composite score of Adjustment.

13. Sports persons were found well adjusted as compared to their counter parts. Non-sports persons were found having undue pressure and narrow range of social environment.

**Urban Sports and Urban Non-sports persons**

14. It has been found that there is significant mean difference between Urban Sports and Urban Non-sports persons on Body Mass Index of Fat dimension level. Urban Sports Persons were found to posses less Body Mass Index (BMI).

15. It has been found that there is significant mean difference between Urban Sports and Urban Non-sports persons on Fat percentage level. Fat/adipose tissue percentage of Urban Sports Persons ranged from 14% to 17% which is a fitness category.

16. It has been found that there is significant mean difference between Urban Sports and Urban Non-sports persons on factor Shuttle run test (agility-
Physical fitness components). Urban Sports persons were found agile and quick in coordinative ability as compared to Urban Non-sports persons.

17. It has also been found that there is significant mean difference between Urban Sports and Urban Non-sports persons on factor 50 Yard Dash test (Speed component of Physical Fitness). Urban Sports persons were found to have good quality to perform fast movement to cover maximum distance in shortest possible time as compared to Urban Non-sports persons. On the other hand Urban Non-sports persons have less speed ability.

18. It has also been found that there is significant mean difference between Urban Sports and Urban Non-sports persons on factor Pull-Ups (Strength, component of Physical Fitness). Urban Sports persons were found to have exceptional strength than their counterparts.

19. It has also been found that there is significant mean difference between Urban Sports and Urban Non-sports persons on factor Modified sit and Reach test, (flexibility component of physical fitness). Urban Sports persons were found to have flexible body and joints than Urban Non-sports persons.

20. It has been found that there is significant mean difference between Urban Sports and Urban Non-sports persons on factor Social Adjustment. Urban Sports persons were found more social, adjustable in any environment, never face difficulty to give an oral report before class. They do not feel a sense of loneliness. In contrary Urban Non-sports persons were found socially maladjusted facing difficulty while speaking in front of their class or in the school assembly.

21. It has been found that there is significant mean difference between Urban Sports and Urban Non-sports persons on factor Emotional Adjustment. Urban Sports persons were found emotionally more adjusted, stable, not concerned with their personal worries or anxieties. Without getting
disturbed and distracted. In contrary, Urban Non-Sports Persons get irritated easily, regret at their actions, feel depressed and worried all the time, which in turn hampers their academic achievement.

22. It has been established that there is significant mean difference between Urban Sports and Urban Non-sports persons on factor Health Adjustment. Urban Sports persons were found proper nourished, well adjusted, and physically & mentally healthier. In contrary Urban Non Sports Persons suffer from many ailments frequently like common cold, spells of dizziness and skin diseases.

23. It has been found that there is significant mean difference between Urban Sports and Urban Non-sports persons on factor Home Adjustment. Urban Sports persons were found well adjusted at Home, living in congenial and lively atmosphere. On the other hand Urban Non-sports persons have usually disturbing environment in their homes. Siblings often disturb each other and had frequent family quarrels among their relatives.

24. It has been revealed that there is significant mean difference between Urban Sports and Urban Non-sports persons on factor Financial Adjustment. Urban Sports persons were found financially well adjusted getting financial support from parents/Guardians. On the other hand Urban Non-sports suppress their desires due to non availability of finances. They are being engaged by their parents/Guardians in earning livelihood. Their demands of life get crushed due to non availability of finance.

25. It has been found that there is significant mean difference between Urban Sports and Urban Non-sports persons on Composite score Adjustment. Urban Sports persons were found well adjusted because they have a sense of personal freedom, find healthy atmosphere around them, prove their metal well and achieve more than their potential as compared to Urban Non-sports persons.
**Rural Sports and Rural Non-sports Persons**

26. It has been found that there is significant mean difference between Rural Sports and Rural Non-sports persons on Body Mass Index of Fat dimension level. Rural Sports Persons were found to posses less Body Mass Index (BMI) than their counter parts. It has been found that Rural Sports persons increase Lean Body Mass (LBM).

27. It has been found that there is significant mean difference between Sports and Non-sports persons on Fat percentage level. Rural Sports Persons have less percentage of Fat/adipose tissue than Rural Non-sports Persons.

28. It has been found that there is significant mean difference between Rural Sports and Rural Non-sports persons on factor Shuttle run test (agility, one of the measurable components of Physical fitness). Rural Sports persons were found to be more agile. While as Rural Non-sports persons were found to have lesser amount of coordinative abilities.

29. It has been found that there is significant mean difference between Rural Sports and Rural Non-sports persons on factor 50-Yards Dash test (speed, one of the measurable components of Physical fitness). Rural Sports persons were found habitual of working in the farms and fields for long hours and walk miles in their fields, having strong muscles than Rural Non Sports persons.

30. It has been found that there is significant mean difference between Rural Sports and Rural Non-sports persons on factor Pull Ups test (strength, one of the measurable components of Physical fitness). Rural Sports persons were found having good muscular strength as compared to Rural Non-sports Persons.

31. It has been found that there is significant mean difference between Rural Sports and Rural Non-sports persons on factor Modified Sit and Reach test (flexibility, one of the measurable components of Physical fitness).
Rural Sports persons were found more flexible body than their counterparts.

32. It has been found that there is significant mean difference between Rural Sports and Rural Non-sports persons on factor Social Adjustment. Rural Sports persons were found more social. They obey the moral code of conduct, participate in different group activities, and leave from any congregation with proper permission. In contrary Rural Non-sports persons were found socially maladjusted having anti social tendencies, feeling a sense of loneliness and hesitation in dealing with the mob.

33. It has been found that there is significant mean difference between Rural Sports and Rural Non-sports persons on factor Emotional Adjustment. Rural Sports persons were found emotionally well adjusted. They don’t lag behind, and not concerned with their personal worries. On the other hand Rural Non Sports Persons get irritated easily and leave their task midway. They are always disappointed and fed up with themselves.

34. It has been found that there is significant mean difference between Rural Sports and Rural Non-sports persons on factor Health Adjustment. Rural Sports persons were found healthier. They don’t lag behind if any difficult Physical task is given to them. On the other hand Rural Non Sports Persons suffer from ailments like Cold, unusual Heart Rate/ palpitation, headache and brain disorders.

35. It has been found that there is significant mean difference between Rural Sports and Rural Non-sports persons on factor Home Adjustment. Rural Sports persons were found well adjusted in the family having pleasant Home Life, cooperative parents, and feelings of home security. On the other hand Non-sports Persons face many problems of inter-family attachments, feel lack of real affection and love in their home.

36. It has been found that there is no significant mean difference between Rural Sports and Rural Non-sports persons on financial Adjustment.
37. It has been found that there is significant mean difference between Rural Sports and Rural Non-sports persons on Composite score of Adjustment. Rural Sports persons were found well adjusted than Rural Non-sports persons.

**Urban and Rural Sports Persons**

38. Urban and Rural Sports persons do not differ so far as Social Adjustment is concerned.

39. Urban and Rural Sports persons do not differ so far as Emotional Adjustment is concerned.

40. Urban and Rural Sports persons do not differ so far as Health Adjustment is concerned.

41. It has been found that there is significant mean difference between Urban and Rural Sports Persons on factor Home Adjustment. It was found that Rural Sports persons were more adjusted at home. Rural Sports Persons usually come from families of healthy environment, having enjoyable family life. On the other hand Urban Sports persons suffer from domestic dissatisfaction, uncongenial atmosphere problems of inter-family relationships, attitudes or jealousy.

42. Urban and Rural Sports persons do not differ so far as Financial Adjustment is concerned.

43. Urban and Rural Sports persons do not differ so far as Composite score of Adjustment is concerned.

**Urban and Rural Non-Sports Persons**

44. Urban and Rural Non-sports persons do not differ so far as Social Adjustment is concerned.

45. Urban and Rural Non-sports persons do not differ so far as Emotional Adjustment is concerned.
46. Urban and Rural Non-sports persons do not differ so far as Health Adjustment is concerned
47. Urban and Rural Non-sports persons do not differ so far as Home Adjustment is concerned
48. Urban and Rural Non-sports persons do not differ so far as Financial Adjustment is concerned.
49. Urban and Rural Non-sports persons do not differ so far as Composite score of Adjustment is concerned.