Any Research literature on Methodology and Interpretation of results strictly cautions the researcher to interpret and explain the findings within the framework of objectives and Hypothesis. In this way there is no place in scientific research for generalizations of research findings which go beyond the objectives under operation. The interpretation of the data is of great significance. The data collected has no meaning, if it is not analyzed and interpreted properly. It is fair to say that research in general consists of two large steps, the collection of data and the analysis of that data. Interpretation and Discussion calls for a critical examination of the results of analysis in light of all the limitations of that data. Interpretation is to be done very carefully, logically and carefully by examining the results obtained after analysis of data. It helps the researcher to arrive at some definite conclusions. Keeping it in view, the results are systematically obtained and presented in the same order as the objectives and hypotheses of the study.

Van Dalen (1973) in his research methodology titled, “Understanding Educational Research” has precisely explained the format and development of a research report. The investigator has provided background instructions for the development of this discussion. In the present study, the investigator organized the data in order of objectives which has been presented in the form of Hypotheses. Investigator has brought some important points to light for the purpose of discussion.
1. Sports and Non-sports Persons

*Anthropometric Measures*

For the measurement of body mass index BMI (also known as Quetelet), which is widely used for clinical assessment of appropriateness of a person to correlates with body fat (adipose tissue), was calculated as the weight in kilograms divided by the square of the height in meters (kg/m²). BMI falls into these categories: below 18.5 (underweight); 18.5-24.9 (normal); 25.0-29.9 (overweight); 30.0 and above (obese) (National Center for Health Statistics, United States of America’s Centers for Disease Control and Prevention, 1990).

BMI is quick, simple ratio and easy method for determining if body weight is appropriate for body height. For example, if an adult who weighs 70kg and whose height is 1.75 m, will have a BMI of 22.9 (normal weight for height) wt (kg) 70 Height (m²) 1.75² BMI is age-independent and the same for both sexes.

For calculating fat %, experimentally, the skin of the subject was gripped about 1cm above the selected site and the calipers applied below this site, the grip was removed and the measurement noted to the nearest 0.2mm. The calipers were then removed. This was repeated for 3 successive measurements, with the mean value calculated. Once the average of each of the four Skin fold thickness i.e. Biceps, Triceps, Sub-Scapular and Supra Iliac sites in the body were obtained, the percentage of the total Body fat was computed by the following technique described by Durnin and Womersley (1974). This involved the following steps: 1) Adding up the four skin fold values to get total skin fold value. 2) Calculating the Body Density (BD) by using Durnin and Womersley (1974) formula appropriate to the age of the subjects. The formulas are as under:

**Body Density = c – m (log S)**

\[
D=1.1620 –\{0.0630 \log (B+T+SS+SI)\} \quad (\text{For 17 - 19 years})
\]

\[
D=1.1631 –\{0.0632 \log (B+T+SS+SI)\} \quad (\text{For 20 - 29 years})
\]
Interpretation & Discussion

Where:
D = Density
c and m = standard age and sex-specific coefficients
S = Sum of all four skinfold measurements (mm)
B=Biceps, T=Triceps, SS=Sub-scapular and SI=Supra iliac

When Body Density was calculated with the help of the above formulas, it was converted to Fat % by the following formula devised SIRI (1965):

\[
\text{Body Fat } \% = \left\{ \frac{4.95}{\text{Body Density}} - 4.50 \right\} \times 100
\]

Where 4.95 and 4.50 are the constants calculated by SIRI (1961)

Comparison between Sports and Non-sports persons on Body Mass Index and Fat percentage Dimension

The result of the table 4.01 shows mean difference between Sports and Non-sports persons on Body Mass Index of Fat dimension level. The table reveals that there is significant mean difference between the two groups, the difference was found significant at 0.05 level. The sports persons were found to have less BMI than their counterparts. The results clearly reveal that due to active lifestyle, sports persons have less BMI because, they burn out their body fat in different physical activities, which results in the less Body Mass index. On the other hand Non-sports persons have high values of BMI, which is linked to increased morbidity and mortality, among which cardiovascular diseases (CVD) is one of the most important causes of mortality.

The perusal of the table 4.02 shows the comparison between Sports and Non-sports persons on Fat percentage. The table reveals that there is significant mean difference between the two groups. The difference was found significant at 0.01 level. The sports persons were found to have less percentage of fat (adipose tissue) than their counterparts. Results of the table clarify that due to involvement of Sports persons in rigorous physical activities during conditioning/ Training classes and sports tournaments, they build up muscular body and burn out their excessive adipose tissue. In contrary Non-sports persons have sedentary life style, hence had more percentage of fat in their
body. Increase in fat % may lead to Obesity, which is the independent risk factor for Cardio Vascular Diseases (CVD), particularly for coronary heart disease (CHD). Obesity increases the risk of diabetes 20 times more and substantially boosts the risk of developing high blood pressure, heart disease, stroke, and gallstones. Among people who were overweight or obese, there is a direct relationship between BMI and risk: the higher the BMI, the higher the likelihood of disease. Some of the most common problems seen in people who carry excess weight, such as high blood pressure and unhealthy levels of cholesterol and other fats in the blood, tend to occur together. Both can lead to concurrent health problems.

**Comparison between Sports and Non-sports persons on Components of Physical fitness Scale**

The perusal of the table 4.03 shows mean difference between Sports and Non-Sports persons on variable of Shuttle run, Agility component of physical fitness scale. The table reveals that there is significant mean difference between the two groups. The difference was found significant at 0.01 level. Sports persons were found to be more agile than their counterparts. A glance at the above table with regard to Agility component of motor fitness shows that Sports Persons were agile and had good coordinative abilities because of games and sports they participate in regularly. Sports persons perform stretching exercises regularly in order to make their body ready and prepared for competitive sports events. It is revealed to a great extent that sports and Games involve efficient foot work and quick changes in body positions.

The results presented in tables 4.01 to 4.06 respectively interpreted and discussed

The result of the table 4.04 shows mean difference between Sports and Non-sports persons on variable of 50 Yard Dash, speed component of physical fitness scale. The table reveals that there is significant mean difference between the two groups, and the difference was found significant at 0.01 level, which
indicates that sports persons have more speed than their counterparts in 50-Yard Dash sprints. The descriptive statistics shows Sports persons have demonstrated significantly better on the variable of speed than the Non-sports persons. They perform quick muscular movement to cover maximum distance in shortest possible time. This indicates that the sports persons are sprinters hence have good speed. In contrary Non-sports persons were not habitual runners. They experience breathlessness and second wind due to lack of fitness during running. Today, hundreds of young and old sports persons are seen running, practicing strenuous exercises and morning jogging in public parks, on streets, roads or wherever it can be. It has a positive effect on their body and enhances their speed.

The table 4.05 shows mean difference between Sports and Non-sports persons on the variable of Pull ups, strength component of physical fitness scale. The table reveals that there is significant mean difference between the two groups. The difference was found significant at 0.01 level. The sports persons were found to have more strength than their counterparts. The descriptive statistics shows that sports persons have demonstrated significantly better on the variable of strength than Non-sports persons. Results may be due to the weight trainings they do to make their body strong. The importance of weight-lifting and weight training to develop muscular strength in the body cannot be ruled out in most sports of course

The result of the table 4.06 shows mean difference between Sports and Non-sports persons on Modified sit and Reach, flexibility component of physical fitness scale. The table reveals that there is significant mean difference between the two groups. The difference was found significant at 0.01 level. The sports persons were found to have muscular and great joint flexibility than their counterparts. The descriptive statistics shows that Sports persons demonstrated better on the variable of flexibility than Non-sports Persons because regular and long term muscular flexibility trainings and practice has a positive effect
on total body flexibility. The flexible body not only makes them fit to play but the injury chances to their body gets minimal also. On the other hand Non-sports persons were unable to attain the optimum level of flexibility due to their sedentary life style.

The results presented in tables 4.01 to 4.06 respectively analyzed, interpreted and discussed above, are in line with the findings of the studies conducted earlier by, Manjit (2014), Jekal, (2013), Maddah, (2012), Helgerud (2001), Kumar, (1999), Vats Aarti (1998), Lindsted (1991).

Manjit (2014) found that it is significant to mention in relation to motor fitness components that insignificant differences occur between Inter-College and Inter-University Sprinters on the sub variable agility, balance and flexibility. However, the significant differences occur between Inter-College and Inter-University Sprinters on the sub variable speed and explosive strength. Jekal, (2013) found that in men and women fatness and fitness levels during adolescence appear to be significantly associated with the MetS risk factors and prevalence in adulthood in Koreans. Maddah, (2012) showed that 11.2% of the participants (9% in women and 12.8% in men P<0.05) did exercise regularly. Prevalence of doing regular exercise was inversely related to age in women but not in men. Educated women were more likely to do regular exercise. The most common perceived barrier for regular exercise was time insufficiency. Only a small proportion of the study men and women had sustainable regular exercise for one year. Regular exercise was more common among young and well educated women than older women and the men. Helgerud (2001) Reported effects of aerobic training on performance during soccer match and soccer specific tests. In the study, nineteen male elite junior soccer players, age 18.1 _ 0.8 yr, randomly assigned to the training group and the control group participated. The specific aerobic training consisted of interval training, four times 4 min at 90–95% of maximal heart rate, with a 3-min jog in between, twice per week for 8 wk, monitored by video during two matches, one before
and one after training. Enhanced aerobic endurance in soccer players improved soccer performance by increasing the distance covered, enhancing work intensity, and increasing the number of sprints and involvements with the ball during a match. Kumar, (1999), investigated the relationship between academic achievement and physical fitness among senior secondary male students of West Delhi schools, the result indicated relationship between academic achievement and physical fitness as significant. The calculated value was .23, which was significant against the tabulated value of .19 for 98 degree freedom at 0.05 level of significance. Vats Aarti (1998), divided subjects into high and low physical fitness group on the basis of their fitness status. The age ranged from 16 to 25 years. The ‘t’ variables were indicating significant differences from ‘t’ value at flexed arm hang indicating at 5.28 and sit up at 2.19 and standing broad jump at 2.24 and 600 yard run/walk was at 2.80 and 50 yards at 2.84 and shuttle run at 3.01. Physical education students were found to be superior on motor fitness components as compared to non-physical education female students. Lindsted (1991) found that the protective effect associated with the lowest BMI quintile decreased with increasing age for ischemic heart disease mortality, it remained greater than one at all ages. The relatively large number of subjects who were lean by choice, rather than as a result of preclinical disease or smoking. There was a significant trend of increasing mortality with increasing BMI for all endpoints studied.

In light of the above findings and with the support of above studies the hypotheses No: 1 and 2, which reads as:

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

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.
Comparison between Sports and Non-sports persons on Social, Emotional, Home, Health and Financial dimensions of Adjustment

Result of the table **4.07** shows mean difference between Sports and Non-sports persons on Social dimension of Adjustment. The table reveals that there is significant mean difference between the two groups. The difference was found significant at 0.01 levels, which indicates that sports persons are socially adjusted than their counter parts. The Results seen on the ground justify that sports persons have no difficulty in attending social functions as they are not shy. The sports persons do not feel a sense of loneliness and are adjustable in any environment, because they have more exposure of participating in different activities with different people of community. In contrary, Non-sports persons are not socially adjusted, and they have difficulty in attending social functions. They find it difficult to express their point of view in front of others; it may be because of their non-participation in different sports or cultural activities. They also feel a sense of individualism.

Result of the table **4.08** shows mean difference between Sports and Non-sports persons on Emotional dimension of Adjustment. The table reveals that there is significant mean difference between the two groups. The difference was found significant at 0.01 levels, which indicates that sports persons are emotionally well adjusted than their counter parts. Results reveal that sports persons are not concerned with their personal worries or anxieties. They have peace of mind. In contrary, Non-sports persons are unstable and get irritated easily. Non Sports Persons also remain disappointed and fed up with themselves. They lack moral courage and remain depressed. This depression may be because of their non-participation in sports or co curricular activities.

Perusal of the table **4.09** shows mean comparison between Sports and Non-sports persons on Health dimension of Adjustment. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.01 levels, which indicates that sports persons
are healthier and well adjusted than their counter parts. Results clarify that sports person experience appetite after taking part in rigorous physical activity during sports tournaments. They take diet to overcome this hunger and appetite. With the intake of proper nourishment and involvement in physical conditioning, they built muscular body, that's why they have pleasant appearance. In contrary Non-sports persons have sedentary life hence suffer from many health ailments and have many problems related to their body & physique.

The table **4.10** shows mean difference between Sports and Non-sports persons on *Home dimension* of Adjustment. The table reveals that there is significant mean difference between the two groups. The difference was found significant at 0.01 levels, which point out that Sports persons are well adjusted at home than their counter parts. Results shed light on that sports persons have enjoyable family life. They do not have problems of inter-family relationships, attitudes or jealousy. On the contrary, Non-sports persons face many problems of inter-family relationships, attitudes, attachments, and fixation. Their parents have frequent quarrels and are very strict with them. They always feel that their relatives interfere in their personal affair that is why their home life is unpleasant.

Result of the table **4.11** shows mean difference between Sports and Non-sports persons on *financial dimension* of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that Sports persons and Non-sports persons do not differ so for as their financial aspect is concerned. Hence no conclusion is drawn.

**Comparison between Sports and Non-sports persons on Composite Score of Adjustment**

It is obvious from the table **4.12** that mean difference between Sports persons is less than the mean score of non-sports persons on *Composite score* of Adjustment. The table reveals that there is significant mean difference between
the two groups and the difference was found to be significant at 0.01 levels, which indicates that sports persons are well adjusted than their counter parts. Results clarify that sports persons get more opportunity to interact with other sports persons more often during sports events, coaching camps etc, with other people of the society from different cast creed and color in or outside the state. In contrary, Non-sports persons have no such opportunity to interact with different people of community. They have narrow range of social environment because of their confinement from home to school. The undue pressure from their home and school makes them socially maladjusted.

The results presented in tables 4.07 to 4.12 respectively interpreted and discussed above factor wise are in line with the findings of the studies conducted by: Gurvir (2015), Neha, et al (2014), Sushma (2013), Verma (1999), Gupta, (1993), Sandhu, (1988), Gurvir (2015). They also found that the comparison of college sports women and college non-sports women did indicate that the Personal Adequacy, Inter-Personal Adequacy and Social Maturity aspect of the college sports women was better developed than the college non-sports women. The comparison of college sports women and non sports women did indicate that social adequacy were no significant differences. Neha (2014) reported that adjustment and self concept has a profound effect on the overall behavior of an individual whether male or female, The result of study revealed that significant difference was found among the groups on home, health, emotional and social adjustment area as well as self – concept scores. Sushma (2013), found Significant differences in physical fitness and adjustment level of National level women judo player in comparison to state district woman judo players. Physical fitness and adjustment level among state level and district level women judo player was also found with significant differences. Findings/conclusion and related review confirm the significant relationship between physical fitness, adjustment level and performance level of judo players. In conclusion significant at 0.01 level of
significance were found on physical fitness and adjustment level of elite non elite players. Verma (1999), found Significant difference in 50 meter run and standing broad jump in favour of Hockey and Basketball groups, sit-ups and trunk flexibility in favour of Hockey group. Significant difference in favour of Volleyball group among the different women sports groups. Investigator concluded that Hockey players were more superior in speed, abdominal strength, trunk flexibility and cardio-vascular endurance than the players of the other two groups. Volley ball players were better in leg strength as compared to those of the other two groups. Similarly Basketball players were superior in Shoulder strength and agility than then players of the other two groups. Gupta, (1993) found that the adjustment problems of the OSPER group and NOSPHER group differ significantly, the difference found positive in all except heath adjustment problems area. They have reported that Sports persons are well adjusted, tougher mined, & less reserved. They have social maturity than Non-sports persons. Sandhu, (1988), reported that the sportswomen (SW) were found to more tough mined and group-dependent and less submissive, shy and sober as compared to non-sportswomen (NSW). She also indicated that Non-sports women scored higher on all the factors of socio –economic background than of the sportswomen.

In light of the above findings and with the support of above studies the hypotheses No: 3 and 4 which reads as:


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

Comparison between Urban Sports and Urban Non-sports persons on Body Mass Index and Fat Dimension

The result of the table 4.13 shows mean difference between Urban Sports and Urban Non-sports persons on Body Mass Index of Fat dimension level. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.05 level. The Urban Sports persons were found to have less BMI than their counterparts. The results clearly reveal that due to active life style sports persons have less BMI, though there is a minimal difference found in BMI (body mass index) because regular physical activity prevents or limits weight gain and gain in body mass index. It was also observed that Urban Sports Persons have easy excess to different nearby maintained Jogging parks, outdoor sports stadiums and indoor stadium. They use facilities better than Urban Non Sports persons, which may be one of the reasons that they maintain proper Body Mass Index and burn excessive body fat by involving themselves in different physical activities.

The result of the table 4.14 shows mean difference between Urban Sports and Urban Non Sports persons on Fat percentage. The table reveals that there is significant mean difference between the two groups and the difference was found significant at 0.01 level. The Urban sports persons were found to have less percentage of body fat than their counterparts. Results of the table clarify that fat % of Urban Sports persons is less than Urban Non-sports persons. Less body fat percentage may be due to the intensive training and food restrictions given to the subjects for their preparation and for participation in different sports activities.
Comparison between Urban Sports and Urban Non-sports persons on Components of Physical fitness Scale

The result of the table 4.15 shows mean difference between Urban Sports and Urban Non-sports persons on Shuttle run, Agility component of physical fitness scale. The table reveals that there is significant mean difference between the two groups, and the difference was found significant at 0.01 level. The Urban Sports persons were found to be more agile than their counterparts. The table reveals that physical activity programs which include different exercises and quick movements appear to be an effective way of improving agility and coordinative abilities among Urban Sports persons.

The result of the table 4.16 shows mean difference between Urban Sports and Urban Non-sports persons on 50 Yard Dash, Speed component of physical fitness scale. The table reveals that there is significant mean difference between the two groups. The difference was found significant at 0.01 level. The Urban Sports persons were found to have good quality to perform fast movement to cover maximum distance than their counterparts. Hence the table reveals that participation in sports activities effects physical, motor and cardiovascular fitness. Continue involvement in physical activities cultivates efficiency of various organ hence enhances speed.

The result of the table 4.17 shows mean difference between Urban Sports and Urban Non-sports persons on Pull ups, strength component of physical fitness scale. The table reveals that there is significant mean difference between the two groups. The difference was found to be significant at 0.01 level. The Urban Sports persons were found to have more strength than their counterparts. The descriptive statistics shows Urban Sports persons have demonstrated significantly better on the variable of strength than Urban Non-sports persons, because training programs involve simultaneous strength and endurance training. There is evidence that strength training can helps to lower risk factors like heart disease, diabetes, osteoporosis and colon cancer. Some studies have
shown the improvement in blood lipid profiles and reductions in blood pressure with strength training.  

The result of the table 4.18 shows mean difference between Urban Sports and Urban Non-sports persons on Modified sit and Reach, flexibility component of physical fitness. The table reveals that there is significant mean difference between the two groups. The difference was found to be significant at 0.01 level. The Urban Sports persons were found to have more flexibility than Urban Non-sports persons. The above results clarifies that the body of Urban Sports persons are more flexible than Urban Non-sports persons. The results presented in tables 4.13 to 4.18 respectively analyzed, interpreted and discussed above are in line with the findings of the studies conducted earlier by: Barend (2014), Das (2015), Dhar (1999), Dunn (1998), Barend (2014, reported that all anthropometric, motor, and physical measurements improved significantly over the two-year period. Significantly, greater changes were seen between 13 and 14 years in stature, arm span, sitting height and body mass. Changes in muscle strength, speed and agility were mainly significant between 13 and 14 years while the biggest changes occurred in explosive power and upper-body-arm-and-shoulder-strength during year 2 (14–15 years). Motor and physical fitness also improved significantly from 13 to 15 years, showing definite interrelationships with anthropometric growth during the mid-adolescence period. Das (2015) in his study tested pull-up for arm/shoulder strength, standing broad jump for leg explosive power, according to “AAPHER youth test Battery” and “t” test used to test the hypothesis. They concluded that there is significant difference in selected strength of sports performer. Any individual can belong better fit and healthy life throw the physical activity, so our main target to participate more pupils in any type of physical activity. Dhar (1999), compared thirty (30) Soccer players and thirty (30) non Soccer players who were randomly selected. The test battery designed by Paul, was employed. The ‘t’ test was employed. The results indicated that
the significant difference for the status of physical fitness among soccer and non-soccer players was found. Dunn (1999), reported that the lifestyle and structured activity groups had significant and comparable improvements in physical activity and cardio respiratory fitness. In previously sedentary healthy adults, a lifestyle physical activity intervention is as effective as a structured exercise program in improving physical activity, cardio respiratory fitness, and blood pressure.

**Comparison between Urban Sports and Urban Non-sports persons on Social, Emotional, Home, Health and Financial dimensions of Adjustment**

The result of the **table 4.19 shows** mean difference between Urban Sports and Urban Non-sports persons on Social dimension of Adjustment scale. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.01 levels. The Urban Sports persons were found to be socially more adjusted than their counterparts. The above results clarify that Urban sports persons have no difficulty in speaking in the class rooms or school assemblies. They make friends easily and develop good relations with them. Urban Sports Persons attend social functions whenever they are asked for. The sports persons are adjustable in any environment, and they do not feel a sense of loneliness. They never face difficulty to give an oral report before class. In contrary, Urban Non-sports persons are afraid of facing any competition. They face difficulty while speaking in front of their class or in the school assembly. Even they hesitate while leaving from any congregation.

The result of the **table 4.20 shows** mean difference between Urban Sports and Non-sports persons on Emotional dimension of Adjustment. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.01 levels, which indicates that Urban sports persons, are emotionally well adjusted than their counter parts. The above result clearly indicates that Urban Sports Persons are more stable and are not concerned with their personal worries or anxieties. They do not get
disturbed and distracted. They do not feel a sense of frustration in different competitive activities. They also do not feel dejected for long time if any one criticizes or ridicule them. In contrary, Urban Non-Sports Persons get irritated easily, they also regret at the actions which they do and feel depressed and worried all the time, which in turn hampers their academic achievement. Since Urban Non-sports Persons have no pleasant appearances due to their non involvement in sports activities, which makes them depressed most of the time. The result of the table 4.21 shows mean difference between Urban Sports and Urban Non Sports persons on Health dimension of Adjustment. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.05 level, which indicates that Urban sports persons are physically and mentally healthier and well adjusted than their counter parts. The above results clarifies that sports persons get proper nourishment as they need to be prepared for participation in combative/ sports tournament. They are being directed from physical instructors and teachers to do so otherwise there are chances to loose in the game due to mal nourishment. In contrary Urban Non Sports Persons have many problems related to their health they suffer from skin diseases which affect their outlook. They suffer frequently from common cold and have spells of dizziness. When they get up after sitting for a long time they feel dizziness and had to sit down again to regain full consciousness.

The result of the table 4.22 shows mean difference between Urban Sports and Urban Non-sports persons on Home dimension of Adjustment. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.01 levels, which indicates that Urban sports persons are well adjusted in their family at Home than their counter parts. The above results clarifies that Urban Sports Persons have less Home problems than their counterparts. Urban Sports Persons usually come from families of healthy environment, where the atmosphere is lively and congenial
with the result they do not have many problems and hence they participate in sports and games activities. While as Urban Non-sports persons usually come from families of broken homes. There is usually disturbing environment in their homes. Parents frequently found fault with their conduct. The siblings often disturb each other and had frequent family quarrels among their relatives. This justifies that Urban Non-sports persons suffer from domestic dissatisfaction, un congenial atmosphere at home which hampers their intellectual potential and sports participation.

The result of the table 4.23 shows mean difference between Urban Sports and Urban Non-sports persons on financial dimension of Adjustment. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.05 level. Which indicates that Urban Sports Persons are financially well adjusted. It also clarifies that Urban Sports Persons have more financial support. They purchase sports items/ equipments. They do not think of ending educational careers on account of financial worries. They also have sufficient money for undertaking recreational or sports programs. In contrary the parents of the Urban Non-sports persons usually feel that they spend more money on unnecessary things. Urban Non-sports persons feel that they had to suppress their desires due to non availability of finances. That is why we see Urban Non Sports Persons being engaged by their parents in earning livelihood to cater the basic needs and demands of life. The desire of Urban Non-sports persons gets crushed due to non availability of finance they need. With the result they are unable to participate in sports activities and their sports potential gets affected.

**Comparison between Urban Sports and Urban Non-sports persons on Composite Score of Adjustment**

The result of the table 4.24 shows mean difference between Urban Sports and Urban Non-sports persons on Composite score of Adjustment. The table reveals that there is significant mean difference between the two groups and the
difference was found to be significant at 0.01 levels, which indicates that Urban Sports Persons are well adjusted than their counter parts. The above result indicates that Urban Sports Persons are more adjusted than their counter parts. They have a sense of personal freedom. Due to support from the members of their community, they are more motivated to participate in different sports activities which in turn make them adjustable in the society. They find healthy atmosphere around them, hence prove their metal and achieve more than their potential. In contrary, Urban Non Sports Persons have more Adjustment problems which perhaps might be physical education programme has something to do with total adjustment as physical education programme involves group work, team spirit etc.

The results presented in table 4.19 to 4.24 respectively, interpreted and discussed above are in line with the findings conducted by Neeta Kumari (2014). Thorarinn (2009), Vats (1998). White (1980),

Neeta Kumari (2014) found that out of twenty two subjects only four reduced body weight by minimum 1.45 percent and 4.31 percent maximum during the camp and weight reduction indicated a gradual pattern. The result indicates that body mass index and fat percentages among the four boxers were reduced simultaneously lean body mass had increased. Thorarinn (2009) found that the gender differences in aerobic fitness after puberty can largely be explained by gender differences in log skin folds and physical activity. In conclusion, the interrelationship between fitness, body composition, physical activity, and gender is not the same among 9 year and 15-year-olds. Vats (1998) found that the significant differences from ‘t’ value at flexed arm hang indicating at 5.28 and sit up at 2.19 and standing broad jump at 2.24 and 600 yard run/walk was at 2.80 and 50 yards at 2.84 and shuttle run at 3.01. Physical education students were found to be superior on motor fitness components as compared to non-physical education female students. White (1980) found that the similar
relationship between anthropometric variables, body density and lean body mass in athletic and non athletic males.

3. **Rural Sports and Rural Non-sports persons**

**Comparison between Rural Sports and Rural Non-sports persons on Body Mass Index and Fat Dimension**

The result of the **table 4.25 shows** the mean difference between Rural Sports and Rural Non Sports persons on Body Mass Index of Fat dimension level. The table reveals that there is significant mean difference between the two groups. The difference was found significant at 0.05 level. The Rural Sports-persons were found to have less BMI than their counterparts. The results clearly reveal that due to active and vigorous life style sports persons have less BMI, though the difference is minimal in body mass index BMI. We can say that there is an increase in lean body mass. As they prepare themselves for sports competition. They were regular in the different types of training such as strength, speed, etc., which might have resulted in increase in lean body mass (LBM). Increase in lean body mass has a positive relationship with muscular strength. In contrary Rural Non-sports persons have high Body Mass index which may be caused due to non participation in training in the training camps and participation in sports activities.

The result of the **table 4.26 shows** the mean difference between Rural Sports and Rural Non Sports persons on Fat percentage. The table reveals that there is significant mean difference between the two groups. And the difference was found to be significant at 0.01 level. The Rural sports persons were found to have less percentage of body fat, which indicates that they have developed more muscular body than their counterparts because Less percentage of body fat may be due to the rigorous and exhaustive physical fitness training programs and high cholesterol food restrictions given to the subjects for their preparation and participations in different sports activities and the pollution free environment they undergo physical education programs. It has been
observed in many studies that people residing in rural areas live longer as they have healthier lives overall than their country cousins (people in urban areas).

**Comparison between Rural Sports and Rural Non-sports persons on Components of Physical fitness Scale**

The result of the **table 4.27 shows** the mean difference between Rural Sports and Rural Non Sports persons compared on Shuttle run, Agility component of physical fitness scale. The table reveals that there is significant mean difference between the two groups. And the difference was found to be significant at 0.01 level. The Rural sports persons were found to be more agile than their counterparts. The results seem to be justified because data revealed that Rural Sports Persons posses better agility and coordinative abilities than Rural Non-sportspersons.

The result of the **table 4.28 shows** the mean difference between Rural Sports and Rural Non Sports persons on 50 Yard Dash, speed component of physical fitness scale. The table reveals that there is significant mean difference between the two groups. And the difference was found to be significant at 0.01 level. The Rural sports persons were found to have better speed than their counterparts. It has been observed from the above results that Rural Sports persons are sprinters hence have demonstrated better on the variable of speed than the Rural Non-sports persons.

The result of the **table 4.29 shows** the mean difference between Rural Sports and Rural Non Sports persons on Pull ups, strength component of physical fitness dimension scale. The table reveals that there is significant mean difference between the two groups, and the difference was found to be significant at 0.01 level. The Rural Sports persons were found to have more strength than their counterparts. The above result indicates that Rural sports persons are habitual of working in the farms and fields. They work for long hours and walk miles in their fields and from fields to their homes sometimes with loads on their shoulders which make them strong enough as their muscles
exert pressure against resistance regularly. The findings suggest that the higher a person’s muscular rating, the greater their dynamic strength. In contrary Rural Non-sports persons do not perform exercises regularly that involve a low number of repetitions on a load that is of high resistance which effectively increases strength.

The result of the **table 4.30 shows** the mean difference between Rural Sports and Rural Non Sports persons on Modified sit and Reach, flexibility component of physical fitness dimension scale. The table reveals that there is significant mean difference between the two groups. And the difference was found to be significant at 0.01 level. This indicates that Rural sports persons were found to have more flexible body/joints than Non-sports persons. One additional reason was observed that Rural Non Sports Persons usually walk towards fields and get their body warmed-up. Warming up bodies decreases chances of injuries also. Rural Sports Persons get involved in static and dynamic stretching in fields which had direct effect on improving their body flexibility.

**Comparison between Rural Sports and Rural Non-sports persons on Social, Emotional, Home, Health and Financial dimensions of Adjustment**

The result of the **table 4.31 shows** the mean difference between Rural Sports and Rural Non-sports persons on Social dimension of Adjustment scale. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.01 level. The Rural Sports persons were found to be more adjusted than their counterparts. The above results clarifies that Rural sports persons do not have Anti Social tendencies. They do not hesitate in front of the public to make their point of view on any issue as they think that conversations of many people is not pretty trite and silly. Rural Sports persons obey the moral code of conduct and they leave from any congregation with proper permission. They always participate in different group activities. They have Social Maturity and it might be due to the fact that
their participation in sport can be energizing and personally empowering experience for them. Being a sports person especially can change the way a person sees herself. It can make him feel physically stronger, more competent, and more in control of his life as an independent individual. The Rural Sports persons found to be more socially mature as compared to the Rural Non-Sports Persons. In contrary, Rural Non-sports persons have difficulty in attending social functions and they feel a sense of loneliness and hesitation in dealing with the mob. That is why they prefer to work alone. Rural Non-sports persons feel embarrassed when they have to enter a public assembly. When they are on a train or a bus, they are unable to engage fellow travelers.

The results of the table 4.32 show the mean difference between Rural Sports and Non Sports persons on Emotional dimension of Adjustment. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.01 levels, which indicates that Rural Sports Persons are emotionally well adjusted than their counter parts. They are not bothered by the feeling that people are reading their thoughts. Common sense of a person also rationalizes one’s psyche that Rural Sports Persons are more adjusted that is why they don’t lag behind. While as Emotional disturbance among Rural Non Sports Persons hampers their sports participation as well as Academic progress. They are higher on withdrawal tendencies and nervous symptoms. They get irritated easily. They are always disappointed and fed up with themselves.

The above results clarifies that Rural Sports Persons are not concerned with their personal worries. Their heart rate does not change without any outside reason. They never put down their work mid way and disappear as they have proper tendency to accomplish the prescribed tasks in time. In contrary, Rural Non-sports persons get irritated easily and leave their task midway as they often change their decisions. Their mood also changes unexpectedly without any proper reason.
The results of the **table 4.33** show the mean difference between Rural Sports and Rural Non-sports persons on Health dimension of Adjustment. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.05 levels, which indicates that Rural sports persons are healthier and well adjusted than their counter parts. Common sense of a person also rationalizes that Rural Sports Persons are healthier that is why they don’t lag behind if any difficult Physical task is given to them.

The above results indicate that Rural sports persons do not suffer from any ailment like Cold, unusual Heart Rate/ palpitation, headache and brain disorders as they remain very active and take proper care of their body in terms of proper nourishment. In contrary Rural Non-sports persons remain sedentary at their home most of the time, and that is why they suffer from various ailments such as Heart, Kidneys, Liver and Lungs.

The result of the **Table 4.34** shows the mean difference between Rural Sports and Rural Non Sports persons on Home dimension of Adjustment. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.01 levels, which indicates that Rural sports persons are well adjusted in the family at Home than their counter parts.

The above results clarifies that Rural Sports Persons have pleasant Home Life. They do not have problems of inter-family relationships. They often find their parents cooperative and sympathetic towards them and feel a sense home security. In contrary; Rural Non Sports Persons face many problems of inter-family attachments. They feel lack of real affection and love in their home. Their parents have frequent quarrels and they always have differences with their parents. Rural Non Sports Persons also feel that their parents do not understand them, that is why their Home life is unpleasant. Even few among them have a strong desire to run away from home as they feel that their parents are disappointed with them. Some mothers tend to dominate in home. These problems are the outcome of peculiar family circumstances.
The result of the table 4.35 shows the mean difference between Rural Sports and Rural Non Sports persons on financial dimension of Adjustment. The table reveals that there is not significant mean difference between the two, which indicates that Rural sports persons and Rural Non Sports persons do not differ as far as financial aspect in concerned. Hence no conclusion can be drawn.

**Comparison between Rural Sports and Rural Non-sports persons on Composite Score of Adjustment**

The results of the table 4.36 show the mean difference between Rural Sports and Rural Non Sports persons on Composite score of Adjustment. The table reveals that there is significant mean difference between the two groups and the difference was found to be significant at 0.01 levels, which indicates that Rural sports persons, are well adjusted than their counter parts. The results makes it clear that Rural Sports Persons are socially well adjusted as they are able to interact easily with different people of the society due to their regular participation in Sports activities at regional, State or National level. They like to participate in festive gatherings and lively parties. This enhances their adjustment in all type of environment. The Rural sports persons face different types of environment where they try to make compromise with the situations prevailing in that place where they usually visit in connection with sports function and tournaments. In contrary Rural Non-sports persons remain Mal-adjusted as they are unable to participate in different activities at different forms related to sports. These persons often feel that they are not in a position to excel their potential. They don’t have an encouraging atmosphere at their home, society and school/College which makes them slow and lethargic.

The findings of the study are supported with the tune of the findings of the studies conducted earlier by Amit Kumar (2014). Tae Nyun (2014). Symons (2013) Takeshi (2009) Goutam Ritu, (2000), Wendell (1990), Amit Kumar (2014), compared the endurance and agility between rural and urban male basketball players. The age of the selected subjects ranged from 15
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to 19 years. Only (Endurance and Agility tests) were used to measures the selected physical fitness components of the players. In order to analyze the data, a t-test was used to analyze the data and investigator observed the significant difference between Rural and Urban basketball players of Rohtak. *Tae Nyun (2014)* found that CRF level correlated positively with SMI and negatively with VFA. Individuals with low muscle mass had lower CRF values than those without low muscle mass. After adjustment for age, sex, lifestyle factors, and markers for insulin resistance and inflammation, participants in the lowest quartile of CRF had an odds ratio (OR) for low muscle mass of 4.98 compared with those in the highest quartile (95% confidence interval (CI) = 1.19-12.99; P for trend = 0.001) and an OR for combined low muscle mass and visceral obesity of 31.46 (95% CI = 4.31-229.68; P for trend = 0.001). *Symons (2013)* found that sex moderated the contributions of External Regulation for predicting exercise dependence such that boys in the high and low external regulation groups had higher symptoms than girls in the high and low external regulation groups. These preliminary findings support the controlled dimensions of Integrated Regulation (boys, girls), interject Regulation (boys, girls), and External Regulation (boys only) are important determinants of primary exercise dependence symptoms. *Takeshi (2009)* variables were significantly lower on the day of the weigh-in than one month prior: body weight (p<0.01,-7.3%); body fat (p<0.05); body water content (p<0.01); trunk cross-section (p<0.05), including separate measurements of trunk viscera, trunk muscle, and trunk fat; quadriceps muscle; lower subcutaneous; and food intake (p<0.01). At one week after the match, all metrics had recovered to their levels measured one month before the weigh-in. Certain variables that were highly sensitive to hydration recovered more rapidly: they had reached their initial levels when measured immediately after the match. *Goutam Ritu, (2000)* in the study indicated that the female students of Delhi University were found significantly better in physical fitness than the rural areas. The attitude towards
physical activity and sub-dimensions was found significantly higher in Urban area students than in rural areas. Similarly, the urban area female students were found better adjusted than rural area female students. Wendell (1990) found that low and high adiposity samples were classified by a median split (42.9 mm) on the sum of three skin fold measures (triceps, supra iliac, sub-scapula). For the high adiposity sample, PAS, age, BMI, and gender were significant and the overall model was significant (p < .001), accounting for 38% of variance in PWC$_{170}$. In the low adiposity sample, gender (p < .04) was significantly related to CVF, but the overall model was not significant (p < .35). PAS, thus, was a significant predictor of CVF among the high adiposity children, but not the low adiposity children. Mechanisms that may account for this difference include greater work for equal activity among the obese, a ceiling effect on CVF among the low adiposity children, or differences in hormonal or metabolic factors mediating the activity-CVF relationship.

4. Urban and Rural Sports Persons

Comparison between Rural and Urban Sports persons on Social, Emotional, Home, Health and Financial dimensions of Adjustment

Result of the table 4.37 shows mean difference between Rural and Urban Sports persons on Social dimension of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that Rural Sports persons and Urban Sports persons do not differ so far as their social aspect is concerned. Hence no conclusion is drawn.

Result of the table 4.38 shows mean difference between Rural and Urban Sports persons on Emotional dimension of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that Rural Sports persons and Urban Sports persons do not differ so far as their emotional aspect is concerned. Hence no conclusion is drawn.

Result of the table 4.39 shows mean difference between Rural and Urban Sports persons on Health dimension of Adjustment. Table reveals that there is
no significant mean difference between the two, which indicates that Rural Sports persons and Urban Sports persons do not differ so for as their health aspect is concerned. Hence no conclusion is drawn.

Results and perusal of the table 4.40 makes it obvious that the mean score of Rural Sports persons (2.919) is less than the mean score of Urban Sports persons (3.915) on Home dimension of Adjustment. The difference between their adjustment scores is statistically significant. And the mean difference was found significant at 0.05 levels. This justifies that Rural Sports persons are more adjusted at home than Urban Sports Persons. Rural Sports persons usually come from families of healthy environment than Urban Sports Persons. This clearly indicates that Sports persons are well adjusted at home than their counter parts. Results also indicate that sports persons have enjoyable family life. They have less problems of inter-family relationships, attitudes or jealousy. On the contrary, Urban Sports persons face many problems of inter-family attachments and relationships. They suffer from domestic dissatisfaction, uncongenial atmosphere at home which disrupts their intellectual potential. It has also been observed that in rural areas of Kashmir, the affluent and rich classes usually send their kids to participate in sports activities held at different places, which helps them to adjust at home as well.

Result of the table 4.41 shows mean difference between Rural and Urban Sports persons on Financial dimension of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that Rural Sports persons and Urban Sports persons do not differ so for as their financial aspect is concerned. Hence no conclusion is drawn.

**Comparison between Rural and Urban Sports persons on Composite Score of Adjustment**

Result of the table 4.42 shows mean difference between Rural Sports and Urban Sports persons on Composite score of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that
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Urban Sports persons and Rural Sports persons do not differ so far as their composite score of adjustment is concerned. Hence no conclusion is drawn.

5. Urban and Rural Non-sports Persons

Comparison between Rural and Urban Non-sports persons on Social, Emotional, Home, Health and Financial dimensions of Adjustment

Result of the table 4.43 shows mean difference between Rural and Urban Non-sports persons on Social dimension of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that Rural Non-sports persons and Urban Non-sports persons do not differ so far as their social aspect is concerned. Hence no conclusion is drawn.

Result of the table 4.44 shows mean difference between Rural and Urban Non-sports persons on Emotional dimension of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that Rural Non-sports persons and Urban Non-sports persons do not differ so far as their emotional aspect is concerned. Hence no conclusion is drawn.

Result of the table 4.45 shows mean difference between Rural and Urban Non-sports persons on Health dimension of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that Rural Sports persons and Urban Sports persons do not differ so far as their health aspect is concerned. Hence no conclusion is drawn.

Result of the table 4.46 shows mean difference between Rural and Urban Non-sports persons on Home dimension of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that Rural Non-sports persons and Urban Non-sports persons do not differ so far as their home aspect is concerned. Hence no conclusion is drawn.

Result of the table 4.47 shows mean difference between Rural and Urban Non-sports persons on Financial dimension of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that Rural
Non-sports persons and Urban Non-sports persons do not differ so far as their financial aspect is concerned. Hence no conclusion is drawn.

The findings of the study are supported with the tune of the findings of the studies conducted recently by Susana (2014). She found that the majority (59%) of the adolescents exhibited low levels of aerobic capacity as defined by the FITNESSGRAM standards. Urban adolescents had significantly higher mean scores in five EUROFIT tests (20 m shuttle, speed shuttle run, plate tapping, sit-up and vertical jump) and significantly most favorable improved plasma lipid profile (triglycerides and HDL) as compared to rural adolescents. There was a weak association between blood lipid profile and physical fitness in both urban and rural adolescents, even after adjustment for confounding factors.

In light of the above findings and with the support of above studies the hypotheses 5, and 6 which reads as:

5. “Rural and Urban Sports person differ significantly in their Social, Emotional, Health, Home and Financial Adjustment”, stands partially accepted, and

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

Comparison between Rural and Urban Sports persons on Composite Score of Adjustment

Result of the table 4.48 shows mean difference between Rural Non-sports and Urban Non-sports persons on Composite score of Adjustment. Table reveals that there is no significant mean difference between the two, which indicates that Urban Non-sports persons and Rural Non-sports persons do not differ so far as their composite score of adjustment is concerned. Hence no conclusion is drawn.

The findings of the study are supported with the tune of the findings of the studies conducted by Kenith (2013), Elaine (2009),
Kenneth (2013) reported that a 9-month physical fitness program for the experimental group resulted in a significant gain in physical fitness. When compared with the control group changes during the experimental period, the experimental group personality trait changes were found to be significantly different on only one test item. Elaine,(2009) indicated that habits formed at a very young age are likely to continue into adolescence and adulthood, it is problematic that many young children do not meet activity and media-use levels recommended for the development of healthy behaviors. In the thesis, the physical activity levels of very young children in rural and urban Iowa did not differ significantly, although media use was significantly higher for rural boys and for lower SES boys and girls. The increased likelihood for rural boys and lower SES children to exceed media use recommendations is noteworthy because television viewing has been associated with risk of overweight in children and specifically in preschool children. Parents and childcare providers should recognize the importance of limiting screen-based recreation and of supplying the means for light play and opportunities for MVPA and VPA. Interventions for decreasing young children’s media time, with particular attention to lower SES and rural areas, should be investigated as primary prevention for childhood overweight.

In light of the above findings and with the support of above studies the hypotheses 7, and 8 which reads as:

7. “Rural and Urban Non-sports person differ significantly in their Social, Emotional, Health, Home and Financial Adjustment”, and

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