COMPARISON OF CARDIOVASCULAR ENDURANCE AND SPEED BETWEEN URBAN AND RURAL FEMALE STUDENTS OF BAHAUDDIN ZAKARIYA UNIVERSITY PAKISTAN

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Abstract

The study was undertaken with the intention of comparing selected physical fitness component in urban and rural female students of BAHAUDDIN ZAKARIYA UNIVERSITY PAKISTAN prominent university in of south Punjab. The selected variables for this study were cardiovascular endurance and speed. Total subject of 72 female students among them 36 from the urban area of south Punjab district Multan and 36 from the rural area of same district were selected from random sampling technique from the various department of the university. Descriptive Statistics and Independent ‘t’ test were employed using SPSS-19 software. Harvard Step Test and 60 Meter Sprint test were used to collect the required data. Findings show that the urban girls are good in endurance and speed from the rural students result of this findings are unique and shows that the cultural, social and religious differences have a great impact on the physical fitness of females in Pakistan.

Keywords: Endurance; Speed; Physical Fitness; Urban; Rural.

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1. Introduction

This perplexing human body and its systems in a sound condition are the real gift for us by the nature. At present healthy life is an awesome endowment of God in the real sense. With the progression of time and distinctive developments in the industrial and the scientific revolution upheaval the entire situation of human life had been changed. Before these all discovers and innovations people relies on upon their own energy and individual strength for the satisfaction of requirements.

This is the reason; they are ace and master in some essential capacities and expertise named as agility in all action, endurance, physically strength, speed, and specialist skills like jumping, climbing and numerous other diverse capacities used in pursuing for their livings said by (Manmeet 2010). But modernization has changed our life style and it’s also affected our physical fitness badly because of less activity.

An ability and capacity to perform daily routine activities and task enthusiastically and effectively is named as Physical fitness of a person. Physical fitness incorporates segments of games as well as those of wellbeing too. Our daily physical activity help us in prevention of weight gaining pick up in body mass index (BMI) said by (Kyle 2001).

Very low ratio in physical activity of a person and cardio-respiratory wellness both are related with higher danger in all cause and sickness particular mortality said by (Thune et al. 1998). A person possessed a good physical fitness can perform running, dodging, climbing, jumping, carrying weight and can proceed with consistent endeavors in an assortment of physical exercises significantly more productively and successfully in recreations and everyday life.

There is a big difference between the urban and rural peoples life alike the environment of both places is totally different, their food quantity and quality, their life style that is influenced by the culture of their area and the standard of health and all these things affect the girl’s physical fitness and their growth.

Urbanization has additionally impacted the physical wellness of individuals like urban girls have less work to do but they have all the modern facilities and the girls from the rural region are constantly busy in doing their domestic and furthermore field work because they don’t have maids like urban people and along with the school education and they are too much involved in physical activity from their childhood not like the urban girls. On the other hand urban girls have the proper equipment, training, and liberal environment to do activities and the can build their confidence. So I can say these are also the reasons why the girls from the rural area seem to be healthier, physically fit but lack of confidence and ignorance of physical activity.

(Choudhary 1998) found a distinction difference with his studies in the physical fitness urban and rural understudies of class 9th and 10th and found that the students from the rural area are better and preferred in the physical fitness level over the urban area students.
(Uppal and Sareen 2000) had found investigated cardiovascular fitness of urban and rural area students that the students those belongs to the rural area and have background from these area performed the physical activities better from their counterparts in urban area.

Like above mention and many other similar studies those had been carried out on same and simple and basic phenomena one may conclude that the girls who belong to urban area are not better and more physically better from rural girls. But here one thing is important Ever society and every person is different from each other it’s not a universal law that the rural girls are better they can also have a change Body structure, their physical fitness level can also change and all these depends on the different factors such as social environment, cultural values and facilities so the change in the place, change in the situation, level physical fitness will also change because these factors has also a connection/bond in the daily life activities.

Talking about specifically about Multan Pakistan many facilities are available in the city and all of these needs of girls are met very easily that can’t be even imagine by the girls of rural area.

Girls In the rural area are usually busy in performing their domestic works. In a few towns schools even there is no physical instruction facilities are available likewise not accessible and they are unaware of important of physical fitness and how can improve or keep better but their daily hard working routine like most of the girls usually have to go schools by walk.

These activities and physical work purportedly shows in a better physical health of rustic young ladies. But urban girls have advantage on availability and having a new equipment and good coaching from the experts in the urban area that is not available for urban girls.

There is also one aspect that the Girls from the urban area have easily access to the good sustenance and nutrition because the financial status of their parents. The girls from the urban area are more empowered and spurred by their instructors and mentors.

Youngsters from the urban regions are usually bigger in body size and have more fast rhythm of maturation than kids of rural area of the encompassing and surrounding countryside area. It also has been said that youngsters from the urban area are tall in height and heavy in weight than their rustic partners, has been founded by (Tanner 1989). Several studies evaluated physical fitness profiles of people in different categories, including urban and female university students in India United States and European countries.

However, relatively no research had been done in Punjab Pakistan and very little information is available about physical fitness of girls in South Punjab. This situation called for an investigation to determine the level of PF components of urban and rural female students in Bahauddin Zakariya University Multan.

2. Methodology

Subject: Subject selection for this study is done through using systematic random sampling. I had selected 72 student/subjects from different bureaus of Bahauddin Zakariya University Multan and students enrolled in session of 2015-2016 were chosen as subjects for this present
study and all sample students were female students. The average age mean is 21.28 and minimum age is 17 and maximum is 26. The weight mean is 5.945 and minimum age is 4.1 and maximum is 56.0. Furthermore the weight mean is 21.4949 and minimum age is 12.50 and maximum is 38.40. Among these 32 belonged to rural areas of south Punjab and rest from urban area of south Punjab. Subjects were students of various teaching departments of Bahauddin Zakariya University Multan these were Sports Science, English, History, Physics, Pharmacy, Computer Science, BBA, Psychology, and Mathematics.

**Variables Selection:** In the table 1 the insights about the variable had been given for the present review and those had been measured.

**Statistical Technique:** Descriptive statistics and Independent ‘t’ test was employed to each variables for comparing them. The level of significance chosen was 0.05. SPSS 22 was used to execute the statistical functions.

3. Results

After conversion of raw data into group, different statistical test had been used to find out necessary information. The findings and the results are given and illustrated through the tables below.

| S. No. | Variables | Tests                  |
|--------|-----------|------------------------|
| 1      | Endurance | Harvard Step Test       |
| 2      | Speed     | 60 Meters Speed test    |

Table 1 shows the variables and their criterion measures that had been used in this study.

Table 2: Mean, standard deviation and Std. Error Mean of urban and rural female students

| Group/Urban or Rural | N  | Mean | Std. Deviation | Std. Error Mean |
|----------------------|----|------|----------------|-----------------|
| Endurance by Harvard Step Test | Urban | 36 | 5.97 | 1.183 | .197 |
|                      | Rural | 36 | 5.75 | .967 | .161 |
| Speed by 60 Meters Speed test | Urban | 36 | 3.67 | .535 | .089 |
|                      | Rural | 36 | 3.56 | .504 | .084 |

Table 2 shows the combined results of total number of subjects, mean, Std. Deviation, Std. Error Mean of Harvard Step Test and 60 Meters Speed test by the urban and rural girls of the study.

Table 3: Comparative analysis Report of 60 Meters Speed test between urban and rural female student

| Group/Urban or Rural | N  | Mean | Std. Deviation | Std. Error of Mean |
|----------------------|----|------|----------------|-------------------|
| Urban                | 36 | 3.67 | .535           | .089              |
| Rural                | 36 | 3.56 | .504           | .084              |
| Total                | 72 | 3.61 | .519           | .061              |
Table 3 shows the mean, Std. Deviation, Std. Error Mean of 60 Meters Speed test of urban and rural those were recorded as group wise urban Mean 3.67, Std. Deviation .535, Std. Error of Mean .089 and rural Mean 3.56, Std. Deviation .504, Std. Error of Mean .084. It shows that the urban students have performed better than rural girls.

Table 4: Comparative analysis Report of Harvard Step Test between urban and rural female student

| Group/Urban or Rural | N  | Mean | Std. Deviation | Std. Error of Mean |
|----------------------|----|------|----------------|-------------------|
| Urban                | 36 | 5.97 | 1.183          | .197              |
| Rural                | 36 | 5.75 | .967           | .161              |
| Total                | 72 | 5.86 | 1.079          | .127              |

Table 4 shows the mean, Std. Deviation, Std. Error Mean of Harvard Step Test of urban and rural those were recorded as group wise urban Mean 5.97, Std. Deviation 1.183, Std. Error of Mean .197 and rural Mean 5.75, Std. Deviation .967, Std. Error of Mean .161. Shows that the urban girls performed better than their rural counterparts.

Table 5: t-test of urban and rural female student

|                            | Levene's Test for Equality of Variances | t-test for Equality of Means | 95% Confidence Interval of the Difference |
|---------------------------|----------------------------------------|-------------------------------|----------------------------------------|
|                           | F         | Sig. | t            | df          | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| Endurance by Harvard Step Test | Equal variances assumed                   | 3.263 | .075 | .873 | 70 | .386 | .222 | .255 | -.286 | .730 |
|                           | Equal variances not assumed               |                     |               |             |               |                 |                   |       |       |
|                           | .873 | 67.346 | .386 | .222 | .255 | -.286 | .731 |
| Speed by 60 Meters Speed test | Equal variances assumed                   | .501 | .481 | .907 | 70 | .367 | .111 | .122 | -.133 | .355 |
|                           | Equal variances not assumed               |                     |               |             |               |                 |                   |       |       |
|                           | .907 | 69.759 | .367 | .111 | .122 | -.133 | .355 |

Significant at 0.05 levels DF at 70

The perusal of table 5 reveals that there lies a significant statistically difference between endurance of urban and rural players in BAHAUDDIN ZAKARIYA UNIVERSITY (t-value =.873, p=.386) and difference between speed of urban and rural players in BAHAUDDIN ZAKARIYA UNIVERSITY (t-value =.907, p=.367).
4. Discussion

Islamic females and sports is nowadays at international level is hot topic for debate and many people are doing work on it and Pakistani females are also facing problems like the international Muslim female community is facing like dress code, Parental Approval and religion boundaries and impatience among the rigid muslin society and misconceptions about the sports and females those involved in physical activity. The rural girls in south Punjab of Pakistan are not physically fit than the urban girls of south Punjab there are many reasons for it because in rural area the females follow Islamic and religious norms more strictly than the urban girls and they are not more conscious about the health related issues and also they do less proper physical activity these factors can be explore in further studies. In the urban area females have many facilities like proper training , knowledge about health risk , its importance and the society is not too regard about to follow the religious norms and parents encourage to do physical activity and girls are not too shy comparatively to rural girls. With the involvement of different factor the life style of Pakistani female is badly affected.

5. Conclusion

Within the limitations of the present study, the following conclusions are enumerated: In the present study the urban girls in BAHAUDDIN ZAKARIYA UNIVERSITY from the south Punjab urban area are better than the rural area girls in the university and the urban girls are better in endurance from the rural girls and urban girls are also better in speed from rural girls.

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