Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The regional variation in ethnicity, geographical, environmental, climatic conditions and dietary habits have a great impact on trade and occupations of people and also have an influence on the type of sports activities engaged in by them.¹

The purpose of the study was to compare non-sports women belonging to different regions of India (i.e. north, south, east and west) on aerobic and anaerobic performance and body composition. A total of 500 subjects were selected for the purpose of this study, out of which 125 subjects were selected from each region. The subjects were taken from Kendriya Vidyalayas No.1 and 2, Faridabad for northern region, Kendriya Vidyalaya, I.I.T. Madras for southern region, Kendriya Vidyalaya, Barackpore, Calcutta for eastern region and Kendriya Vidyalaya, I.I.T., Bombay for western region.

Aerobic Performance of subjects was measured by using Cooper's 8 min. Run/Walk test as per the specified procedure laid in the manual of the test and anaerobic performance was measured by using 50 mts. dash. The body composition was measured by Skinfold Caliper and it was converted as per manual. To compare the women subjects of different regions of India on aerobic and
anaerobic performance and body composition, one-way analysis of variance F-ratio was used. Scheffe's Post-hoc test of significance was used to assess the significant differences between the paired means. To test the hypothesis the significance level chosen was .05.

The analysis of data revealed that there were significant differences at the .05 level of confidence in case of aerobic and anaerobic performance and body composition. (The F-ratio values were 13.216, 31.246 and 78.318 respectively)

The analysis of data further revealed that the non-sports women belonging to northern region performed comparatively better in aerobic type of activities whereas southern region were superior in anaerobic performance.

Regarding Body Composition, it was observed that all the regions (i.e. northern, southern, eastern and western) had significant differences. Non-sports women from the northern region had more adipose tissues than that of the other regions. Women of the southern region had least percentage of body fat in comparison to other regions of India.

Conclusions

Within the limitations identified and on the basis of the results of the study, the following conclusions were drawn:
1. The present study established the differences on aerobic and anaerobic performance and body composition among non-sports women belonging to different regions of India.

2. The non-sports women from the northern region were found significantly superior in aerobic performances as compared to the non-sports women of the southern and eastern regions. Significant differences were found between the non-sports women of the eastern and western regions in aerobic performance. No significant differences were found between non-sports women belonging to northern and western regions and southern and western regions of India.

3. Non-sports women from southern region were found to be significantly better in the anaerobic performance as compared to non-sports women from the northern and eastern regions. No significant differences were found between non-sports women belonging to southern and western regions.

4. Non-sports women belonging to northern region were having more body fat in comparison to other regions of India. Women from the western region were having significantly more percentage of body fat than that of the southern and eastern regions. Non-sports women belonging to the southern region had least body fat in comparison to any other regions of India.
Recommendations

In the light of the conclusions drawn, the following recommendations have been made:

1. Due emphasis regarding improving performance should be given to the northern and southern regions of India while selecting women subjects for the events of the aerobic and anaerobic in nature respectively.

2. In order to promote all round development in a region, efforts should be made to popularise aerobic activities in the southern region and anaerobic activities in the northern region, so that the selection can be made from a wider range of potential sports participants in the near future.

3. A similar study may be repeated of western region in comparison to northern, southern, and eastern regions of India taking more physical and physiological variables in account.

4. A similar study may be undertaken with the subjects of age and sex other than employed in the study from extreme borders of same regions to get more concrete results of the study.