Chapter V

SUMMARY, AND CONCLUSIONS, AND RECOMMENDATIONS

Summary

The present study was undertaken to evaluate the effect of fourteen weeks physical education programme on health related fitness variable of male and female students of a professional institute.

Thirty male and thirty female students admitted to B.PE 1st year course at the Degree College of Physical Education at HVP Mandal, Amaravati were selected as subjects for the study.

The health related fitness variables selected in the present study included the ICHPER SD. Asia Health Related Physical Fitness test, body composition variables and cholesterol components.

The ICHPER Health Related Physical Fitness test consisted of the following items: (i) Cardiovascular endurance (one mile run performance); (ii) Muscular endurance (sit ups); (iii) Muscular strength (pull ups for males and modified pull ups for females); (iv) Flexibility (sit and reach performance) and; (v) Body composition (sum of triceps and calf skinfolds).

The body composition variables included total body weight, fat weight and lean body mass.
The cholesterol components included, total cholesterol, triglycerides, low density lipoprotein cholesterol (LDL-C) and high density lipoprotein cholesterol (HDL-C).

The t-ratio and the analysis of covariance were used as statistical measures to find out the significant effect of the physical education programme on the selected health related fitness variables of male and female subjects.

The 14 weeks programme of physical education proved effective in significant improvement of cardiovascular endurance, muscular endurance, muscular strength, flexibility and sum of skinfolds (triceps and calf) in case of both male and female subjects. Total body weight and fat weight showed significant decrease for both males and females, where as no significant alteration was found for lean body mass.

In case of cholesterol components, total cholesterol and triglyceride levels were significantly lower following the participation in 14 weeks physical education programme. A significant increase in HDL-C levels, and significant decrease in LDL-C levels were observed in case of males. No significant change was found for these two variables for the female subjects.
Conclusions

On the basis of the findings of the study, the following conclusion may be drawn:

1. The fourteen weeks physical education programme showed beneficial effects on the selected health related fitness variables for male and female subjects by an improvement in their motor abilities and decrease in body fat and cholesterol components.

2. The findings of the study indicated significant reduction in total body weight and body fat, whereas lean body weight remained unaltered as a result of participation in the physical education programme.

3. The findings of the study indicated a decrease in total cholesterol and triglyceride levels in case of both males and females.

4. The study results also indicated a decrease in LDL-C levels and an increase in HDL-C levels in case of males.

Recommendations

In the light of the findings of the study and the conclusions drawn, the following recommendations are made:

1. Physical activity, physical conditioning may help as therapeutic measures in lowering the cholesterol level and in the control of obesity.
2. Comparative studies may be conducted in evaluating the physical education programmes in other professional institutes/colleges in the country.

3. Similar studies may be conducted with the assessment of other parameters not used in this study.

4. Studies evaluating the benefits of physical training programme on health and fitness may be undertaken on subjects of older age groups.