Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Physical Education, Games and Sports have gained tremendous popularity in the State of Goa, since the last few decades.

Herculean efforts are being made by the sporting Government of Goa, to promote Physical Education on par with the total Educational system, whereby Physical Education has been elevated to a school certificate subject.

Unfortunately, adequate attention has not been paid in respect to the assessment and evaluation of the physical fitness status of the students, so much so, that the outdated and non-standardized NPF P norms are still in vogue in assessing the physical fitness level of secondary school students. It is pertinent to note that there do not exist any standardized norms for evaluating the physical fitness of the students in Goa.

In the present study, the research scholar felt a very strong need to formulate standardized norms for Physical Fitness Tests, specifically for the Goan girls in the age groups of 13 through 16 years.
The investigator formulated a suitable battery of standardized physical fitness test items, taking into consideration the availability of playgrounds, equipment, etc. in the Government and Non-Government Secondary Schools in Goa and administered the said Test Battery to 3500 girls from 60 secondary schools from all the 11 Talukas of Goa.

The tests were administered by a band of competent and qualified officials, under the supervision and control of the investigator.

The performances of all the subjects in each of the 7 test variables, were recorded to the nearest hundredth of a second, in 50 Meter Dash, Flexed Arm Hang, 4 x 10 Meter Shuttle Run and 600 Meter Run and Walk, in centimeters, in Standing Broad Jump and Vertical Jump and in "number of cycles" in Bend, Touch and Twist, respectively.

The data was statistically analysed for computation of normative scales for different age groups. The following three scales were constructed:

1. Percentile scale
2. Sigma scale
3. Hull scale
As these scales have been constructed based on the actual data on the subjects, they may be considered extremely reliable for grading performances of subjects in the age groups of 13 to 16 years in the State of Goa.

The t-test was employed for comparing subjects representing different age groups in various test items considered in the study. The level of significance was set at .05 level of confidence.

No significant differences were observed when the means of all the test items in all age groups were compared except in Vertical Jump, wherein the subjects belonging to 15 year age group showed significantly better performances than the 13 years age group and this difference could be a matter of mere coincidence and no specific logic may be provided for the above difference and hence no valid conclusion can be drawn. The research work with the above age group may have to be replicated in order to re-establish the above difference.

The fact that no significant differences in means of other test items were observed, may be because there is no difference in physical and motor ability of subjects belonging to the age group employed in the study.
Conclusions

Within the limitations of the present study, the following conclusions may be drawn:

1. The norms constructed by the research scholar, have been prepared with data collected from girl students in the age group of 13 to 16 years from the State of Goa and as such, may be utilised for evaluating the physical fitness test items employed in the study.

2. The subjects belonging to the various age groups i.e. 13 to 16 years, employed in the study, do not differ significantly with regard to their performance in selected physical fitness test items and hence it is evident that there is no significant difference in the physical fitness of the girls from the State of Goa, in the above stated age groups.

3. The subjects belonging to the 15 year age group were found to be significantly superior to that of 13 year age group in Vertical Jumping ability.

Recommendations

In the light of the conclusions drawn, the following recommendations can be made:

1. The study will ensure an uniform pattern of administering physical fitness tests for girls in the age group of 13
to 16 years in all the schools in Goa.

2. The proposed battery of tests is easy to administer, since the test items included are to be conducted in two days, for about 90 minutes per day, with adequate recovery periods in between the tests.

Hence, they may be adopted by Teachers/Coaches, in evaluating the physical fitness status of the students/trainees, for selecting potential sportsmen for participation at different levels of competition.

3. The Norms presented in this study may be adopted by the Directorate of Education and the Directorate of Sports and Youth Affairs, Government of Goa and included in the syllabus of the school curriculum for evaluating the physical fitness of girl students from 13 to 16 years age groups.

4. Similar Norms should be prepared for Girls, for other physical fitness items not included in the present study.

5. The present study may be replicated with subjects of age and sex other than those employed in this study.