CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The purpose of the study was to construct the norms for evaluating performance in physical fitness. In India proper recognition of physical education as an academic discipline is yet to come. However, now there is an increasing awareness, regarding the development and acceptance of physical education as an essential part of educational programme, at all levels of education. In many of the states, physical education has been introduced as a compulsory subject at school level and many more states, are planning on these lines. Even the University Grants Commission has recommended to include physical education in all the colleges as a compulsory subject, which is very encouraging trend.

Though physical education has been introduced as an academic subject in schools, its evaluation procedures are still ill conceived. No attempt has been made to construct or adopt standardized physical fitness tests and norms for grading the students. Therefore, the present study was undertaken to evolve physical fitness norms for male students of 11-12, 12-13, 13-14, 14-15 and 15-16 years from schools of Gujarat state.
Six thousand male students belonging to Schools in grades five through nine from various districts of Gujarat state acted as subjects for the study. For this purpose boys were selected, at random, from 20 schools. 1200 subjects were selected in each age group i.e. 11-12, 12-13, 13-14, 14-15 and 15-16 years. A sample of 300 subjects was picked up from each school, i.e. 60 boys from each age group.

To measure the physical fitness of selected subjects, AAHPER Youth Fitness Test\(^1\) was selected, keeping in mind its wider range of application and its nature as well as its administrative feasibility. The data was collected by administering the AAHPER Youth Fitness Test to the selected subjects but prior to that reliability of data, reliability of instruments, tests and subjects' reliability and tester's competency was established. The test was administered as per the guidelines provided in AAHPER Youth Fitness Test manual. Maximum numbers of Pulls-Ups were considered to determine arm and shoulder strength. The muscular endurance was tested through Bent Knee Sit-Ups. The numbers of Bent Knee Sit-Ups completed in 60 seconds were the scores. 4x10 meters Shuttle Run Test was conducted to measure the agility and the time taken in seconds were the scores. The explosive powers of legs were tested through Standing Broad Jump. Three trials were permitted and best trial was considered and recorded in centimeters. For measuring the speed, 50 meters Run was employed and the time was

recorded in seconds. One trial was permitted. To measure muscular endurance 600 meters Run /Walk test was used. Time in seconds was recorded on completion.

For the purpose of the study, age-wise norms for boys in terms of Percentile Scales and 7 Sigma Scales were constructed for each item of the AAHPER Youth Fitness Test separately.

The analysis was done by using statistical package for social sciences version 10.1.

Conclusions

Based on the findings and within the limitations of this study, the following conclusions were drawn:

1. The two normative scales namely the Percentile Scales and 7 Sigma Scales were prepared for boys of grades five through nine of Gujarat State, 11-12, 12-13, 13-14, 14-15 and 15-16 years of age.

2. AAHPER Youth Fitness Test was employed on 6000 male subjects.

3. The norms were prepared by using Percentile techniques analyzed through statistical package.
RECOMMENDATIONS

In the light of the conclusions of the present study, it is recommended that:

1. The normative scales constructed in this study may be used to evaluate the physical fitness of students of grades five through nine of the whole of Gujarat State.

2. The same study may be repeated by employing the students of different ages of other grades of Gujarat State.

3. The same study may be repeated by employing the female students of Gujarat State as subjects.

4. As the standard of performance will differ from place to place due to environmental, social and economical conditions, studies may be conducted on a wider scale, covering the whole nation.

5. A research cell be open in the field of physical education in the Sports Authority of Gujarat to study the physical fitness of students each year and to revise the norms accordingly.

6. The norms prepared may be utilized for comparing the standard of performance of boys from different States.

7. Other variables like height, weight etc. may be also considered for preparing norms.