CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

SUMMARY

Apart from physical, motor, social, economic, anthropometric and a host of other factors, the family role, direct or indirect, also has a vital significance upon a school-going adolescent, his daily life routine, his academic and extra-curricular schedules, his intellectual self and most important of all, his future. Various studies had been carried out previously with either different variables or with different age groups. During the developmental stages of an adolescent, the family's condition, both social as well as economic, and anthropometric dimensions of subjects needed to be studied in order to get as accurate an indication as possible with respect to the classified and overall motor fitness of an individual adolescent. It is expected that on the basis of current research and other similar research projects that might be carried out, some definite picture of the Indian school-going male adolescent population would be formed so as to enable school physical educators to develop and define school curriculum according to the varying needs of the adolescent student population on the basis of individuality.
instead of subjecting every pupil with different physical, social and motor capabilities to a fixed curriculum and hence undertaking a risk of either misusing the curriculum scope or directing student energy in a wrong direction and fashion.

Physical, social and motor capabilities of Indian adolescent population need to be estimated and understood in order to employ their energies to the best possible advantage and make best use of a school physical education curriculum. This will prevent student burn-out which is very common in Indian schools where pupils opt out of a physical education program under the impression of having achieved nothing in a particular session. If student population is better understood by school physical educators this phenomenon can be checked and prevented to a great extent by periodically updating and modifying the curriculum on the basis of student potential.

In order to help physical educators design their respective physical education curriculum with respect to general analysis of their student population, the current study, "Relationship of Varying Levels of Motor Fitness to Socio-Economic Status and Structural Variations Among School Students in the Age Group of 14 to 16 Years", was undertaken.

Four hundred male school students 14 to 16 years of age from families with different socio-economic
backgrounds and studying in different schools of Chandigarh were selected as subjects. Economically the subjects selected ranged from low class poverty stricken families to upper middle class families with wide variations in social patterns of the families.

The entire data on the population was analyzed through statistical techniques employing three-way analysis of variance (ANOVA) and Scheffe's post-hoc test. The analysis was carried out to examine the significance of differences on motor fitness variable in relation to socio-economic status as well as structural variations. Significant influences of socio-economic status on structural variations was also studied through analysis of variance (ANOVA), three-way whereas significance of coefficient of correlation between motor fitness and structural variations, i.e. somatotypes was carried out by applying the biserial correlation techniques.

Results of this study indicated that in 14 year age group, regarding explosive strength or power, the medium socio-economic status group was superior in performance than high socio-economic status group. Upon further analysis regarding 15 and 16 year age groups, the low socio-economic status group was better than high socio-economic status group as was the case in the 14 year age group, but no significant differences existed in the 16 year age group.

For age classifications on the basis of socio-economic
status, with regard to explosive strength or power, 16 year olds were better than 14 and 15 year olds and also 15 year olds were better than 14 year olds in all the three socio-economic status groups.

Regarding flexibility, with regard to structural variations across age, all the three age groups had similar results, that is, mesomorphs were better in flexibility than endomorphs and ectomorphs. Across socio-economic status, only mesomorphs and endomorphs from high socio-economic status group were significantly more flexible than ectomorphs from the same socio-economic status group.

With reference to cardio-respiratory endurance, 16 year olds proved to be better than 14 and 15 year olds. Further, across structural variations the socio-economic status groups were not influenced significantly. Similar was the case across low and high socio-economic status groups where there was no significant influence upon structural variations. However, in the medium socio-economic status group mesomorphs had significantly greater cardio-respiratory endurance than ectomorphs and endomorphs.

In overall motor fitness, mesomorphs proved superior than ectomorphs and endomorphs. Across socio-economic status, mesomorphs were significantly superior to endomorphs and ectomorphs and similar was the case across the 16 year age group. Structural variations came under no influence regarding overall motor fitness.
across 14 and 15 year age groups. Further, across structural variations medium socio-economic status group was better in overall motor fitness than high socio-economic status group with regard to ectomorphy and again with regard to age 15 year olds were better than 14 and 16 year olds and also 14 year olds were better than 16 year olds in ectomorphy in overall motor fitness.

High, medium and low socio-economic status groups ranked in that order of decline with regard to endomorphy. High motor fitness subjects turned out to be more mesomorphic than subjects in medium motor fitness groups. Further subjects in low motor fitness group were less mesomorphic than those in medium motor fitness group.

16 year old boys were more endomorphic than 15 and 14 year old boys. 14 year old boys were more mesomorphic than 15 and 16 year old boys. Also 14 year olds were more ectomorphic than 16 and 15 year olds.

**CONCLUSIONS**

With respect to the only limitation of this study, the following conclusions are drawn on the basis of the results achieved:

1. Socio-economic status did not influence motor fitness significantly except in explosive strength
where low socio-economic status group and medium socio-economic status group differed significantly from high socio-economic status group in 14 year age group. In 15 year age group, low socio-economic status group was better than high socio-economic status group. However, there were no significant influences in the 16 year age group.

2. High motor fitness group had a significantly higher mesomorphic component of structural variations than medium motor fitness and low motor fitness groups. Medium motor fitness group also had a higher mesomorphic component than low motor fitness group.

3. Socio-economic status did not influence structural variations significantly except in endomorphic component of structural variations where high and medium socio-economic status groups were more endomorphic than low socio-economic status group.

4. 15 and 16 year olds were better than 14 year olds in flexibility. Also 15 year olds were better than 14 year olds in explosive strength or power and 16 year olds were better than 14 and 15 year olds in
cardio-respiratory endurance. While there were no significant differences across age in overall motor fitness.

5. 14 and 15 year olds were more ectomorphic than 16 year olds; 16 year olds were more endomorphic than 14 and 15 year olds; and 14 year olds were more mesomorphic than 15 and 16 year olds.

RECOMMENDATIONS

On the basis of findings of this study, the following recommendations are put forth:

1. Socio-economic factor must be kept in view while organizing school physical education programs.

2. Average age and socio-economic background of the school population may prove helpful in classification of the students for the purpose of administering the best suitable program.

3. Students may be classified on the basis of somatotypes for bringing about an improvement in their physical and motor performance.

4. While preparing physical education schedules for
children, the findings of this study with regard to age should be kept in mind.

5. While spotting talent structural variations of individuals should also be taken into account.

6. Further studies may be undertaken with different age and gender characteristics and socio-economic variables like minimum income, social care, sanitary conditions, health care, immunization, education and the like that may prove to be direct or indirect influencing factors. Such studies could be of immense use to school physical educators in understanding the individual aspects of the school population and also in proper planning and development of school curriculum.