Chapter V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This study was conducted for a cross-sectional study on age, sex, height and weight in relation to motor development among boys and girls. Two thousand five hundred boys and 2500 girls (500 in each age category i.e. 12-13 yrs; 13-14 yrs; 14-15 yrs; 15-16 yrs and 16-17 yrs.) were randomly selected as subjects from East, West, North, South and Central zones.

The physical variables were strength, speed, power, flexibility and co-ordinative abilities and anthropometric variables chosen were age, height and weight. These variables were measured in terms of motor performance test.

All the subjects went through the test in a particular sequence against the time, starting with hopping; zig-zag running; standing board jump; vaulting over an obstacle; walking on balancing beam; crawling on fours; backward running; sit-ups and sprint. Performance of all subjects were recorded in seconds for a total distance of 100 M.

Coefficient of correlation was applied for height and weight relationship with the motor performance and ANOVA (2-way) was applied to establish relationship of age and sex in relation to the motor performance.

Results of Coefficients of correlation showed that the height contributes significantly to motor performance in both gender and particularly in boys.

The results of ANOVA (2-way) showed that there is significant relationship with age, sex and within the same age group of different sex, with the values of
231.75; 07.58 and 23.04 respectively, in favour of the boys.

The results of critical difference revealed that boys motor performance increases with the increase in age, but in girls performance was decreasing with increase in age.

**Conclusions**

Based on the findings and within the limitations of the study, the following conclusions are drawn.

1. Significant relationship of height were exhibited by the subjects (boys and girls) in the motor performance test.

2. Height contributed significantly in motor performance of boys than of girls.

3. Gender differences affect the motor performance significantly.

4. Motor performance of boys showed significant difference (increased) with the increase in age.

5. Motor performance of girls showed detoriation with increase in age.

6. Motor performance of boys were better than the girls in every age category except 12-13 yrs.
Recommendations

On the basis of the conclusions drawn, the following recommendations are being made:

1. Physical education teachers and coaches may utilize the findings of the present study in preparing motor performance test at different age level.

2. The present study may be undertaken involving other psychological, anthropometric and sociological variables, not employed in this study.

3. The similar study may be replicated with other physical and physiological (body composition) variables.

4. A similar study may be conducted using subjects from nearby foreign countries.

5. Research study of this nature may be conducted on different games and sports.

6. Modified test of this present study may be used efficiently in countries like India.

7. A similar study of longitudinal nature can be undertaken.

8. A similar study can be undertaken with various modifications of testing procedures for selection of testing the most suitable procedure in future which takes less time, manpower and equipment.