CHAPTER V
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

Physical movements of the body are vital for normal brain development and it is imperative that teachers increase the amount of physical activity programmes for the respondents to improve their healthy lifestyle. While taking part in competition, our body movements have relationship with the cognitive functions. Doing regular exercise reduces stress and helps one to function normally and improves emotional state.

Physical activity and academic achievement find a strong link between the respondent’s health and his academic performance. By improving physical fitness level, he tends to perform better in the classroom and that; the daily exercise does not affect one’s academic performance.

Academic achievement is more important for learning and improving the personality development of a respondent. Assessing a progress of a respondent means identifying what he has achieved. Acquiring skills in academic matters is important as a means of attaining complete realization. The respondent does not merely have a task without any assistance is trying to perform well with the aim of eliciting positive reinforcement for his demonstrated competence in the task. The academic achievement means respondent makes achievement in his marks in the examination which is the criterion for the performance of the respondent. Academic achievement is also known as scholastic achievement.
Scholastic achievement is the degree to which the respondent has moved towards the objective of the school. Academic achievement measures the extent to which individuals have acquired certain knowledge skills, concept and abilities as a result of instruction received from the school.

The present investigation consists of two categories of independent variables namely academic discipline and different academic achievement. The first independent variable relates to Arts and Science discipline and Engineering discipline and the second independent variables relate to average achievers; above average achievers; good achievers and superior achievers. The criterion variables selected for this study are standing height, body mass and BMI as anthropometric variables; 50mts run, sit and reach and bent knee sit –up as physical variables; resting pulse rate, breath holding time and respiratory rate as physiological variable and trait anxiety, smith’s aggression and sports achievement motivation as psychological variables. The Two Way (2x4) Analysis of variance (ANOVA) was used to evaluate the influence of the twelve criterion variables on the two categories of variables. The obtained results have three ‘F’ ratio, two for main effect; the first F – ratio for rows (referring to academic discipline) and columns (referring to academic achievement) and one for interaction (referring to the academic discipline and academic achievement).

The F- ratio for rows, test the significant difference, if any, among Arts and Science discipline and Engineering discipline female respondents irrespective of academic achievement in each dependent variables. The F – ratio for column analysis test the significant difference if any, among respondents of academic
achievement irrespective of academic discipline in each dependent variables separately. The F- ratios for interaction compare the means for Arts and Science discipline and Engineering discipline of the selected dependent variables among the academic achievement selected for study. The obtained F ratios of column (academic achievement) were significant, Scheffe’s test was used as Post Hoc Test separately for column to find out the difference between paired mean were significant. If the obtained F ratio for interaction was significant, then simple main effect test was used as follow-up test to find out which of the mean scores for academic discipline and academic achievement were significant. Thus, Five F – ratios were computed in which the first three F – ratio analyze the scores for Arts and Science discipline and Engineering discipline at different academic achievement levels on dependent variables and the remaining two F –ratio analyze the variations in the academic achievement of respondents of Arts and Science discipline and Engineering discipline on dependent variables. Further, individual comparison among the respondents of academic achievement levels were also made for interpretation by using the Scheffe’s Post Hoc Test. In all the conditions the significant level was fixed at 0.05 levels, which was considered to be appropriate.

**Conclusions**

From the result of the present investigation, the following conclusions were drawn.

1. There were existed significant difference between Arts and Science discipline and Engineering discipline respondents irrespective of different
academic achievement such as average achievers, above average achievers, good achievers and superior achievers on selected anthropometric variables.

2. There were existed significant difference between the average achievers and above average achievers of Engineering discipline respondents are better than the Arts and Science discipline respondents.

3. There were existed significant difference between Arts and Science discipline and Engineering discipline respondents irrespective of different academic achievement such as average achievers, above average achievers, good achievers and superior achievers on selected physical variables on flexibility.

4. There were existed significant difference between Arts and Science discipline and Engineering discipline respondents irrespective of different academic achievement such as average achievers, above average achievers, good achievers and superior achievers on selected physiological variables on respiratory rate.

5. There were existed significant difference between Arts and Science discipline and Engineering discipline respondents irrespective of different academic achievement such as average achievers, above average achievers, good achievers and superior achievers on selected psychological variables on aggression and sports achievement motivation.
6. There were no significant difference between Arts and Science discipline and Engineering discipline respondents irrespective of different academic achievement on selected physical, physiological and psychological variables such as speed, muscular endurance, resting pulse rate, breath holding time and trait anxiety.

7. There were no significant difference between the Arts and Science discipline and Engineering discipline at different academic achievement such as good achiever and Superior achiever on selected anthropometric variable on BMI.

8. There was no significant difference on selected physiological variable on resting pulse rate and breath holding time among the different academic achievement irrespective of Arts and Science discipline and Engineering discipline respondents.

9. There was no significant difference on selected physical variables on speed and muscular endurance among the different academic achievement irrespective of Arts and Science discipline and Engineering discipline respondents.

10. There was no significant difference on selected psychological variable on trait anxiety among the different academic achievement irrespective of Arts and Science discipline and Engineering discipline respondents.
11. There was no significant difference on selected anthropometric variables such as standing height and body mass among the Arts and Science discipline and Engineering discipline at different academic achievement.

12. There was no significant difference on selected physical variables such as speed, flexibility and muscular endurance among the respondents of Arts and Science discipline and Engineering discipline at different academic achievement.

13. There was no significant difference on selected physiological variables such as resting pulse rate, breath holding time and respiratory rate among the Arts and Science discipline and Engineering discipline respondents at different academic achievement.

14. There was no significant difference on selected psychological variables such as trait anxiety, aggression and sports achievement motivation among the Arts and Science discipline and Engineering discipline respondents at different academic achievement.

**Recommendations**

Based on the findings of the present investigation the following recommendations were drawn.

1. The College authorities may take necessary steps to improve the specific components of anthropometric, physical, physiological and psychological variables which are lacking in Arts and Engineering disciplines.
2. Similar studies may be conducted on school and university respondents for evaluation.

3. Similar studies may be conducted on male respondents in schools, academic discipline and at university levels.

4. Similar studies may be conducted taking the university semesters marks and school grades point marks.

5. A study may be conducted to select the most important independent variables in the order of priority towards criterion variables.

6. A similar study may be conducted for the different academic achievement categories such as low achiever, medium achiever and high achiever.