## Chapter - 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

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SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

The proposed study will help to understand the present status and attitude towards physical activity, achievement motivation, self-esteem, self-efficacy and academic achievements of students who study arts and science subjects. The study will contribute to giving an idea about the attitude of athletes (team and individual games) and non-athletes. The study will also further enable coaches/trainers to get a better understanding of gender differences in attitude towards physical activity, achievement motivation, self-esteem, and self-efficacy and academic achievement.

The purpose of the study was to investigate the differences between the students of arts and science streams, athletes (team, individual games) and non-athletes of both the genders on attitude towards physical activity, achievement motivation, self-esteem, self-efficacy and academic achievement. The objectives of the study included, finding out the differences between the students studying arts and science subjects in their attitude towards physical activity,
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Achievement motivation, self-esteem, and self-efficacy and academic achievement; to find out the differences between athletes (team and individual games), and non-athletes in their attitude towards physical activity, achievement motivation, self-esteem, self-efficacy and academic achievement, to investigate the differences between the genders in the attitude towards physical activity, achievement motivation, self-esteem self-efficacy and academic achievement. and to find out relationship of athletes and non-athletes between achievement motivation, self-esteem and self-efficacy with academic achievement.

The sample consisted of 600 students doing under-graduate programmes in different colleges affiliated to Mahatma Gandhi University, Kottayam, India, of both the arts and science streams. The sample from arts stream was 474 and science stream 126. The sample was bifurcated into individual and team games. Among these, 21% (N=126) are from the science stream and 79% (N=474) from the arts stream. The population consisted of 300 (50%) male students and 300 (50%) female students. According to the type of group 33.33% each were under the individual sport (n=200), team games (n=200) and non-athletes (n=200).
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Four instruments were used in this study, namely: a) Children’s Attitude towards Physical Activity Inventory (Simon and Smoll, 1974), b) Sports Achievement Motivation Test (M L Kamlesh, 1990), c) Rosenberg Self-esteem Scale (Morris Rosenberg, 1965) and d) General Self-efficacy Scale (Schwarzer, R & Jerusalem, M., 1995). The percentage of total marks scored in the university degree examinations was calculated by the researcher with the help of their mark list.

The researcher visited the major colleges of Mahatma Gandhi University, the university campus, university intercollegiate meet venues and gave the questionnaire to small groups and explained to them the purpose of the survey. The instructions given were very specific, unambiguous and sufficiently informative so that all the students were able to provide genuine responses to the questions. Survey procedures were designed with utmost care to protect the privacy of the respondents; they were allowed to conceal their identity if they so desired.

The data were analysed using SPSS Version 20.0 (SPSS Inc., Chicago, IL). The data pertaining to the attitude towards physical activity, achievement motivation, self-esteem, self-efficacy and academic achievement were tested using Descriptive statistics,
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Multivariate Analyses of Variance (MANOVA), and Pearson Coefficient of Correlation analysis. The level of significance was set at .05 for testing the hypotheses.

Four test statistics are reported for the group effect on Independent Variables (IV’s) Stream, Gender and Group: “Pillais”, “Wilks”, “Hotelling’s”, and “Roy’s.” Huberty (1994, pp. 183-189) offers a detailed discussion of these four statistics, and in the first independent variable Stream (Arts/Science), all the tests indicate the multivariate effect is statistically not significant for the current data (Wilks’ = .975, F = 1,489 (10,579), p < .141). The observed power of partial ETA squared is .025, which also shows that, this independent variable (gender) accounts for only 2.5% of variability in dependent variables.

In the case of second independent variable gender (Male/Female), all the tests indicate that multivariate effect is statistically significant for the current data (Wilks’ λ = .822, F = 12.533 (10,579), p < .000). This significant F indicates that, there are significant differences between genders on selected dependent variables. The observed power of partial ETA squared is 0.178, which also shows that, this independent variable (Gender) accounts for 17.8% of variability among dependent variables. In third independent
variable Group (Individual Sport, Team Games and Non-Athletes) also all the tests indicate the multivariate effect is statistically significant for the current data (Wilks’ $\lambda = .823$, $F = 5.923$ (20,1158), $p<.000$). This significant $F$ indicates that, there are significant differences between groups (Individual Sport, Team Games and Non-Athletes) on selected dependent variables. The observed power of partial ETA squared is 0.093 also shows that, this independent variable (group) accounts for 9.3% of variability among dependent variables. Further univariate tests have been performed to find out effect of independent variables, gender and group, on dependent variables.

The ANOVA result reveals that, the dependent variables ‘Attitude towards physical activity sub scale Idea 6’ ($F = 5.546$, $p<.019$), self-esteem ($F = 10.796$, $p<.001$), Sports Achievement Motivation ($F = 5.708$, $p<.017$) and Self-Efficacy ($F = 104.489$, $p<.000$) differ significantly with independent variable gender (male/female). All other dependent variables are found not significant.

The pair-wise comparison shows that compared to male students, female students feel that, participation in physical activities that take long, hard practices require you to give up other things. Another dependent variable, self-esteem, mean scores shows that
female students’ overall subjective emotional evaluation about their own worth is higher than that of their male counterparts. The dependent variable, Sports Achievement Motivation, mean scores confirm that male students have more desire for challenge, concern for excellent standards and value of feedback, lower failure rate and more positive internal attributions regarding failure and success and a positive attitude towards evaluation than female students. The dependent variable, Self-Efficacy, mean scores shows that, when compared to female undergraduate students, male students have a stronger belief in own-ability to succeed in specific situations.

The ANOVA result reveals that, the dependent variable, Attitude towards physical activity sub scale Idea 1 (F = 6.815, p<.001), Idea-3 (F = 5.075, p<.007), Idea-5 (F = 4.218, p<.015), Idea-6 (F = 5.687, p<.004), Self-Esteem (F = 12.440, p<.000), Self-Efficacy (F= 6.967, p<.001) and Academic Achievement (F = 23.580, p<.000) differ significantly with independent variable group (Individual Sport, Team Games, Non-Athletes).

The pair-wise comparison shows that, ATPA sub domain Idea 1– Social Experience (Participation in physical activities that give you a chance to meet people and give you a chance to be with friends) results indicate that, individual and team games participants
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strongly believe that, participation in physical activities give them a chance to meet people and to be with friends in comparison to non-athletes.

The third (Idea 3) sub domain, Vertigo: Participation in physical activities that could be dangerous and require you to move quickly and change directions; cores seem to confirm the notion that the non-athlete girls are not very adventurous in activities where there is a risk factor and are unlikely to devote much time to extended periods of training. The fifth (Idea 5) sub domain, Catharsis: Participation in physical activities that reduce stress; results shows that, athletes’ more strongly believe that physical activity is often seen as a release from the strain of academic activity than non-athletes. The sixth (Idea 6) sub domain, Ascetic: Participation in physical activities that require long, hard practices will force you to give up other things; The results shows that, the scores seem to confirm the notion that the non-athlete girls are not very adventurous in activities where there is a risk factor and are unlikely to devote much time for extended periods of training. Significant dependent variable, self-esteem, mean score shows that participants of individual and team games students overall subjective emotional
evaluation of their own worth is higher than that of their non-athlete counter parts.

The dependent variable, Self-Efficacy, mean scores show that, when compared to non-athlete undergraduate students, individual sport and team games participants have a stronger belief in own-ability to succeed in specific situations. The dependent variable, academic achievement, mean score shows that, non-athletes’ academic achievement is higher than that of the students participating in individual and team games among the undergraduate students of Mahatma Gandhi University, Kottayam.

5.2 CONCLUSIONS

The following conclusions were drawn based on the study:

1. Stream of study, Arts or Science, is not a criterion factor deciding the attitude towards physical activity among the undergraduate students in Mahatma Gandhi University, Kottayam.

2. Gender difference is a significant factor determining attitude towards physical activity, self-esteem, sports achievement motivation and self-efficacy of undergraduate students in Mahatma Gandhi University, Kottayam.

3. In Mahatma Gandhi University, Kottayam, compared to male students, female students feel that, participation in physical
activities that require long, hard practices will compel them to give up other things.

4. Individual and team games participants in the Mahatma Gandhi University, Kottayam, believe that participation in physical activities gives them a chance to meet people and to be friends with them.

5. In Mahatma Gandhi University, Kottayam, the non-athlete girls are not very adventurous in activities where there is risk factor and unlikely to devote much time for extended periods of training.

6. Female student’s overall subjective emotional evaluation about their worth is higher than that of their male counterparts in Mahatma Gandhi University, Kottayam.

7. Male students have more positive internal attributions regarding failure and success and positive attitude towards evaluation than female students in Mahatma Gandhi University, Kottayam.

8. When compared to female undergraduate students, male students have stronger belief in their own ability to succeed in specific situations in Mahatma Gandhi University, Kottayam.
9. In Mahatma Gandhi University, Kottayam, athletes more strongly believe that physical activity is often seen as a relief from the strain of academic activity.

10. Individual and team game participant’s overall subjective emotional evaluation of their own worth is higher than that of their non-athlete counterparts in Mahatma Gandhi University, Kottayam.

11. When compared to non-athlete undergraduate students, individual sport and team games participants hold stronger belief in own ability to succeed in specific situations.

12. Non-athletes’ academic achievement is much higher than that of students participating in individual sports and team games in Mahatma Gandhi University, Kottayam.

13. Self-esteem having significant positive correlation with self-efficacy and academic achievement and no relation was found with sports achievement motivation among undergraduate students in Mahatma Gandhi University, Kottayam.

14. Sports achievement motivation having significant positive correlation with self-efficacy and no significant relation with academic achievement among undergraduate students in Mahatma Gandhi University, Kottayam.
15. Self-efficacy having significant positive correlation with self-esteem and sports achievement motivation and no significant correlation was found with academic achievement among undergraduate students in Mahatma Gandhi University, Kottayam.

5.3 RECOMMENDATIONS

1. Leadership training programmes should be conducted to enhance self-esteem and self-efficacy in undergraduate students, especially for women.

2. When providing the physical activities for students, health promotion, enjoyment, and social interactions are the most important aspects to consider.

3. When gender differences are taken into account, however, risky activities (football, hockey, basketball) could be provided for male, and activities with beautiful and graceful movements (dance, aerobics, yoga etc.) are more suitable for non athlete students.

4. Organize community-wide campaigns and sustained efforts with ongoing high visibility. These large-scale campaigns should be conducted to deliver messages that promote physical
activity by using television, radio, newspaper columns and inserts, and trailers in movie theatres.

5. It is possible to replicate the study selecting samples from a broader spectrum, say, colleges from different districts of the state.

6. An in-depth study of gender difference and attitude towards physical activity may bring about a better understanding of the need to narrow down the difference.

7. A study on why non-athletes show apathy towards physical activity despite the growing importance of physical fitness is worth undertaking.

8. It is possible to replicate the study adopting different methods to see whether the results differ in any way.

9. The percentage of obese young people in society is increasing day by day mainly on account of the sedentary lifestyle they are forced to adopt. A serious study on young people’s attitude to physical activity is desirable.

10. It is necessary to plan and implement novel strategies to attract non-athletes also into the mainstream.

11. Samples selected from colleges affiliated to Agricultural, Medical, Scientific and Technical Universities may be
subjected to the same experiment to find out how they respond to physical activity.

12. An extension of the study with the inclusion of a few more variables is worth considering.

13. Devise strategies to make physical activity a pleasurable experience and bring the youth of the country to a platform of ‘sporting friendship’.

14. Liaison with academics and policy makers to ensure the inclusion of sport as a curricular subject.