Chapter V

SUMMARY CONCLUSION AND RECOMMENDATIONS

Summary

Today the life style of the young women have drastically changed due to sedentary activities, such as television viewing, computer games, games in mobile and tablet, is suspected to be responsible for the decline in physical activity levels as result they are more prone to diseases and young age mortality. In order to minimize the effect pranayama can be administered to improve their life span. Pranayama includes breath practices where there is no body movement except of the breathing apparatus itself. Several researches suggest that simple breathing techniques alone may increase the amount of oxygen absorbed from the blood. Individuals who are restricted in their movement due to health problems may have access to some of the benefits that have traditionally been reserved for those who do not do vigorous exercise. However, the efficacy of pranayama on physiological variables is yet to be explored.
Hence, in this investigation, the effect of Anuloma Viloma pranayama on physiological variables among female of different age category is to be reviewed.

To accomplish the purpose of the study, ninety (90) female subjects were selected with age ranging between 21 to 35 years. These female working subjects were selected from Swami Vivekanand Subharti University, Meerut, Uttar Pradesh and novice with pranayama. These subjects were classified into three groups based on their age as Group 1: 21 to 25 years, Group 2: 26 to 30 years and Group 3: 31 to 35 years each constitutes thirty (30) subjects. The selected subjects gave willingness to participate in this study. After getting the consent, 90 healthy female subjects were medically examined and found they were free from diseases.

The investigator selected pulse rate, systolic blood pressure, diastolic blood pressure, vital capacity, resting respiratory rate, breath holding time and cardiovascular
efficiency were selected as criterion variables. The independent variable selected in the present study was Anuloma Viloma pranayama which was administered daily for three months.

For the present study pretest – posttest randomized group design (Thomas, Nelson & Silverman 2005) which consists of a groups with respect to different age on physiological variables. Equal numbers (thirty) of subjects were assigned through random sampling. The data collected were statistically analysed to examine the changes in female with respect to different age group. The experimental design used for the present investigation was Analysis of Covariance (ANCOVA). When $F$ is significant Scheffe S post hoc test was applied. The level of confidence was fixed at 0.05 to test the significance. The data was analysed in computer system by using statistical package for social science (SPSS) version 16.
Conclusions

The present study showed Anuloma Viloma pranayama administered daily for three months significantly altered physiological variables. The dependent variables, pulse rate \( (p < 0.05) \) by 5.05% and systolic blood pressure \( (p < 0.05) \) by 3.77% found low in 26 to 30 years female. The Scheffe S post hoc test revealed the same and elicited group differences between 21 to 25 – 31 to 35 years and between 26 to 30 – 31 to 35 years age group female. However resting respiratory rate decreased significantly in \( (p < 0.05) \) by 15.56% decreased significantly but vital capacity \( (p < 0.05) \) by 4.93%, breath holding time \( (p < 0.05) \) by 13.35% and cardiovascular efficiency \( (p < 0.05) \) by 12% increased in 21 to 25 years group female. The post hoc test displayed similar result and proved the difference between the groups.

Based on the findings of the study, it can be concluded that Anuloma Viloma pranayama training induces positive
changes in the body’s cardiorespiratory adaptation, as confirmed by the improvement in all groups. It can be assumed that among the many factors affecting the health of the female, the capability of maintaining the health is one of the key components at present. Although, three months of Anuloma Viloma pranayama training have obvious contributions to selected criterion variables, who require both a high aerobic capacity to reproduce multiple high-energy outputs. This study suggests that improvements in physiological variables may provide an advantage for women fraternity to maintain and enhance health through practicing Anuloma Viloma pranayama.
Recommendations

Based on the results of the study the following recommendations have been made.

1. Anuloma Viloma pranayama demonstrated no changes on diastolic blood pressure which require further investigation.

2. The body composition of the young adults may influence the result which has to be analysed in detail.

3. Analysing the physiological and biochemical alterations due to Anuloma Viloma pranayama has to be measured during exercise and recovery.

4. Haematological parameters alterations due to Anuloma Viloma pranayama have to be studied.

5. Anuloma Viloma pranayama on sports performance has to be studied.
Based on the limitations of the study the following recommendations have been made.

1. Impact of Anuloma Viloma pranayama on menstrual cycle.

2. In the present study health status have not been tested in this study.

3. This study can be extended to men, school children, physical education students.