#### **CHAPTER V**

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### **5.1 SUMMARY**

The increasing prevalence of overweight and obesity in humans is a growing public health. Concomitants include poor health behaviors and reduced psychological well-being. Preliminary evidence suggests yoga and treatment paradigms incorporating mindfulness, self-compassion (SC), acceptance, non-dieting, and intuitive eating may improve these ancillary correlates, which may promote long-term weight loss. (Braun TD et al. (2012)

Rioux J et al. (2014) developed and tested the feasibility of a whole-systems lifestyle intervention for obesity treatment based on the practices of Ayurvedic medicine/ Yoga therapy. They recommended a comprehensive diet, activity, and lifestyle modification program based on principles of Ayurvedic medicine/yoga therapy with significant self-monitoring of lifestyle behaviors. Neumark-Sztainer D. (2012) documented that Weight-related problems, including unhealthy weight control behaviors, binge eating, overweight and obesity, and eating disorders, are prevalent in youth. Although dieting and body dissatisfaction strongly predict weight gain over time, these findings are not always taken into account in the design of obesity interventions for youth. Possible reasons as to why risk factors such as dieting, body dissatisfaction, and weight stigmatization may be not adequately addressed within interventions

addressing obesity required further researches in this area and to address this problem, the investigator in this study made an attempt to find out the effect of combined and isolated effect of yogic practices and yogic diet on maximal oxygen uptake and vital capacity. Yoga practice has been effectively prescribed in conjunction with other medical and yogic procedures in the management of severe psychosomatic diseases, including cancer, bronchial asthma, colitis, peptic and ulcer. The effects of Yogic Practice were evaluated on anxiety/depression associated with obesity and found supports yoga as an effective tool with no diet restriction to improve anxiety and depression symptoms as well as obesity in obese subjects. Dhananjai S et al. (2013). Since there were lack of studies to find out the effect of combined and isolated yogic practices and yogic diet on selected physiological and psychological variables among obese women, this study dealt with the influence of combined and isolated effects of yogic practices and yogic diet on selected physiological and psychological variables among obese engineering college women students.

The purpose of this research is to find out the combined and isolated effect of yogic practices and yogic diet on selected physiological and psychological variables among obese engineering college women students. To achieve the purpose of this study, eighty obese engineering college women students were selected. Obesity of the subjects were determined through a person's BMI by the formula, Metric:  $BMI = \text{Weight } (kilograms) / \text{Height } (meters^2)$ . For the purpose of this study, women with  $30 \text{kg/m}^2$  and above of

Body Mass Index is considered as obese women. The selected subjects were in the age group of 20 to 25 years. The requirement of the experiment procedures, testing as well as exercise schedule were explained to the subjects so as to get full co-operation of the effort required on their part and prior to the administration of the study. The investigator got individual consent from each subject.

The study was formulated as a true random group design, consisting of a pre test and post test. The subjects (n=80) were randomly assigned to four equal groups of twenty in each. The groups were assigned as Experimental Groups I, II, III and control group respectively. Pre tests were conducted for all the subjects on selected physiological and psychological variables such as VO<sub>2</sub> max, Breath Holding Time, Resting Pulse Rate, Vital Capacity, Mean Arterial Blood Pressure, Self Confidence, Stress Management, Relationship, Achievement Motivation and Self Concept. The experimental groups participated in combined and isolated treatments such as, combination of yogasana and yogic diet; yogasana; and yogic diet for a period of twelve weeks. The post tests were conducted on the above said dependent variables after a period of twelve weeks in the respective treatments. The training programme was scheduled on week days excluding Sundays. The difference between the means on each variable was considered as the effect of respective treatments.

#### 5.1.1 LEVEL OF SIGNIFICANCE

The subjects were compared on the effects combined and isolated yogic practices and yogic diet on selected physiological and psychological variables, such as, VO<sub>2</sub> max, breath holding time, resting pulse rate, vital capacity, mean arterial blood pressure, self confidence, stress management, interpersonal relationship, self concept and achievement motivation of obese engineering college women students. Pre and post test scores were obtained. The analysis of covariance (ANCOVA) was used to find out the significant difference if any, among the groups on selected criterion variables separately, due to experimental treatments. In all the cases, 0.05 level of confidence was fixed to test the significance, which was considered as appropriate.

The results of the study proved that combined and isolated effects of yogic practices and yogic diet significantly influenced selected physiological variables, VO<sub>2</sub> max, breath holding time, resting pulse rate, vital capacity and mean arterial blood pressure and psychological variables, self confidence, stress management, inter personal relationship, achievement motivation and self concept of the obese engineering college women students.

# **5.2 CONCLUSIONS**

Within the limitations and delimitations of the study, the following conclusions were drawn.

- It was concluded that combined and isolated yogic practices and yogic diet significantly improved physiological variable such as VO<sub>2</sub> max among obese engineering college women students. It was also found that combined training was significantly better than yogic practices group.
- 2. It was concluded that combined and isolated yogic practices and yogic diet significantly improved physiological variable such as breath holding time among obese engineering college women students. It was also found that combined training was significantly better than isolated yogic practices group and yogic diet group.
- 3. It was concluded that combined and isolated yogic practices and yogic diet significantly improved physiological variable such as resting pulse rate among obese engineering college women students. It was also found that there was no significant difference among treatment groups.
- 4. It was concluded that combined and isolated yogic practices significantly improved physiological variable such as Vital Capacity among obese engineering college women students. It was also found that there was no significant difference among experimental groups.
- It was concluded that combined and isolated yogic diet groups significantly improved physiological variable such as mean arterial blood pressure among obese engineering college women students. It

was also found that there was combined group was significantly better than yogic practices group.

- 6. It was concluded that combined and isolated yogic practices and yogic diet significantly improved psychological variable such as self confidence among obese engineering college women students. It was also found that there was no significant difference among treatment groups.
- 7. It was concluded that combined and isolated yogic practices and yogic diet significantly improved psychological variable such as stress management among obese engineering college women students. It was also found that there was no significant difference among treatment groups.
- 8. It was concluded that combined and isolated yogic practices and yogic diet significantly improved psychological variable such as inter personal relationship among obese engineering college women students. It was also found that combined group was significantly better than yogic practices group in improving interpersonal relationship.
- It was concluded that combined and isolated yogic practices and yogic diet significantly improved psychological variable such as achievement motivation among obese engineering college women

students. It was also found that combined group was significantly better than yogic diet group in improving achievement motivation.

10. It was concluded that combined and isolated yogic practices and yogic diet significantly improved psychological variable such as self concept among obese engineering college women students. It was also found that there was no significant difference among treatment groups.

### 5.3 RECOMMENDATIONS

The findings of this study proved that combined and isolated yogic practices and yogic diet significantly altered selected physiological and psychological variables among obese engineering college women students, the following recommendations were made:

- In view of the existing knowledge and yoga being a cost-effective technique without side effects, it appears appropriate to incorporate yoga/meditation for primary and secondary prevention of obesity and cardiovascular disease.
- 2. Yogic practices with yogic diet may be introduced among obese women for managing obesity of the women students.
- 3. Yogic practices with yogic diet may be introduced among obese women for psychological development of the students.

- 4. The engineering college authorities may come forward to introduce yogic practices and yogic diet for the students, especially obese women students for all round development of the students.
- Fitness trainers can introduce yogic practices and yogic diet for the physiological and psychological fitness of obese engineering college students.

#### 5.4 SUGGESTIONS FOR FUTURE RESEARCHES

During the course of the study, the investigator came across number of new ideas and suggestions that can be taken care of future researchers. Some of which are given below:

- Researches may be under taken to find out the potential to facilitate
  power and well-being in the human and environmental field patterning
  process by Yogic practices and yogic diet through health related
  physical fitness variables of obese college students.
- Researches may be conducted to find out the effect of yogic practices
  and yogic diet as a promise as a behavioral intervention for enhancing
  accuracies in altering biochemical and hematological variables of obese
  students.
- 3. Different physical poses and yoga techniques may have unique health benefits. Researches may be undertaken to pin point which yogic

- technique contribute for which physiological and psychological variables among obese women.
- 4. Similar researches with manipulation of duration of yogic practices and yogic diet may be undertaken to find out the effect of selected experimental protocols among obese women.
- 5. Researches may be undertaken to combine yogic practices with laughter yoga to find out their effects on selected physical, physiological and psychological variables among obese students.