CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

In these days of explosive population growth and advanced technology, considerable emphasis is being laid on educating a citizen to maintain an optimum level of fitness for personal efficiency and national progress all over the world. The present age is an age of automation, sophistication and technological wonders which were once beyond man’s wildest dreams. All the powerful and ever increasing efforts on the part of medical science in recent years to make man awake of the fact that maintenance of his body especially his heart, is the only way to assure a long and healthy life has not been taken need of.

In the modern world, yoga and walking is the best remedy for the diseases and discomfort. They are being exposed to the exercises and yoga methods which have proved beneficial for achieving high standards. The training programmes for sports are so designed that they may favourably effect the physiological, psychological and Biochemical variables associated with high performance capacity in that sport.

A variety of walking and yoga training schedules are adopted to develop the physical fitness with emphasis on developing one or other factors more intensively through methods which will have some effect on qualities to be developed.
The purpose of this study was to investigate the effects of yoga and walking on the selected physiological, biochemical and psychological variables of diabetic patients.

To facilitate the study, sixty diabetic patients were basis randomly selected as subjects. They were divided into four equal groups such as one group and three experimental group I did not involve any physical activity. Experimental group II underwent walking, Experimental group III underwent yoga, and experimental group IV underwent Yoga and walking for a period of twelve weeks.

The analysis of covariance was used to find out the adjusted mean differences among the experimental groups. The Schaffer's post hoc test was used to find out the period mean difference. The level of significance was set at 0.05 level.

5.2 CONCLUSIONS

Within the limitations of the study, the following conclusions were drawn:

1. Pulse rate, respiratory rate, vital capacity, blood sugar, insulin level (c-peptide), cholesterol, Anxiety, stress and self concept were significantly improved due to the effect of Yoga and Walking.

2. In pulse rate the Experimental Group IV (Yoga and Walking Group) exhibited significantly greater improvement than Experimental Group III, (Yoga Group) Experimental Group II (Walking Group) and Experimental Group I (Control Group). Further the Experimental
Group III (Yoga Group) significantly improved in pulse rate better than the Experimental Group II (Walking Group) and Experimental Group I (Control Group) and the improvement of Experimental Group II (Walking) was significantly better than the Experimental Group I (Control Group).

3. In respiratory rate the Experimental Group IV (Walking and Yoga Group) significantly greater improvement than Experimental Group III, (Yoga Group) Experimental Group II (Walking Group) and Experimental Group I (Control Group). Further the Experimental Group III (Yoga Group) significantly improved in Respiratory rate better than the Experimental Group II (Walking Group) and Experimental Group I (Control Group), and the improvement of Experimental Group II (Walking Group) was significantly better than the Experimental Group I (Control Group)

4. In vital capacity the Experimental Group IV (Walking and Yoga Group) significantly greater improvement than Experimental Group III, (Yoga Group) Experimental Group II (Walking Group) and Experimental Group I (Control Group). Further the Experimental Group III (Yoga Group) significantly improved in Vital capacity better than the Experimental Group II (Walking Group) and Experimental Group I (Control Group), and the improvement of Experimental Group II (Walking Group) was significantly better than the Experimental Group I (Control Group)
5. In blood sugar the Experimental Group IV (Walking and Yoga Group) significantly greater improvement than Experimental Group III, (Yoga Group) Experimental Group II (Walking Group) and Experimental Group I (Control Group). Further the Experimental Group III (Yoga Group) significantly improved in Blood sugar better than the Experimental Group II (Walking Group) and Experimental Group I (Control Group), and the improvement of Experimental Group II (Walking Group) was significantly better than the Experimental Group I (Control Group).

6. In Insulin level (C Peptide) the Experimental Group IV (Walking and Yoga Group) significantly greater improvement than Experimental Group III, (Yoga Group) Experimental Group II (Walking Group) and Experimental Group I (Control Group). Further the Experimental Group III (Yoga Group) significantly improved in Insulin level better than the Experimental Group II (Walking Group) and Experimental Group I (Control Group), and the improvement of Experimental Group II (Walking Group) was significantly better than the Experimental Group I (Control Group).

7. In Cholesterol the Experimental Group IV (Walking and Yoga Group) significantly greater improvement than Experimental Group III, (Yoga Group) Experimental Group II (Walking Group) and Experimental Group I (Control Group). Further the Experimental Group III (Yoga Group) significantly improved in Cholesterol better than the Experimental Group II (Walking Group) and Experimental
Group I (Control Group), and the improvement of Experimental Group II (Walking Group) was significantly better than the Experimental Group I (Control Group).

8. In Anxiety the Experimental Group IV (Walking and Yoga Group) significantly greater improvement than Experimental Group III, (Yoga Group) Experimental Group II (Walking Group) and Experimental Group I (Control Group). Further the Experimental Group III (Yoga Group) significantly improved in anxiety better than the Experimental Group II (Walking Group) and Experimental Group I (Control Group), and the improvement of Experimental Group II (Walking Group) was significantly better than the Experimental Group I (Control Group).

9. In Stress the Experimental Group IV (Walking and Yoga Group) significantly greater improvement than Experimental Group III, (Yoga Group) Experimental Group II (Walking Group) and Experimental Group I (Control Group). Further the Experimental Group III (Yoga Group) significantly improved in stress better than the Experimental Group II (Walking Group) and Experimental Group I (Control Group), and the improvement of Experimental Group II (Walking Group) was significantly better than the Experimental Group I (Control Group).

10. In Self Concept the Experimental Group IV (Walking and Yoga Group) significantly greater improvement than Experimental Group III (Yoga Group) Experimental Group II (Walking Group) and
Experimental Group I (Control Group). Further the Experimental Group III (Yoga Group) significantly improved in self concept better than the Experimental Group II (Walking Group) and Experimental Group I (Control Group), and the improvement of Experimental Group II (Walking Group) was significantly better than the Experimental Group I (Control Group).

11. The findings of the study showed that the combination of Walking and Yoga training to controlled the diabetes is far better than Yoga training and Walking training separately. It was further proved that the Yoga training controls diabetics and also controls the diabetics better than Walking training and finally Walking training also controls the diabetics for diabetic patients.

12. It was found that the Experimental combined Group of Yoga and Walking showed remarkable results followed by the Experimental Group Yoga and the Experimental Group Walking.

**5.3 RECOMMENDATIONS**

On the basis of the findings and conclusions, the following recommendations were made.

1. The present study shows that there is improvement in pulse rate, respiratory rate and cholesterol due to the influence of Walking, Yoga and Walking & Yoga training. Hence it is recommended that these training methods could be included as one of the other training methods.
2. Further it is recommended that the combination of Walking & Yoga training assigned to Experimental Group III could be significantly used as one of the training methods to improve pulse rate, cholesterol since it is significantly better than Experimental Groups I, II and IV.

3. Physical activities like cycling and swimming can be conducted as the training programme for future studies.

4. The duration of the session may be between 20 and 30 minutes for Type 1 diabetics and from 40 to 60 minutes for Type 2 diabetics.

5. Similar studies may be conducted on the basis of intensity of the activity, that is between 50 and 75 per cent of the person's functional capacity.

6. With the consultation of medical doctor, this study may also be conducted for persons with other diseases.

7. This study may be carried out with regular fitness programme.

8. Similar studies can also be conducted on certain physiological, psychological and sociological variables.

9. This study will be useful for future researchers.