CHAPTER 9.0

9.0 APPRAISALS

9.1 SUMMARY OF THE FINDINGS

When we observe the results of autonomic and respiratory variables, in the frequency domain measures of HRV, the LF was higher and HF was lower during LC in frequency domain measures and NN50 was found to be higher during all the sessions across all the four groups in the statistical measures. But pNN50 was lower during LC compared to during NC. In addition to this, the mean RR and HR were significantly higher during LM and LC. Whereas in the cognitive variables it was observed that the scores of attention and short-term memory following SC and LC was higher but the score of attention was comparatively higher following LC and short-term memory following SC.

9.2 CONCLUSIONS

Therefore, in conclusion, we can interpret that during the practice of Loud chanting and Lips movement of *Mahamrityunjay mantra*, the attention is likely to be more with an increase in sympathetic activity in the background of relaxation. We also anticipate that amygdale and hippocampus following Loud chanting and Prefrontal cortex following Silent chanting are found to be activated suggestive of significant information processing in these designated areas of the Brain

9.3 IMPLICATIONS OF THE STUDY

It can be implied that during loud chanting of a *Mantra* there is temporary increase in the sympathetic tone under the background of relaxation and hence the span of attention is more compared to any other style of chanting.

Similarly during Silent chanting there could be activation of Amygdala and Hippocampus due to processing of information in these areas.

9.4 APPLICATIONS OF THE STUDY

Since span of attention is more during loud chanting, this particular intervention can be given to the participants with lack of attention or attention deficits. Similarly silent chanting of a *Mantra* will be highly applicable for managing our emotions and memory encoding processes in Hippocampus attributed to effective consolidation of long term memory.

9.5 STRENGTH OF THE STUDY

Following are the strength of the study

- Involved the same participant for recitation of all styles of *Mantra*.
- Though recording is not done during any voluntary breath manipulation technique, ECG recording was done during recitation as there was breath manipulation is involved during recitation.
- In the cognitive study, both male and female participants were recruited.
- In the trial of cognitive variables, suitable precaution was taken to define the washout period and this particular duration was given to ensure the overcome the carry over effect.

9.6 LIMITATIONS OF THE STUDY

Following were the limitations of the study

- Sample size of both the trials was not desirable.
- There were no female participants in the study of autonomic and respiratory variables.
- Good number of biochemical variables should have been studied along with autonomic, respiratory and cognitive variables.

- Some of the neuro-imaging studies like MRI etc. should have been included to understand which parts of the brain are involved during various styles of recitation of MMM.

9.7 SUGGESTIONS FOR FUTURE STUDIES

This particular concept of studying different styles of *mantra* can be conceptualized well with appropriate study design with addition of appropriate variables such as electrophysiological, neuro-imaging and biochemical assessment tools. In addition to this, a study with a large sample size could have been planned well for predicting a desirable outcome.