CHAPTER-V
MAIN FINDINGS, DISCUSSION OF RESULTS, EDUCATIONAL IMPLICATIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

The analysis and interpretation of results has been provided in the previous chapter. This chapter deals with the presentation of main findings, discussion of results, and educational implications based on these findings. It also provides suggestions for further research. They follow in the same sequence.

5.1 MAIN FINDINGS

On the basis of analysis and interpretation the following findings were emerged out. This section is concerned with findings related to emotional states, concentration and academic achievement of senior secondary school students.

5.1 (a) FINDINGS RELATED TO ‘EMOTIONAL STATES’ OF SENIOR SECONDARY SCHOOL STUDENTS

1. There is a significant difference in scores of emotional states i.e. ‘stress’ of senior secondary school students after yogic practices i.e. ‘stress’ is reduced after yogic practices. In other words, there is a significant positive effect of yogic practices on ‘stress’ of senior secondary school students.

2. There is a significant difference in scores of emotional states i.e. ‘anxiety’ of senior secondary school students after yogic practices i.e. ‘anxiety’ is reduced after yogic practices. In other words, there is a significant positive effect of yogic practices on ‘anxiety’ of senior secondary school students.

3. There is a significant difference in scores of emotional states i.e. ‘depression’ of senior secondary school students after
yogic practices i.e. ‘depression’ is reduced after yogic practices. In other words, there is a significant positive effect of yogic practices on ‘depression’ of senior secondary school students.

4. There is a significant difference in scores of emotional states i.e. ‘regression’ of senior secondary school students after yogic practices i.e. ‘regression’ is reduced after yogic practices. In other words, there is a significant positive effect of yogic practices on 'regression' of senior secondary school students.

5. There is a significant difference in scores of emotional states i.e. ‘fatigue’ of senior secondary school students after yogic practices i.e. ‘fatigue’ is reduced after yogic practices. In other words, there is a significant positive effect of yogic practices on 'fatigue' of senior secondary school students.

6. There is a significant difference in scores of emotional states i.e. ‘guilt’ of senior secondary school students after yogic practices i.e. guilt is reduced after yogic practices. In other words, there is a significant positive effect of yogic practices on 'guilt' of senior secondary school students.

7. There is a significant difference in scores of emotional states i.e. ‘extraversion’ of senior secondary school students after yogic practices i.e. ‘extraversion’ is increased after yogic practices. In other words, there is a significant positive effect of yogic practices on 'extraversion' of senior secondary school students.

8. There is a significant difference in scores of emotional states i.e. ‘arousal’ of senior secondary school students after yogic
practices i.e. ‘arousal’ is increased after yogic practices. In other words, there is a significant positive effect of yogic practices on ‘arousal’ of senior secondary school students.

5.1 (b) FINDINGS RELATED TO ‘CONCENTRATION’ OF SENIOR SECONDARY SCHOOL STUDENTS

There is a significant difference in scores of ‘concentration’ of senior secondary school students after yogic practices i.e. ‘concentration’ is increased after yogic practices. In other words, there is a significant positive effect of yogic practices on ‘concentration’ of senior secondary school students.

5.1 (c) FINDINGS RELATED TO ‘ACADEMIC ACHIEVEMENT’ OF SENIOR SECONDARY SCHOOL STUDENTS

There is a significant difference in scores of ‘academic achievement’ of senior secondary school students after yogic practices i.e. ‘academic achievement’ is increased after yogic practices. In other words, there is a significant positive effect of yogic practices on ‘academic achievement’ of senior secondary school students.

5.2 DISCUSSION OF RESULTS

The present investigation has been carried out to study the “Effect of Yogic Practices on Emotional states, Concentration and Academic Achievement of Senior Secondary School Students”. The present study was undertaken with a reasonable thought that large population of adolescents have been gripped with mental health problems like stress, anxiety, depression, regression, fatigue, etc., which have manifested in behavioral, emotional and other problems and resulted into lowering of concentration level and academic performance. The students who
are in their adolescent age undergo many physical and psychological changes and experience a lot of stress in their critical period of life. **Andreason (1980)** studied the adjustment disorder in adolescents and adults, found mental ill health symptoms in about 400 adolescents and adults. Studies by **Bhatia (1981); Offord et al. (1987); Cairns et al. (1991); Cairns et al. (1991); Zuckerman et al. (1993)** revealed that anxiety and depressive disorders are the most common, affecting nearly 15% of people in their lifetime. **Department of Health and Human Service (1996); Sindhu and Shukla (2002); Sirvastava et al. (2003)** found the prevalence of mild to severe depressive syndromes and behavioural problems in adolescents in typical range between 20% and 32%. **Hegde (2001); Grover (2002)** blamed the examination system for students' ill mental state and fill one with fear, anxiety, uncertainty, depression and dejection. **Sebapathy (2002)** held that negative factors can manifest as mental disorders or mental symptoms (anxiety, depression, obsession) or even negative states (anger, hostility, dissatisfaction, jealously, irritation, fear, projective, inferiority feeling, loneliness hatred, anxiety and depression). **Hembree (1988); Ghose (2001); Dubey (1993)** studied the effects of 'Test Anxiety' on 'Academic Performance'. Comprehensive reviews showed that in most studies 'Test Anxiety' is accompanied by lower test performances. The present investigation has highlighted that large number of students are suffering from emotional imbalances, low mental states and high anxiety.

After the selection of sample for the present study, it was observed that yoga is a potential tool in improving emotional states, concentration and academic achievement. Even in
*Upanishads and Yoga-Samhitas*, it was duly emphasized that the yogic practices and yogic breathing were able to alleviate physical, mental and ethical disorder. Patanjali termed yoga as the restraint of mental fluctuations and modifications. *Sharma, Prohit and Tyagi (1980)* studied the effect of *Yogāsanas* on learning and found that *Yogāsanas* can be used for effective learning.

In the present study, *'Pre-test and Post-test Design'* under controlled conditions was followed. After selection of Experimental and Control groups, yogic exercises were practiced to Experimental group for a period of six months. After six months yogic practices, four pre-test and post-test combinations of comparison were made between Experimental and Control group. **First**, Experimental and Control groups in pre-test situation were compared. This was to ensure that in the beginning of the study; the groups might not differ significantly so that at the Post-test comparison stage the difference if any may reveal only the effect of yogic practices on Experimental group. **Second**, Experimental group in Pre-test and Post-test situations was compared to determine any significant difference between the two groups after six month yogic practices. **Third**, Control group in pre-test and post-test situations was compared to see any difference in both situations. **Fourth**, Experimental and Control groups in Post-test situations were compared.

**Emotional States:**

Based on the finding of t-ratios, significant difference between Experimental and Control group was observed for emotional states at 0.01 level of significance. A significant positive effect of yogic practices on emotional states, i.e. stress
anxiety, depression, regression, fatigue, guilt, extraversion and arousal was observed. After yogic practices first six emotional states i.e. stress, anxiety, depression, regression, fatigue, guilt was reduced while extraversion and arousal increased. Such positive effect of yoga on the stated parameters has also been supported by others.

The result of the study were supported by the study of Sharma and Singh (1989); Nespor (1994); Srivastva and Sharma (2004) that the yogic practices are useful in the prevention of stress among the adolescent students of class XI and XII. Study by Vishal, Singh and Madhu (1987); Crisan, Nagarthana, Nagendra nd Seetahalkshmi (1988); Sahasi, Mohan and Kacker (1989); Vinod (1991); Millor, Fletcher, Kabat and Zinn (1995); Sabapathy, Sabapathy and Kaur (2002); Singh (2002) revealed that yogic practices like Yogāsanas, meditation, relaxation techniques are helpful in the reduction or management of anxiety. Study by Vicente (1987); P. Kaur and S. Kaur (1993); and Verma (1996) found the effectiveness of yogic practices in reduction of depression level of students to a large extent. Prabhakar, Chopra and Verma (1989) evaluated the effect of yoga therapy comprising of Kriyas (Internal cleansing processes), Asanas (postural patterns) to a group of 47 patients and found significant reduction in depression, neuroticism, psychiatric disability and both state as well as trait- anxiety. Manjunath and Telles (2001) studied the effect of yogic practices on school girls of a residential school, between the ages of 10-13 years found a significant improvement in their performance in the task specific for the assessment of
planning especially with respect to a decrease in execution time, suggesting improved alertness and planning strategies.

**Concentration:**

Based on the finding of t-ratio, significant difference between experimental and control group was observed for concentration at 0.01 levels of significance. A significant positive effect of yogic practices on concentration was observed i.e. concentration was increased after practicing yogic exercises on experimental group. Indirectly, the results of the study are supported by others. **Sahu and Bhole (1983)** studied the effect of three weeks yoga training programme on psychomotor performance. The findings of the study revealed that yoga training programme was found to increase performance involving speed and accuracy. This finding indirectly supported by **Barnes and Nagarkar (1989); Telles, Hanumanthaiah, Nagarkar, and Nagendra (1993)** revealed that yogic practices increased the concentration of students.

**Academic Achievement:**

Based on the finding of t-ratio, significant difference between experimental and control group was observed for ‘academic achievement’ at 0.01 level of significance. A significant positive effect of yogic practices on academic achievement was observed i.e. academic achievement was increased after yogic practices. The results of the study were also supported by others. **Shamra, Prohit and Tyagi (1980); Manjunath and Telles (1999); Kauts and Sharma (2009)** studied the effect of yogic practices on learning, and academic performance of adolescent students. Results of the studies...
revealed better learning and academic performance after yogic practices. **Bakshi and Kumari (2009)** found a significant difference between experimental and control group in respect of their subjective well-being and academic performance after yogic practices.

Psychologists differ in opinion how to deal with emotional problems. Some encourage emotional release (Catharsis), while others prefer control or sublimation. Yoga psychology offers a clear, precise and easily understood conceptualization and training programme in which the energy gives rise to such unpleasant emotional states as fear, depression, jealousy and anger can be channeled towards the experience of positive emotional states such as love, devotion and bliss. This becomes a reality when a lifestyle based on the principles of yoga is adopted. Thus, from the present study, finally it can be stated that yogic practices have an edge in improving the emotional states of senior secondary school students by reducing stress, anxiety, depression, regression, fatigue, guilt and increasing extraversion and arousal. The yogic practices are quite helpful for improving the level of concentration and academic achievement.

### 5.3 EDUCATIONAL IMPLICATIONS

- The present study has a great importance to parents, teachers, educationists, counselor, therapists and all those who are concerned with the well-being of adolescents. The UNICEF'S 'State of World's Children 2004' report released a stirring call to link education with social reforms, health and family welfare activities as a new approach to the human resource management. As a result such an experimental study would
develop the interest of educationists and researchers to implement it in their best possible way.

- It provides direction to teachers’ and taught both in solving the problems of students regarding emotional states.
- The present study develops interest among educationists, researchers and teachers to implement yogic practices at each level of education and scheduling of such training in the curriculum.
- The present study is also helpful for educationists, researchers, teachers and parents to implement yogic practices for solving the psychological problems of adolescents and reducing the suicidal cases that are enhancing in the present scenario due to cut throat competitions, parental pressure, employment problems, etc.
- The study also develops interest among administrators at administrative level for better implementation.
- The present study as a policy tool would ensure the exchange of benefits among various educational institutions by review changes in the curriculum and proposals at policy level and to increase its importance and scope through conferences and seminars.
- The present study attract to those who want to excel or improve their ‘concentration’ by doing daily yogic practices.
- The present study attract to those who want to excel or improve their ‘academic achievement’ by doing daily yogic practices.
- The present study is also significant for those who are suffering from anxiety, stress, depression and other mental
health problems and cannot afford to spend huge money in curing such diseases.

➢ The present study is also significant for those who want to cure mental health problems without ill effects.

5.4 SUGGESTIONS FOR FURTHER RESEARCH

1. The present study was conducted on male students only. Study can be undertaken on female students.

2. In the present study, subjects from school of urban area were selected. Study can be undertaken on schools from sub-urban and rural area.

3. The present study was conducted, to study the effect of yogic practices on emotional states of senior secondary school students. Study can be undertaken on primary, middle, high school, graduate and post-graduate students.

4. In the present study, the yogic practices included a set of selected yogic practices only. Other yogic practices can be incorporated for better results.

5. The study used yogic practices as a method of study. Other upcoming therapies viz. Reiki, Magnetic therapy, Acupressure, etc. can be undertaken to study their effects.

6. The present study was conducted to study the effect of yogic practices on emotional states. The study can be undertaken on other variables like overall mental health, physical health and others similar related psychological and physiological states.

7. The yogic practices for the present study were designed for a period of sixth months. The study can be undertaken for a smaller or longer period of time.