CHAPTER IV
CONCLUSIONS, RECOMMENDATIONS AND SUGGESTIONS

This chapter is divided into three sections. Firstly, it includes the conclusions of study. Secondly, recommendations based on the findings of the study. Finally, it provides suggestions for further study in the event a similar study is undertaken in the state of Punjab or anywhere else for that matter.

4.1 CONCLUSIONS

On the basis of the results, objective wise following conclusions have been drawn for the study:

Objective I: To explore the level of academic resilience among senior secondary students.
1. Majority of boy and girl senior secondary students from rural and urban localities have average level of academic resilience.
2. Majority of senior secondary school students from least populated districts have above average level of academic resilience but students from highly populated districts have average level of academic resilience.
3. In total, majority of the senior secondary school students have average level of academic resilience.

Objective II: To identify the metacognition, self efficacy and learning environment of the senior secondary students.
1. On the basis of gender, locality and population, majority of the senior secondary school students having average level of metacognition.
2. Majority of the senior secondary school students have average level of self efficacy on the basis of gender, locality and population.
3. In total, majority of the senior secondary students perceived moderate level of learning environment.

Objective III: To find out significant difference among senior secondary students in their academic resilience, metacognition, self efficacy, and learning environment in relation to gender, locale and population.
1. Urban senior secondary students have better sense of well being than rural senior secondary students. Gender does not have influence on academic resilience of senior secondary students.

2. Senior secondary school students from least populated districts are more academically resilient than students from highly populated districts.

3. Senior secondary school girls from urban locality are better in their emotional regulation and physical health than senior secondary school girls from rural localities.

4. Urban students from highly populated districts have greater sense of well being than senior secondary students from rural highly populated districts.

5. Senior secondary girls from least populated districts are more academically resilient than boys from highly populated districts and senior secondary boys from least populated districts are more academically resilient than girls from highly populated districts.

6. Locality has no influence on the metacognition of senior secondary students which means that senior secondary students from rural and urban areas do not differ in their metacognitive abilities.

7. Senior secondary girl students are more aware of their own cognitive abilities and their application for learning than senior secondary boys.

8. Senior secondary students from least populated districts are better in applying their procedural knowledge for the purposes of completing a task/assignment efficiently than students from highly populated districts.

9. Urban students from least populated districts are better in managing their declarative knowledge and cognitive skills than students from rural highly populated districts.

10. Senior secondary students from urban least populated districts are better in their metacognitive abilities than senior secondary students from rural highly populated districts.

11. An interaction of locality, gender and population has influence on the declarative knowledge and evaluation dimension of metacognition of senior secondary students.
12. Urban senior secondary school students are more self efficacious than the rural senior secondary students specifically in terms self confidence, efficacy expectations and positive attitude than rural counter parts.

13. Senior secondary boys are better in terms of efficacy expectation and outcome expectation than senior secondary girls.

14. Senior secondary students from least populated districts are more self confident in their own abilities to perform a task and are better in their efficacy expectation than students from highly populated districts.

15. Senior secondary boys from urban localities are having more positive attitude than girls from rural localities. Similarly, girls from urban localities are having more positive attitude than boys from rural localities. However, girls from urban localities are having less outcome expectation than boys from rural localities.

16. Senior secondary students from urban least populated areas are more self efficacious than senior secondary students from urban highly populated districts.

17. Senior secondary girls from highly populated districts and boys from least populated districts are more self efficacious than senior secondary girls from least populated districts.

18. Gender, locality and population have influence on efficacy expectation and positive attitude dimension of self efficacy of senior secondary students.

19. Learning environment at home is perceived better by students belonging to urban areas than belonging to rural areas. Specifically in terms of ‘Independence and Conformity’, ‘Recreational Orientation’, ‘Learning through Computer Technology’ is found better in students from urban localities than students from rural localities.

20. Senior secondary girls are getting effective and better learning environment at home than boys specifically in terms of ‘Parental Care and Nurturance’. Similarly, girls perceived better learning environment at school that promote positive attitude towards learning at school than senior secondary boys specifically in terms of ‘Peer influence on Learning’. Also, this has been
found true in the case of girls from urban localities than boys. Results also revealed that girls from least populated are getting better recreational orientation at home than boys from least populated districts.

21. Senior secondary students from least populated districts are getting more secure and stimulating environment at home specifically in terms of ‘Independence and Conformity’, ‘Parental Care and Nurturance’, ‘Recreational Orientation’ and they are getting whole range of activities and opportunities at school to maximize their learning like reading material, proper guidance by teachers, efficient teachers etc specifically in terms ‘Cognitive Encouragement’, ‘Teaching through Technology’, ‘Reward and Punishment’ and ‘Physical Infrastructure’ than students from highly populated districts. It has also been found that senior secondary students from urban least populated districts are better in their Independence and Conformity than students from urban highly populated districts.

22. Gender and locality has direct influence on the ‘Learning environment at School’ of senior secondary school students specifically in terms of ‘Teaching through Technology’, ‘Reward and Punishment’ and ‘Physical Infrastructure’.

23. Girls from least populated districts are getting more recreational or interesting activities at home like books, puzzles, educational tours, and educational games etc that stimulate child’s thinking and arouse their curiosity than boys from highly populated districts.


Objective IV: To study the influence of metacognition, self efficacy and learning environment on academic resilience of senior secondary school students.

1. Metacognition has influence on academic resilience of senior secondary school students. Senior secondary students with high metacognitive abilities are found having good relationship with peers and adults and emotional
regulation & physical health than the students with below average, average and above average metacognitive abilities.

2. Senior secondary students with high metacognitive abilities are found more academically confident, sense of well being and more motivated to get goals than the students with average and below average metacognitive abilities.

3. Senior secondary students with above average metacognitive abilities are found more academically confident, more motivated to get goals and good in emotional regulation and physical health than the students with below average and average metacognitive abilities.

4. Senior secondary students with above average metacognitive abilities are found having good sense of well being and relationship with peers and adults than the students with average metacognitive abilities.

5. Senior secondary students with high metacognitive abilities are found having good relationship with peers and adults and good in emotional regulation & physical health than the students with above average, average and below average metacognitive abilities

6. Self efficacy also has influence on academic resilience of senior secondary students. Senior secondary students with average and high self efficacy are found more academically resilient than students with poor self efficacy.

7. Senior secondary students with high self efficacy are found more academically resilient than students with average self efficacy.

8. Students who perceive favourable learning environment are found more academically resilient than students who perceive moderate and unfavourable learning environment. It is found true for ‘Academic Confidence’ and ‘Sense of Well Being’, ‘Motivation and Ability to get goals’, ‘Relationship with peers and adults’ and ‘Emotional regulation and Physical Health’.

9. Students who perceive moderate learning environment are found more academically resilient than students who perceive unfavourable learning environment. It is found true for ‘Academic Confidence’ and ‘Sense of Well Being’, ‘Relationship with peers and adults’ and ‘Emotional regulation and Physical Health’.

315
Objective V: To analyze the relationship between academic resilience of the senior secondary students with their metacognition, self efficacy and learning environment.

1. The relationship between academic resilience and metacognition is found positive and significant. This shows that there is reciprocal relation between academic resilience and metacognition of students.

2. Relationship between academic resilience and different dimensions of self efficacy of senior secondary students is found positive and significant. It implies that more an individual is self efficacious, the more are the chances that he will be academically resilient or vice versa.

3. Relationship between academic resilience and learning environment of senior secondary students is found significant. It can be concluded that more effective and favourable learning environment at home and at school students gets, more the students will be academically resilient or vice versa.

Objective VI: To find out the initiatives taken by school personnel in developing academic resilience among senior secondary students.

1. Some facilities like safe and inviting school environment to the students, engagement of the students in a variety of games, sports and motor activities, parent teacher association, and safety practices like truancy and bullying or ragging are provided by all schools.

2. Majority of the schools provide physical infrastructural facilities to the students like adequate ventilation and lighting, proper seating arrangement in the classrooms, safe ramp roads for physically handicapped students.

3. Majority of the schools provide support system services like programmes/support for the students with special needs, initiatives for student’s development and personal growth and support services for children with acute social, emotional and behavioural problems.

4. Majority of the schools provide medical facilities like first aid facility, time to time medical checkups for students; health and recreational facilities like Pro
social activities; games and sport facilities like safe outdoor spaces for involving students in outdoor activities.

5. It has been found that majority of the schools provide psychological counselling facilities like school counsellor to understand the problems faced by the students and ensure privacy.

6. Majority of the schools provide motivation/feedback facilities like school teachers motivate students to participate in extracurricular activities, provide opportunities to express their views and opinions about the school, involvement of parents or students in development of school rules/regulations, curriculum and school policies.

7. Majority of the schools provide teacher development programmes like organize teacher training programmes for the betterment of the teachers, student problems understand by teachers.

8. Majority of the schools agreed that effective discipline services like that strict discipline is followed in the school and students do not have enough time to relax in the school.

9. Majority of the schools agreed that some services are not provided in their school i.e. Safety and supervision services like CCTV cameras are not located within the school campus/building; health and recreational facilities like rest room facility for students; psychological counselling facilities like professional counsellor in the school to advice students on personal problems; and professional counsellor in the school to advice students on career related issues.

4.2 RECOMMENDATIONS

In the light of conclusion drawn and the importance of the study, the following recommendations are put forth for different stakeholders i.e. school students, school counsellors, child psychologists, government officials, policy makers, parents and teachers as means to improve the learning environment conditions in schools to strengthens the resilience abilities in the senior secondary students.
1. In the present study, it has been found that majority of boy and girl senior secondary students from rural and urban localities possessed average level of academic resilience except students from least populated districts who possessed above average level of academic resilience. This indicates that Government should frame programmes and policies for facilitating schools in highly populated districts for fulfilling the educational demands of the students promoting academic resilience abilities in the students.

2. Present study indicated that urban senior secondary students from have better sense of well being than rural senior secondary students. Also, urban students from highly populated districts have greater sense of well being than senior secondary students from rural highly populated districts. Thus in order to improve the sense of well being among students from rural highly populated districts teachers should ensure the encouraging atmosphere in the classroom.

3. The present study showed that learning environment at home is perceived better by students belonging to urban areas than belonging to rural areas and also senior secondary students from urban least populated districts are better in their Independence and Conformity than students from rural least populated districts. This suggests that parents should pay attention towards their children regarding motivating them to take their decisions independently and provide resources at home for fulfilling their educational needs. Rural parents must also be familiar with the problems faced by their children at school and involve themselves actively with school authority to understand their ward’s progress.

4. For strengthening the metacognitive, self efficacy and resilient abilities in the students it is important teachers should pay individual attention. It can only be achieved if there will be ideal pupil teacher ratio in the class. There is need to control the overcrowding of the students in the schools.

5. Learning environment at home as well as at school plays a crucial role in the development of academic resilience as the study has confirmed that with the betterment of learning environment academic resilience becomes
better. Therefore, the importance of learning environment shall be discussed in the parent teacher meetings organized by the schools as well as the principals should explore the ways to enrich the learning environment in schools. Teachers shall be given training to enrich the learning environment of their classrooms.

6. Present study revealed that some of the facilities are not provided by the schools like CCTV cameras are not located within the school campus/building; rest room facility for students; professional counsellor in the school to advice students on personal problems and career related issues. This indicates dire need to strengthen the safety and supervision needs on the part of schools.

7. The findings of the study suggest the need for high quality school activities that help to protect children from the hazards of their environment. High-quality programs provide children important opportunities to develop confidence and social skills. However, it is critical that parents and children feel that these programs are provided in a safe and secure environment to strengthen their resilience abilities.

4.3 EDUCATIONAL IMPLICATIONS

The present study throws light on the present scenario academic resilience, metacognition, self efficacy and learning environment of the senior secondary students in Punjab state. Thus, the produced results have clear implication for school counselors, teachers, principals and parents. Counselors need to understand that academic resilience is instrumental for a child’s success. Therefore, They can consult teachers, staff, administrators to identify and implement school based programs or policies designed to enhance resilience, metacognition, self efficacy and learning environment.

The study findings also provide insights into parenting practices like supervising school work or activities, to recognize the qualities of the children, to provide resources, opportunities or services in home to promote resilient abilities in the students. Another practical implication of the present study is to assess the resilient abilities of the students in particular situation by using academic
resilience scale. Similarly student’s learning environment at home as well as at school can also be analyzed by using Learning environment scale i.e. developed and standardized for this purpose accordingly efforts can be put forward for improving their resilient abilities and learning environment. Teachers can help the students believe on their abilities. Teachers should take steps to teach different types of skills needed to overcome or tackle difficult situations in student’s life.

4.4 SUGGESTIONS FOR FURTHER RESEARCH

Though the present investigator has taken every care to make the study as scientific as possible in terms of representativeness of the sample, validity of the tools and appropriateness of statistical design for the analysis of the data, yet there are many pitfalls and bottlenecks which have been beyond the control of the problem of the present investigator. Therefore, there are many aspects of the problem, which could be covered in the study. Although the results obtained are very enlightening in the light of the problem undertaken there is need for further research. Being cognizant of all such limitations, some personal and some related with space and time, the present investigator gives certain suggestions which can be helpful for more through investigations in the development of policies related to the senior secondary school students and education sector.

a. Because of the limitations of the time, the investigator could not cover more districts in the study. Moreover, the investigator had to choose the sample from the six cities of Punjab (i.e. Ludhiana, Barnala, Amritsar, Tarntaran, Jalandhar, Nawashahr)on the basis of literacy and population rate. Therefore, replica studies can be taken up choosing the sample from other districts of the state on the basis of growth rate.

b. Another similar study can be conducted on Talented and Gifted students rather than senior secondary students to study the effect of metacognition on academic resilience of talented and gifted students in all streams (Arts, Commerce and Science).