CHAPTER-V

FINDINGS, CONCLUSIONS, IMPLICATIONS AND SUGGESTIONS

Based on the analysis and interpretation of results, findings were lined up. Keeping in view the major findings, conclusions and educational implications of the study have been peeked in to. Some suggestions have also been laid down for further research in the areas related to the present investigation. So this chapter is devoted to major findings, conclusion, implications of the study and suggestions for further research.

5.1 FINDINGS

5.1.1 Impact of Learning Styles of High School Students on their Scholastic Achievement in English

- The scores on left hemisphere of high school students were found to be positively correlated whereas their scores on right hemisphere were negatively correlated with scholastic achievement in English. However the scores on integrated hemisphere of high school students were found to be significantly positively correlated with their scholastic achievement in English.

- A significant relationship between learning styles of high school students and their scholastic achievement in English was found.

- Significant difference was found in the scholastic achievement of high school students in English having different learning styles. It was also revealed that integrated hemisphericity students had more achievement in English than that of left hemisphericity and right hemisphericity students. Further it was observed that left hemisphericity students had a little higher achievement in English in comparison to those of right hemisphericity students.
5.1.2 Impact of Study Habits of High School Students on their Scholastic Achievement in English

- Significant relationship between study habits of high school students and their scholastic achievement in English was found.

- Significant difference was noted in scholastic achievement in English of good and poor study habits students of high school. It was also found that scholastic achievement in English of good study habits students was better than that of poor study habits students.

5.1.3 Impact of School Environment of High School Students on their Scholastic Achievement in English

- The school environment with creative stimulation, cognitive encouragement and acceptance of high school students was significantly positively correlated with their scholastic achievement in English.

- The school environment with permissiveness of high school students was positively correlated with their scholastic achievement in English.

- The school environment with rejection of high school students was significantly negatively correlated with their scholastic achievement in English.

- The school environment with control of high school students was negatively correlated with their scholastic achievement in English.

- Significant difference was found in scholastic achievement in English of high school students having school environment with high and low creative stimulation. It was revealed that a school environment with more creative stimulation resulted in to higher scholastic achievement in English of high school students than that of school environment with less creative stimulation.

- Significant difference was observed in scholastic achievement in English of high school students having school environment with high and low cognitive encouragement. It was found that a school environment with
more cognitive encouragement led to have higher scholastic achievement in English of high school students.

- There was a significant difference in scholastic achievement in English of high school students having school environment with high and low acceptance. It was noted that a school environment with high scored acceptance resulted in to higher scholastic achievement in English of high school students.

- No significant difference was found in scholastic achievement in English of high school students having school environment with high and low permissiveness. It was also exhibited that a school environment with high scored permissiveness resulted in to higher scholastic achievement in English of high school students.

- Significant difference was noted in scholastic achievement in English of high school students having school environment with high and low rejection. It was revealed that a school environment with high rejection resulted in to lower scholastic achievement in English of high school students.

- Significant difference was seen in scholastic achievement in English of high school students having school environment with high and low control. It was also observed that a school environment with more control resulted in to less scholastic achievement in English of high school students.

5.1.4. **Interaction Effect of Learning Styles and Study Habits of High School Students on their Scholastic Achievement in English**

- Significant interaction effect of learning styles and study habits of high school students on their scholastic achievement in English was found. It was observed that students with integrated hemisphericity and good study habits had the highest scholastic achievement in English among the six groups under study.
5.1.5 Interaction Effect of Study Habits and School Environment of High School Students on their Scholastic Achievement in English

- Significant interaction effect of study habits and school environment with creative stimulation of high school students on their scholastic achievement in English was noted. It was also revealed that the students having good study habits and high creative stimulation have the highest scholastic achievement in English among the four groups under analysis.

- Significant interaction effect of study habits and school environment with cognitive encouragement of high school students was found on their scholastic achievement in English. It was also revealed that the students having good study habits and high cognitive encouragement have the highest scholastic achievement in English among the four groups under study.

- Significant interaction effect of study habits and school environment with acceptance of high school students was noted on their scholastic achievement in English. It was also observed that student having good study habits with high acceptance have the highest scholastic achievement in English among the four groups under study.

- Significant interaction effect of study habits and school environment with permissiveness of high school students on their scholastic achievement in English was found. It was also highlighted that the student having good study habits and high permissiveness had the highest scholastic achievement in English among the four groups under investigation.

- Significant interaction effect of study habits and school environment with rejection of high school students was exhibited on their scholastic achievement in English. Scholastic achievement in English of high school student having good study habits and less rejection was the highest among the four groups under study.

- Significant interaction effect of study habits and school environment with control of high school students on their scholastic achievement in English
was found. It was also revealed that scholastic achievement in English of high school student having good study habits and school environment with more control was the highest among the four groups under investigation.

5.1.6 Interaction Effect of Learning Styles and School Environment of High School Students on their Scholastic Achievement in English

- Significant interaction effect of learning styles and school environment with creative stimulation of high school students was found on their scholastic achievement in English. It was revealed that the students having integrated hemisphericity and high creative stimulation had the highest scholastic achievement in English among the six groups under study.

- No significant interaction effect of learning styles and school environment with cognitive encouragement of high school students was observed on their scholastic achievement in English. It was also seen that the students having integrated hemisphericity and more cognitive encouragement had the highest scholastic achievement in English among the six groups under investigation.

- No significant interaction effect of learning styles and school environment with acceptance of high school students was found on their scholastic achievement in English. It was also observed that the scholastic achievement in English of high school students having integrated hemisphericity and more acceptance was the highest among the six groups under study.

- No significant interaction effect of learning styles and school environment with permissiveness of high school students was shown on their scholastic achievement in English. It was also noted that the students with integrated hemisphericity and more permissiveness had the highest scholastic achievement in English among the six groups under study.

- No significant interaction effect of learning styles and school environment with rejection of high school students was found on their scholastic achievement in English. It was highlighted that the student with integrated
hemisphericity having less rejection had the highest scholastic achievement in English among the six groups under study.

- No significant interaction effect of learning styles and school environment with control of high school students was found on their scholastic achievement in English. It was also revealed that scholastic achievement in English of the students having integrated hemisphericity and school environment with less control performed the best among the six groups under study.

5.1.7 **Multiple Correlation between Learning Styles, Study Habits, and School Environment; and their Scholastic Achievement in English of High School Students**

- The multiple correlations between learning styles, study habits and six dimensions of school environment; and their scholastic achievement in English of high school students were found significant.

5.1.8 **Prediction of Scholastic Achievement in English of High School Students on the basis of their Learning Styles, Study Habits, School Environment**

- Five significant predictors of scholastic achievement in English were found. It was observed that out of three categories of learning styles only one i.e. integrated hemisphericity; study habits and out of six dimensions of school environment only three viz. creative stimulation, rejection and control were significantly contributing towards prediction of scholastic achievement in English of high school students.

- The variables study habits, integrated hemispheric learning style, school environment with rejection, creative stimulation and control were the first, second, third, fourth and fifth significant predictors of scholastic achievement in English of high school students. The first predictor study habits explained 9.3 percent of variance in scholastic achievement in English of high school students whereas the second predictor variable integrated hemispheric learning style contributed 11.2 percent of the variance in students' scholastic achievement in English. The third
The predictor was rejection that explained 12.6 percent of the variations in scholastic achievement of the students and the fourth predictor was creative stimulation that was explaining 14.2 percent variations in scholastic achievement in English of high school students. The fifth predictor was control that explained 16.1 percent variations in their scholastic achievement in English.

The predictors integrated hemisphericity learning style, study habits and creative stimulation were positively contributing towards scholastic achievement in English whereas school environment with rejection and control were negatively contributing.

5.2 CONCLUSIONS

Writing a conclusion is the final part of the research drawing everything together. The present study concluded that there was significant impact of each of the independent variable i.e. learning styles, study habits and school environment on the dependent variable scholastic achievement in English of high school students. The significant difference in scholastic achievement in English was observed among the students with three categories of learning styles viz. left hemisphericity, right hemisphericity and integrated hemisphericity. It was found that students with integrated hemisphericity had more scholastic achievement in English than those who had left hemisphericity or right hemisphericity.

The study further concluded with a significant difference in scholastic achievement of students with respect to their study habits. The study further revealed that students with high academic achievement have better study habits as compared to the students with low academic achievement.

The significant difference in scholastic achievement of high school students with high and low scores on six dimensions of school environment made the investigator to conclude that the school environment with more creative stimulation, high cognitive encouragement and less permissiveness respectively resulted in to higher scholastic achievement in English of the students. The study further led to conclude that school
environment with acceptance had significantly positive effect on academic achievement whereas school environment with too much rejection and control had significantly negative effect on the scholastic achievement of the students. The effect of other dimensions of school environment on scholastic achievement was however positive but not statistically significant.

It was also noticed that there was significant interaction effect of learning styles and study habits; study habits and six dimensions of school environment; and learning styles and school environment with creative stimulation on scholastic achievement in English of high school students.

Five significant predictors (out of three categories of learning styles one i.e. integrated hemisphericity; study habits and out of six dimensions of school environment only three viz. creative stimulation, rejection and control) also came into the limelight while concluding the results. These were significantly contributing towards prediction of scholastic achievement in English of high school students.

5.3 EDUCATIONAL IMPLICATIONS

After exploring the concepts of scholastic achievement in the cognitive, affective and psychomotor aspects of human behavior, the investigator attempted to understand the 'BLACK BOX' of scholastic achievement and to break new grounds in search on scholastic achievement of high school students. Nevertheless, the findings from the present study have implications for teachers, students, parents, teacher educators, curriculum planners, school authorities and researchers.

The study has revealed that there is significant difference in scholastic achievement of the students with respect to their learning styles, study habits and school environment. The students who show preferences for both the right and left hemispheres in learning style, their scholastic achievement in English is significantly higher than those who prefer one of the two hemispheres. There is significant difference in scholastic achievement among high school students with left hemisphericity, right hemisphericity and integrated hemisphericity. It has been found that students with integrated hemisphericity have more scholastic achievement in English than those who have left hemisphericity or right
hemisphericity. Teachers should carry out activities that activate both hemispheres (whole brain) of high school students to enhance their scholastic achievement in English. Left hemisphere function can be activated by introducing new concepts in an analytic manner and by asking the students to hear abstract speeches in the radio, television, public meetings, symposium etc. It should be the sole aim of school authorities to provide all the helpful aids to the teachers and students.

With the shift from an instructional to a learning paradigm, there is growing acceptance that understanding the way students learn is the key to educational improvement. To achieve a desired learning outcome, teaching and counseling interventions compatible with the students learning styles should be provided. Since the focus is on child-centred pedagogy giving primacy to the child’s experiences, voices, thoughts and participation in learning which the National Curriculum Framework (2005) reiterates in its chapter on ‘Learning and Knowledge’, it becomes necessary to change our approach towards teaching. In fact, knowledge of the child’s information processing styles would enhance teaching and make the exercise fruitful. It not only shapes teaching practices, but also highlights those issues that help curriculum planners, faculty members and administration to think more deeply about their roles in facilitating students learning. The teaching techniques in the schools should be undertaken in consonance with the students’ style of learning to improve their academic achievement. Further it would enable the teacher to organize the teaching and learning procedures in such a way that they tone up and activate the hemisphere functions of the brain. Seminars and trainings should be conducted to acquaint teachers on the various learning styles. Moreover, in designing teaching plans and strategies, the teacher should consider how the different learning styles can be incorporated in the teaching-learning process. Students must also provide input as to their preferred learning style to be considered by the teacher in designing the course syllabus.

The study further revealed a significant difference in scholastic achievement of students with respect to their study habits. Students with high academic achievement have better study habits as compared to the students with low academic achievement. This suggests that the students with low scholastic achievement should be motivated by the teachers and parents to generate the desired level of study habits among them. They should be
guided to focus their energies in academic stream, rather than wasting in futile affairs. Some special quality should be developed in their study habits such as not being afraid of examination, studying up to midnight during examination and going through the important hints before the examination. They should be motivated to study during leisure time, making use of library books, reading newspaper, participation in discussion in the classroom and answering the questions asked by the class teachers. Findings of this study can be helpful for the teachers, parents and counselors in giving proper guidance to the students for improving their study habits so that they can adopt good study habits as efficient learning depends upon the development of effective study habits and skills. They can help these students in the optimum use of their valuable time and energy.

The findings of the study further explored significant difference in scholastic achievement of high school students with high and low scores on six dimensions of school environment. Students who score high on creative stimulation and cognitive encouragement, their academic achievement is higher than those who score low on these dimensions whereas the students who score low in permissiveness, their academic achievement is higher than those who score high in permissiveness. However a positive environment at school can act as facilitators in coping with this. The findings will help the teachers to have a psychological outlook of the performance of pupils and a clear understanding of their environment. The results of the study suggest that one scale i.e. acceptance has significantly positive effect on academic achievement. Rejection and control have significantly negative effect on the academic achievement. The effect of other sub-scales on academic achievement was positive but not statistically significant. Creative stimulation is found to have a significantly positive effect on academic achievement but not statistically significant. Good conditions and opportunities should be provided by teachers to stimulate creative thinking. Availability of adequate materials, new techniques of teaching and especially trained teachers should be provided by the school authorities for the enhancement of scholastic achievement. Teachers should spell out a definable set of expected behaviours, which can inspire the student to perform better. Acceptance has a positive correlation with academic achievement. Teachers should accept the feelings of individuals in a non-threatening manner. The students who perceived teacher support in the classroom performed better academically than the
students who perceived low in teacher support. Rejection was negatively related to academic achievement. Sometimes rejection is perceived due to the differences in teacher's expectations with some students and less from others. Those whom the teachers feel will do well presumably receive more attention in class than those the teacher thought will do poorly. Students' rights should be recognized by teachers to make students to act freely.

As it is evident that all the three independent variables included in the study exert a significant effect on the scholastic achievement of the high school students. Therefore there should be such activities which can enhance the scholastic achievement of high school students. Students' learning styles should be recognized as it not only profits the students but the teachers and parents as well. Cultivation of proper study habits should be the sole aim of education as their relationship with the scholastic achievement in English cannot be ignored. Research shows that school environment can affect many areas and scholastic achievement in English of the students. Additionally, specific research on school climate in urban environments indicates that a positive, supportive, and culturally conscious school climate should be provided as it can significantly shape the degree of academic success. There should also be a visible change in the policy of the government and curriculum planners so as to provide a new look and status to the teaching and learning of English in the schools. In this direction refresher courses, orientation programs and workshops may be conducted for the teachers.

In nutshell the scholastic achievement in English of high school students can be enhanced by understanding their learning styles, inculcating good study habits and providing them healthy school environment.

5.4 SUGGESTIONS FOR FURTHER RESEARCH

Due to paucity of time and resources at the disposal of the investigator, all the aspects of the problem cannot be expected to deal with. Therefore, the present study opens up certain avenues for further research which are briefly mentioned below:

(i) Similar study can be conducted with the larger sample and at different regions to have in depth knowledge of the factors deciding academic performance of students.
(ii) The present piece of research was confined to study the academic achievement of students in English only. It would surely be useful to study the scholastic achievement of students in other subjects also.

(iii) In the present study, the sample was limited to Haryana state only. It can be extended to other states also.

(iv) The sample was limited to schools affiliated to Haryana Board of Education only. It can be extended to other Board of Education.

(iv) In the present study, the sample was limited to 10th class students. The similar study can be conducted at other level of education.

(v) The present piece of research was confined to study the scholastic achievement of students in relation to their learning styles, study habits and school environment. The same study can be conducted by taking other variables also.

(vi) In the present study, comparison was made on the samples of high and low group of students belonging to learning styles, study habits and school environment respectively. It is suggested that a comparative study of high, average and low group of students belonging to learning styles, study habits and school environment can be conducted.

The list which has been given above is, however, not exhaustive but illustrative. There are vast areas in this field which have not been explored so far and any attempt in this direction may both be rewarding and instructive. If the present study is able to provide thinking in this direction, the efforts of the investigator would be amply rewarded.