From the t-values, it can be concluded that the variable learning & thinking style is the strongest predictor of study habits in comparison to meta-cognitive skills. Thus, it can be concluded that both the variables, learning & thinking style and meta-cognitive skills are significantly contributing toward prediction of study habits of school students and hence are significant predictors. These results are in consonance with the results of Deniz (2013) who also found that learning styles were the most important predictor of study habits for late adolescents. Ünal Çakıroğlu (2014) and Kiblasan, Abufayed, Sehari, Madamba, and Mhanna (2016) also examined strong relationship between learning styles and study habits. Gokhan, Aysel and Turan (2009) also explored that there was a significant relationship between meta-cognition levels and study habits of students.

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CHAPTER-V

FINDINGS, EDUCATIONAL IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Based on the analysis and interpretation of results which had been carried out in the previous chapter, the findings have been discussed in the present chapter. These findings can be generalized to the extent of representativeness of the sample and methodology employed in the study. Keeping in mind the major findings, the educational implications of the study have been worked out. However, these findings
and educational implications do not fit in all the concerns of study, hence, some suggestions have been given for further researches. The present chapter is, therefore, devoted to represent the findings, educational implications, conclusion of the study and suggestions for further researches.

5.1 MAJOR FINDINGS OF THE STUDY

On the basis of analysis and interpretation of data in the previous chapter, the following findings have been drawn out:

5.1.1 FINDINGS RELATED TO EFFECT OF META-COGNITIVE SKILLS, LOCALITY AND GENDER ON ACADEMIC ACHIEVEMENT OF SCHOOL STUDENTS

A. Main Effects of Meta-cognitive Skills, Locality and Gender on Academic Achievement of School Students

- The study revealed that there was a significant effect of meta-cognitive skills on academic achievement of school students. In the context of mean scores, it was found that students with high meta-cognitive skills had significantly higher academic achievement in comparison to students with low meta-cognitive skills.
- It was inferred that locality had a significant effect on academic achievement of school students. On comparison of mean scores, it was concluded that urban students had significantly better academic achievement than that of rural students.
- Gender was found to have a significant effect on academic achievement of school students. It was revealed that female students had slightly higher academic achievement than that of male students.

B. Double Interaction Effects of Meta-cognitive Skills, Locality and Gender on Academic Achievement of school students

Meta-cognitive Skills (A) × Locality (C)

There was found a significant interaction effect of meta-cognitive skills and locality on academic achievement of school students. The result of t-test further revealed that:

- A significant difference was found between academic achievement of urban students with high meta-cognitive skills and urban students with low meta-cognitive skills. It was inferred that urban students with high meta-cognitive skills
had significantly higher academic achievement as compared to urban students with low meta-cognitive skills.

- It was revealed that there was no significant difference between academic achievement of rural students with high and low meta-cognitive skills.

- A significant difference was found between academic achievement of urban students with high meta-cognitive skills and rural students with low meta-cognitive skills. From the comparison of mean scores, it was revealed that urban students with high meta-cognitive skills possessed significantly better academic achievement than rural students with low meta-cognitive skills.

- By comparing mean scores, it was concluded that there was no significant difference in academic achievement of rural students with high meta-cognitive skills and urban students with low meta-cognitive skills.

- It was found that mean academic achievement score of urban students with high meta-cognitive skills was higher than the mean academic achievement scores of rural students with high meta-cognitive skills. From the results, it was concluded that urban students with high meta-cognitive skills had significantly higher academic achievement than rural students with high meta-cognitive skills.

- There was no significant difference found between the academic achievement of urban students with low meta-cognitive skills and rural students with low meta-cognitive skills.

**Meta-cognitive Skills (A) × Gender (D)**

It was revealed that there was no significant interaction effect of meta-cognitive skills and gender on academic achievement of school students.

**Locality (A) × Gender (B)**

There was found a significant interaction effect of locality and gender on academic achievement of school students. The result of t-test further revealed that:

- It can be concluded from the results that there was significant difference between academic achievement of urban male students and rural male students. Further, it
was found out that urban male students had significantly better academic achievement as compared to rural male students.

- No significant difference was found between academic achievement of urban female students and rural female students.
- There was no significant difference found between academic achievement of urban male students and rural female students.
- On comparison of mean scores, it was concluded that urban female students had significantly higher academic achievement than rural male students.
- There was no significant difference found between the academic achievement of urban male students and urban female students.
- There was found a significant difference between the mean academic achievement scores of rural male students and rural female students. The mean academic achievements score of rural male students was lower than the rural female students. From the results, it was concluded that rural male students performed academically poor than rural female students.

(C) **Triple Interaction Effect of Meta-cognitive Skills, Locality and Gender on Academic Achievement of School students**

It was found that there was significant interaction effect of meta-cognitive skills, locality and gender on academic achievement of school students. For further exploration t-test was applied. The following conclusions were drawn:

- It was concluded from the results that there was no significant difference between academic achievement of urban male students with high meta-cognitive skills and rural female students with low meta-cognitive skills.
- It was further concluded that urban female students with high meta-cognitive skills had significantly higher academic achievement than rural male students with low meta-cognitive skills.
- No significant difference was found between academic achievement of rural female students with high meta-cognitive skills and urban male students with low meta-cognitive skills.
There was no significant difference between academic achievement of rural male students with high meta-cognitive skills and urban female students with low meta-cognitive skills.

From the results, it was inferred that there was no significant difference between academic achievement of urban male students with high meta-cognitive skills and urban female students with high meta-cognitive skills.

It was revealed that there was significant difference between academic achievement of urban male students with high meta-cognitive skills and rural male students with high meta-cognitive skills. Urban male students with high meta-cognitive skills had significantly higher academic achievement as compared to rural male students with high meta-cognitive skills.

There was no significant difference between academic achievement of urban male students with high meta-cognitive skills and rural female students with high meta-cognitive skills.

It was concluded that urban female students with high meta-cognitive skills had significantly higher academic achievement than rural male students with high meta-cognitive skills.

The results of the study further revealed that there was no significant difference between academic achievement of urban female students with high meta-cognitive skills and rural female students with high meta-cognitive skills.

There was significant difference found between academic achievement of rural female students with low meta-cognitive skills and rural male students with low meta-cognitive skills. It was inferred that rural female students with low meta-cognitive skills had significantly better academic achievement than rural male students with low meta-cognitive skills.

A significant difference was found between academic achievement of rural female students with low meta-cognitive skills and urban female students with low meta-cognitive skills.
The results of the study revealed that there was no significance difference between academic achievement of rural female students with low meta-cognitive skills and urban male students with low meta-cognitive skills.

It was inferred from the results of the study that there was no significant difference between academic achievement of rural male students with low meta-cognitive skills and urban female students with low meta-cognitive skills.

It was concluded that rural male students with low meta-cognitive skills had significantly lower academic achievement than urban male students with low meta-cognitive skills.

There was no significant difference found between academic achievement of urban male students with high meta-cognitive skills and urban male students with low meta-cognitive skills.

It was found from the results of the study that urban male students with high meta-cognitive skills had significantly higher academic achievement than urban female students with low meta-cognitive skills.

It was inferred from the results of the study that there was significant difference between academic achievement of urban male students with high meta-cognitive skills and rural male students with low meta-cognitive skills.

The study revealed that urban female students with high meta-cognitive skills had significantly higher academic achievement than urban male students with low meta-cognitive skills.

Urban female students with high meta-cognitive skills had significantly higher academic achievement than urban female students with low meta-cognitive skills.

It was found that there was no significant difference between academic achievement of urban female students with high meta-cognitive skills and rural female students with low meta-cognitive skills.
The study revealed that rural male students with high meta-cognitive skills had significantly lower academic achievement than rural female students with high meta-cognitive skills.

It was inferred from the results of the study that rural male students with high meta-cognitive skills had significantly lower academic achievement than urban male students with low meta-cognitive skills.

In the context of mean scores, it was found that there was no significant difference between academic achievement of rural male students with high meta-cognitive skills and rural male students with low meta-cognitive skills.

It was found that academic achievement of rural male students with high meta-cognitive skills and rural female students with low meta-cognitive skills differed significantly.

The study further revealed there was no significant difference between academic achievement of rural female students with high meta-cognitive skills and urban female students with low meta-cognitive skills.

It was reported that rural female students with high meta-cognitive skills had significantly better academic achievement than rural male students with low meta-cognitive skills.

It was indicated that there was no significant difference between academic achievement of rural female students with high meta-cognitive skills and rural female students with low meta-cognitive skills.

No significant difference was found between academic achievement of urban male students with low meta-cognitive skills and urban female students with low meta-cognitive skills.

5.1.2 FINDINGS RELATED TO EFFECT OF LEARNING & THINKING STYLE, LOCALITY AND GENDER ON ACADEMIC ACHIEVEMENT OF SCHOOL STUDENTS

A. Main Effects of Learning & Thinking Style, Locality and Gender on Academic Achievement of School students
There was found a significant effect of learning & thinking style on academic achievement of school students. From the mean scores, it was inferred that students learned by left hemisphere had slightly higher academic achievement in comparison to students learned by right hemisphere.

It was found that locality had a significant effect on academic achievement of school students. In terms of mean scores, it was interpreted that urban students had significantly higher academic achievement in comparison to rural students.

The study revealed that there was a significant effect of gender on academic achievement of school students. Further it was showed that female students had significantly good academic achievement than that of male students.

B. Double Interaction Effects of Learning & Thinking Style, Locality and Gender on Academic Achievement of School students

Learning & Thinking Style (B) × Locality (C)
There was found a significant interaction effect of learning & thinking style and locality on academic achievement of school students. The result of t-test further revealed that:

- It was concluded from the results that there was no significant difference between academic achievement of urban students with right and left hemisphericity.

- On comparison of mean scores, it was revealed that rural students with right hemisphericity had significantly lower academic achievement than rural students with left hemisphericity.

- There existed a significant difference between academic achievement of urban students with right hemisphericity and rural students left hemisphericity. Urban students with right hemisphericity had slightly higher academic achievement than rural students left hemisphericity.

- A significant difference was observed between academic achievement of rural students with right hemisphericity and urban students with left hemisphericity. Rural students with right hemisphericity had significantly lower academic achievement than urban students with left hemisphericity.
It was revealed that urban students with right hemisphericity had significantly higher academic achievement than rural students with right hemisphericity.

From the results of the study it was inferred that there was significant difference between academic achievement of urban students with left hemisphericity and rural students with left hemisphericity. Urban students with left hemisphericity had significantly higher academic achievement than the academic achievement of rural students with left hemisphericity.

**Learning & Thinking Style (B) × Gender (D)**

It was inferred that there was significant interaction effect of learning & thinking style and gender on academic achievement of school students. The result of t-test further inferred that:

- The results of the study revealed that there was no significant difference between academic achievement of male students with right and left hemisphericity.

- On comparison of mean scores, it was found that female students with right hemisphericity had significantly lower academic achievement than female students with left hemisphericity.

- A significant difference was found between the mean academic achievement scores of male students with right hemisphericity and female students left hemisphericity. On the comparison of mean scores, it was inferred that former had significantly lower academic achievement than that of the later one.

- No significant difference was observed between academic achievement of female students with right hemisphericity and male students with left hemisphericity.

- There was no significant difference between academic achievement of male students with right hemisphericity and female students with right hemisphericity.

- It was concluded that there was a significant difference in academic achievement of male and female students with left hemisphericity. In the context of mean scores, it was further revealed that later had significantly better academic achievement than that of the former one.
Locality (C) × Gender (D)

It was indicated that there was no significant interaction effect of locality and gender on academic achievement of school students.

C. Triple Interaction Effect of Interaction Effect of Learning & Thinking Style, Locality and Gender on Academic Achievement of School students

It was palpable from the results of the study that learning & thinking style, locality, and gender differed significantly with each other in relation to academic achievement. The result of t-test further revealed that:

- From the results of the study, it was found that there was significant difference in the mean academic achievement scores of urban male students with right hemisphericity and rural female students with left hemisphericity.
- A significant difference was found between academic achievement of urban female students with right hemisphericity and rural male students with left hemisphericity. Urban female students with right hemisphericity had significantly higher academic achievement than rural male students with left hemisphericity.
- On comparison of mean scores, it was revealed that rural female students with right hemisphericity possessed significantly lower academic achievement as compared to urban male students with left hemisphericity.
- It was concluded that there was a significant difference in academic achievement of rural male students with right hemisphericity and urban female students with left hemisphericity. In the context of mean scores, it was further revealed that the former had significantly poor academic achievement than that of the later one.
- There was no significant difference found between academic achievement of urban male students with right hemisphericity and urban female students with right hemisphericity.
- No significant difference was found between academic achievement of urban male students with right hemisphericity and rural male students with right hemisphericity.
From the mean scores, it was revealed that urban male students with right hemisphericity had significantly better academic achievement than the rural female students with right hemisphericity.

It was concluded that urban female students with right hemisphericity had significantly higher academic achievement than the rural male students with right hemisphericity.

A significant difference was found between academic achievement of urban female students with right hemisphericity and rural female students with right hemisphericity. It was concluded that urban female students with right hemisphericity had significantly higher academic achievement as compared to rural female students with right hemisphericity.

There was significant difference between academic achievement of rural female students with left hemisphericity and rural male students with left hemisphericity. From the comparison of mean scores, it was concluded that rural female students with left hemisphericity had significantly higher academic achievement than that of rural male students with left hemisphericity.

No significant difference was found between academic achievement of rural female students with left hemisphericity and urban female students with left hemisphericity.

It was observed that there was significant difference between academic achievement of rural female students with left hemisphericity and urban male students with left hemisphericity.

A significant difference was found between academic achievement of rural male students with left hemisphericity and urban female students with left hemisphericity. In the context of mean scores, it was further revealed that the former had significantly poor academic achievement than that of the later one.

There existed significant difference between academic achievement of rural male students with left hemisphericity and urban male students with left hemisphericity. From the mean scores, it was concluded that rural male students with left
hemisphericity had significantly lower academic achievement than that of urban male students with left hemisphericity.

- It was revealed that there was no significant difference between academic achievement of urban male students with right hemisphericity and urban male students with left hemisphericity.

- There was no significant difference between academic achievement of urban male students with right hemisphericity and urban female students with left hemisphericity.

- It was concluded that there was significant difference between academic achievement of urban male students with right hemisphericity and rural male students with left hemisphericity. It was further concluded from the comparison of mean scores that urban male students with right hemisphericity had significantly better academic achievement as compared to rural male students with left hemisphericity.

- There was no significant difference between academic achievement of urban female students with right hemisphericity and urban male students with left hemisphericity.

- It was revealed that there was no significant difference between academic achievement of urban female students with right hemisphericity and urban female students with left hemisphericity.

- No significant difference was found between academic achievement of urban female students with right hemisphericity and rural female students with left hemisphericity.

- On comparison of mean scores, it was concluded that rural male students with right hemisphericity had significantly higher academic achievement than that of the rural female students with right hemisphericity.

- It was found that there was no significant difference between academic achievement of rural male students with right hemisphericity and urban male students with left hemisphericity.
It was revealed that there was no significant difference between academic achievement of urban male students with right hemisphericity and rural male students with left hemisphericity.

It was observed that there was significant difference between academic achievement of rural male students with right hemisphericity and rural female students with left hemisphericity. It was deduced from the mean scores that rural male students with right hemisphericity had significantly lower academic achievement than that of rural female students with left hemisphericity.

It was concluded that there was significant difference between academic achievement of rural female students with right hemisphericity and urban female students with left hemisphericity. The rural female students with right hemisphericity had significantly poor academic achievement as compared to urban female students with left hemisphericity.

It was revealed that there was no significant difference between academic achievement of rural female students with right hemisphericity and rural male students with left hemisphericity.

It was inferred that there was significant difference between academic achievement of rural female students with right hemisphericity and rural female students with left hemisphericity. The rural female students with right hemisphericity had significantly lower academic achievement than rural female students with left hemisphericity.

From the results, it was found that there was no significant difference between academic achievement of urban male students with left hemisphericity and urban female students with left hemisphericity.

5.1.3 FINDINGS RELATED TO EFFECT OF META-COGNITIVE SKILLS, LOCALITY AND GENDER ON STUDY HABITS OF SCHOOL STUDENTS

A. Main Effects of Meta-cognitive Skills, Locality and Gender on Study Habits of School students

A significant effect of meta-cognitive skills on study habits of school students was found that led to the inference that students with high meta-cognitive skills
possessed significantly better study habits as compared to students with low meta-cognitive skills.

- There was found a significant effect of locality on study habits of school students. In the context of mean scores, it was concluded that urban students had significantly good study habits than rural students.

- The study revealed that there was no significant effect of gender on study habits of school students leading to the conclusion that male and female students did not differ significantly with respect to their study habits.

B. **Double Interaction Effects of Meta-cognitive Skills, Locality and Gender on Study Habits of School students**

**Meta-cognitive Skills (A) × Locality (C)**

There was found a significant interaction effect of meta-cognitive skills and locality on study habits of school students. The result of t-test further explored that:

- It can be concluded from the results that there was significant difference between study habits of urban students with high meta-cognitive skills and urban students with low meta-cognitive skills. Urban students with high meta-cognitive skills had significantly good study habits as compared to urban students with low meta-cognitive skills.

- A significant difference was found between the study habits of rural students with high meta-cognitive skills and rural students with low meta-cognitive skills. Rural students with high meta-cognitive skills had significantly better study habits than that of rural students with low meta-cognitive skills.

- In the context of mean scores, it was observed that there was significant difference between study habits of urban students with high meta-cognitive skills and rural students with low meta-cognitive skills. Urban students with high meta-cognitive skills had significantly good study habits than rural students with low meta-cognitive skills.

- No significant difference was found between study habits of rural students with high meta-cognitive skills and urban students with low meta-cognitive skills.
Form the comparison of mean scores, it was further concluded that urban students with high meta-cognitive skills had significantly good study habits than rural students with high meta-cognitive skills.

From the results, it was revealed that there was no significant difference between study habits of urban students with low meta-cognitive skills and rural students with low meta-cognitive skills.

Meta-cognitive Skills (A) × Gender (D)

It was found that meta-cognitive skills and gender differed significantly with each other in relation to study habits of school students. The result of t-test further concluded that:

- It was concluded that male students having high level of meta-cognitive skills possessed significantly good study habits than that of male students having low level of meta-cognitive skills.

- A significant difference was observed between study habits of female students having high and low level of meta-cognitive skills. It was concluded that female students with high meta-cognitive skills had significantly good study habits as compared to female students with low meta-cognitive skills.

- On comparison of mean scores, a significant difference was found between study habits of male students having high level of meta-cognitive skills and female students having low level of meta-cognitive skills. The former had significantly good study habits than that of the later one.

- It was concluded that there was significant difference between study habits of female students having high level of meta-cognitive skills and male students having low level of meta-cognitive skills. From the comparison of mean scores, it was deduced that female students with high meta-cognitive skills had significantly better study habits than male students with low meta-cognitive skills.

- Male students having high level of meta-cognitive skills had poor study habits than that of female students having high level of meta-cognitive skills.

- It was deduced from the results of the study, that there was no significant difference between study habits of male and female students having low level of meta-cognitive skills.
Locality (A) × Gender (B)
It was revealed that locality and gender do not interact significantly with each other in relation to study habits of school students.

C. Triple Interaction Effect of Meta-cognitive Skills, Locality and Gender on Study Habits of School students
It was concluded that there was no significant interaction effect of meta-cognitive skills, locality and gender on study habits of school students.

5.1.4 FINDINGS RELATED TO EFFECT OF LEARNING & THINKING STYLE, LOCALITY AND GENDER ON STUDY HABITS OF SCHOOL STUDENTS

A. Main Effects of Learning & Thinking Style, Locality and Gender on Study Habits of School students

❖ It can be concluded from the results that learning & thinking style had a significant effect on study habits of school students. Further it was inferred that students learned by right hemisphere had significantly good study habits in comparison to students learned by left hemisphere.

❖ Locality was found to have a significant effect on study habits of school students. On the comparison of mean scores, it was revealed that urban students possessed significantly better study habits than that of rural students.

❖ There was found a significant effect of gender on study habits of school students. In terms of mean score, it was observed that male students had significantly good study habits in comparison to female students.

B. Double Interaction Effects of Learning & Thinking Style, Locality and Gender on Study Habits of School students

Learning & Thinking Style (B) × Locality (C)
It was inferred that there was no significant interaction effect of learning & thinking style and locality on study habits of school students.

Learning & Thinking Style (B) × Gender (D)
The results of the study revealed that learning & thinking style and gender differed significantly with each other in relation to study habits of school students. The result of t-test further inferred that:
It can be concluded from the results that there was no significant difference between study habits of male students with right hemisphericity and left hemisphericity.

By comparing mean scores, it was revealed that female students with right hemisphericity had significantly better study habits than female students with left hemisphericity.

It was found that male students with right hemisphericity had significantly good study habits as compared to female students with left hemisphericity.

No significant difference was observed between study habits of female students with right hemisphericity and male students with left hemisphericity.

It was revealed that there was significant difference between study habits of male and female students with right hemisphericity. Male students with right hemisphericity had significantly poor study habits than female students with right hemisphericity.

The result of study further revealed that male students with left hemisphericity had significantly better study habits than female students with left hemisphericity.

**Locality (C) × Gender (D)**

It was evident from the results of the study that there was significant interaction effect of locality and gender on study habits of school students. The result of t-test further revealed that:

- It was concluded from the results that there was a slightly difference between study habits of urban and rural male students. Urban male students had slightly better study habits than rural male students.

- In the context of mean scores, it was revealed that urban female students had significantly good study habits as compared to rural female students.

- It was evident from the results of the study that urban male students had significantly good study habits than rural female students.
It was inferred from the results that there was no significant difference between study habits of urban female students and rural male students.

No significant difference was found between the study habits of urban male students and urban female students.

From the result of the study, it was further inferred that rural male students had significantly good study habits than rural female students.

**C. Triple Interaction Effect of Learning & Thinking Style, Locality and Gender on Study Habits of School students**

There was found a significant interaction effect of learning & thinking style, locality and gender on study habits of school students. The result of t-test further explored that:

- From the comparison of mean scores, it was found that there was significant difference between study habits of urban male students with right hemisphericity and rural female students with left hemisphericity. It was concluded that urban male students with right hemisphericity possessed significantly good study habits as compared to rural female students with left hemisphericity.

- There was found a significant difference between study habits of urban female students with right hemisphericity and rural male students with left hemisphericity. Urban female students with right hemisphericity had significantly good study habits as compared to rural male students with left hemisphericity.

- In the context of mean scores, it was revealed that rural female students with right hemisphericity had poor study habits than urban male students with left hemisphericity.

- It was deduced that there was a significant difference in study habits of rural male students with right hemisphericity and urban female students with left hemisphericity. Further, it was concluded that rural male students with right hemisphericity possessed significantly better study habits than urban female students with left hemisphericity.

- A significant difference was found between study habits of urban male students with right hemisphericity and urban female students with right hemisphericity.
From the results, it was revealed that urban male students with right hemisphericity had significantly poor study habits in comparison to urban female students with right hemisphericity.

- There was found no significant difference between study habits of urban male students with right hemisphericity and rural male students with right hemisphericity.

- From the comparison of mean scores, it was revealed that urban male students with right hemisphericity had significantly good study habits than the rural female students with right hemisphericity.

- It was concluded from the analysis of mean scores that urban female students with right hemisphericity had significantly good study habits as compared to the rural male students with right hemisphericity.

- There was found a significant difference between study habits of urban female students with right hemisphericity and rural female students with right hemisphericity. Urban female students with right hemisphericity had significantly good study habits than rural female students with right hemisphericity.

- A significant difference was found between study habits of rural female students with left hemisphericity and rural male students with left hemisphericity. From the comparison of mean scores, it was concluded that rural female students with left hemisphericity had significantly poor study habits than that of rural male students with left hemisphericity.

- No significant difference was found between study habits of rural female students with left hemisphericity and urban female students with left hemisphericity.

- It was revealed from the comparison of mean scores that there was significant difference between study habits of rural female students with left hemisphericity and urban male students with left hemisphericity. Rural female students with left hemisphericity possessed significantly poor study habits in comparison to urban male students with left hemisphericity.

- A significant difference was found between study habits of rural male students with left hemisphericity and urban female students with left hemisphericity. From the
comparison of mean scores, it was further revealed that the former had significantly better study habits than that of the later one.

- From the results, it was revealed that there existed a significant difference between study habits of rural male students with left hemisphericity and urban male students with left hemisphericity. From the mean scores, it was concluded that rural male students with left hemisphericity had significantly poor study habits as compared to urban male students with left hemisphericity.

- It was inferred that there was significant difference between study habits of urban male students with right hemisphericity and urban male students with left hemisphericity. From the comparison of mean scores, it was concluded that former had significantly poor study habits than that of the later one.

- A significant difference was found between study habits of urban male students with right hemisphericity and urban female students with left hemisphericity. Urban male students with right hemisphericity possessed significantly good study habits than urban female students with left hemisphericity.

- It was concluded that there was no significant difference between study habits of urban male students with right hemisphericity and rural male students with left hemisphericity.

- There was significant difference between study habits of urban female students with right hemisphericity and urban male students with left hemisphericity. It was concluded that former had significantly good study habits as compared to the later one.

- It was revealed that there was significant difference between study habits of urban female students with right hemisphericity and urban female students with left hemisphericity. Urban female students with right hemisphericity had significantly good study habits than urban female students with left hemisphericity.

- A significant difference was found between study habits of urban female students with right hemisphericity and rural female students with left hemisphericity. Further, it was observed that urban female students with right hemisphericity
possessed significantly good study habits as compared to rural female students with left hemisphericity.

- By comparing mean scores, it was deduced that rural male students with right hemisphericity had significantly good study habits than that of the rural female students with right hemisphericity.
- It was found that there was significant difference between study habits of rural male students with right hemisphericity and urban male students with left hemisphericity. Rural male students with right hemisphericity had significantly poor study habits in comparison to urban male students with left hemisphericity.
- It was observed that there was no significant difference between study habits of rural male students with right hemisphericity and rural male students with left hemisphericity.
- It was revealed that there was significant difference between study habits of rural male students with right hemisphericity and rural female students with left hemisphericity. It was concluded from the mean scores that rural male students with right hemisphericity had significantly better study habits than that of rural female students with left hemisphericity.
- A significant difference was found between study habits of rural female students with right hemisphericity and urban female students with left hemisphericity. The rural female students with right hemisphericity had significantly good study habits as compared to urban female students with left hemisphericity.
- There was found no significant difference between study habits of rural female students with right hemisphericity and rural male students with left hemisphericity.
- From the results, it was revealed that there was significant difference between study habits of rural female students with right hemisphericity and rural female students with left hemisphericity. The rural female students with right hemisphericity possessed significantly good study habits as compared to rural female students with left hemisphericity.
- It was concluded from the results of the study that that there was significant difference between study habits of urban male students with left hemisphericity and
urban female students with left hemisphericity. It was further observed that urban male students with left hemisphericity had significantly good study habits than urban female students with left hemisphericity.

5.1.5 FINDINGS RELATED TO PREDICTION OF ACADEMIC ACHIEVEMENT AMONG SCHOOL STUDENTS ON THE BASIS OF THEIR META-COGNITIVE SKILLS AND LEARNING & THINKING STYLE

- From the results of the study, it was explored that both the variables i.e. meta-cognitive skills and learning & thinking style were significantly contributing towards prediction of academic achievement of school students. From the comparison of t-values, it was concluded that the variable meta-cognitive skills was the strongest predictor of academic achievement of school students in comparison to learning & thinking style.

5.1.6 FINDINGS RELATED TO PREDICTION OF STUDY HABITS AMONG SCHOOL STUDENTS ON THE BASIS OF THEIR META-COGNITIVE SKILLS AND LEARNING & THINKING STYLE

- It was observed from the computation of the data that both the variables i.e. meta-cognitive skills and learning & thinking style were significantly contributing towards prediction of study habits among school students. Further, it was inferred from the comparison of t-values that the variable learning & thinking style was the strongest predictor of study habits among school students in comparison to meta-cognitive skills.

5.2. CONCLUSION
Writing conclusion is an imperative part of the research process as it represents everything together. The present investigation aimed to study academic achievement and study habits among school students in relation to their meta-cognitive skills and learning & thinking style. At the outset, the effect of meta-cognitive skills, locality and gender was examined on academic achievement of school students. All the three variables (Meta-cognitive Skills, Locality and Gender) were reported to have significant main effect on academic achievement of school students. The study revealed significant double interaction effects of meta-cognitive skills and locality; locality and gender on
academic achievement of school students whereas the double interaction effect of meta-cognitive skills and gender was found insignificant. However, the triple interaction effect of meta-cognitive skills, locality and gender was found to be significant.

On exploring the effect of learning & thinking style, locality and gender on academic achievement of school students, it was found that learning & thinking style, locality and gender had a significant main effect on academic achievement and it was observed that the urban & rural, male & female students having right hemisphericity and left hemisphericity differed significantly with respect to their academic achievement. In the context of double interaction effect, it was revealed that there was significant interaction effects of learning & thinking style and locality; learning & thinking style and gender on academic achievement of school students. However, the study reported that locality and gender had no significant interaction effect on academic achievement of school students. The study also concluded that there was a significant triple interaction effect of the variables i.e. learning & thinking style, locality and gender on academic achievement of school students.

The third section focused on the effect of meta-cognitive skills, locality and gender was examined on study habits of school students. The findings revealed significant main effects of meta-cognitive skills and locality on study habits of school students whereas no significant difference was observed between study habits of male and female school students. The double interaction effects of meta-cognitive skills & locality and meta-cognitive skills and gender on study habits of school students were found to be significant leading to the inference that these variables interact with each other to have an effect on study habits. However, the double interaction effect of locality and gender was not found significant leading to the conclusion that locality and gender did not interact significantly with each other in relation to study habits. Similarly, the interaction effect of all the three variables namely meta-cognitive skills, locality and gender on study habits of school students was also reported to be insignificant.

The fourth section dealt with the effect of learning & thinking style, locality and gender on study habits of school students, it was found that learning & thinking style, locality and gender had a significant main effect on study habits and it was observed that the
urban & rural, male & female students having right hemisphericity and left hemisphericity differed significantly with respect to their study habits. In the context of double interaction effects, it was revealed that there were significant double interaction effects of learning & thinking style and gender; locality and gender on study habits of school students. However, the study reported that learning & thinking style and locality had no significant interaction effect on study habits of school students. The study also reported that there was a significant triple interaction effect of learning & thinking style, locality and gender on study habits of school students. Lastly, in the prediction phase, both the variables i.e. meta-cognitive skills and learning & thinking style came into the limelight while concluding the results. In case of academic achievement, the variable, meta-cognitive skills was found to be the strongest predictor than learning & thinking style whereas in the context of study habits, the variable, learning & thinking style was found to be the strongest predictor. In the end, it was concluded that these variables (meta-cognitive skills and learning & thinking style) were significantly contributing towards prediction of academic achievement and study habits of school students.

5.3. EDUCATIONAL IMPLICATIONS

The most outstanding characteristic of any research is that it contributes something new towards the development of the area concerned. The findings of the present study raised some significant issues that are beneficial for educational thinkers, psychologists, teachers and others who are concerned with the sphere of education. The present study lays emphasis on the improvement of strategies for the transmission of knowledge in school students. The present study has a wide range of implementation in the field of education. The present study showed that students with high meta-cognitive skills possessed higher academic achievement than that of students with low meta-cognitive skills. It may be due to the fact that students having high meta-cognitive skills are more self-regulated learners and are cognizant of their academic strengths & weaknesses and have a repertoire of strategies they apply to tackle the day to day challenges of their academic tasks. In order to improve the academic achievement of students with low meta-cognitive skills, constructivist way of learning should be encouraged among
students to develop their meta-cognitive skills. Instead of only memorizing, how to learn skill should be inculcated in students. They should be encouraged to be active participants of their own learning by having their learning controlled. Meta-cognitive skills among students can be enhanced in co-operative problem solving by discussing possible approaches with their friends and learning from each other. Teacher training programmes should include meta-cognitive learning and self-regulated learning strategies which enable the teachers to teach effectively. The more emphasize on development of meta-cognitive skills in the school curriculum is considered important because of its impact in improving academic performance of students.

It was revealed that students learned by left hemisphere had slightly higher academic achievement in comparison to students learned by right hemisphere. It is considered that no one is totally left-brained or right-brained however, probably everyone has a dominant side of the brain. Left brained children have analytical thinking. They always want to know the rules and follow them. They take in information through analysis, observation and thinking. Their language abilities are so refined and also good at processing symbols and mathematical formulas. Right brained ones use mostly their feelings about something to decide if it is true or not. Their minds move rapidly from one thought to another and this causes difficulties in finishing their assignments. They are holistic, creative, imaginative & visual learners and singing, music, art, writing, designing, anything based on creativity are easy for them. They view their opinions through their own personal experiences and backgrounds.

The reason responsible for poor academic achievement of right brained school students may be the left-brain strategies which are most often used in classrooms by left brained teachers, who themselves love order, sequence and planning which results in their academic achievement. Right brained learners do not always get the rewards or understanding of a different way to process information and feel inadequate. To solve this problem teacher should find out the dominant part of their students’ brains and use the appropriate classroom techniques, methods and tools according to them only then better and greater learning can be accomplished. Discussions may be arranged on general problems, world affairs from the reading of daily newspapers and magazines.
Games based on verbal materials, numerical, events and meditation can be encouraged after class hours.

Academic achievement of urban students was found significantly higher than that of rural students. The reason for higher academic achievement of urban students may be more qualified teachers, more learning facilities, infrastructure and other facilities i.e. electricity, water supply etc. Urban schools environment enriched with modern facilities makes the student feel comfortable in their studies that results to high academic performance. The uneven distribution of resources, poor school mapping, facilities, problem of qualified teachers, refusing appointment or not willing to perform well in isolated villages, lack of good transport facility, poor communication, and nonchalant attitude of some communities towards schools are some of the factors contributed to a wide gap between academic achievement of urban and rural schools students. In order to bridge this gap of uneven academic achievement between urban and rural schools students there should be the inclusion of proper school buildings, classroom, accommodation, libraries, laboratories, furniture, recreational equipment, apparatus and other instructional materials in rural schools. The availability, relevance and adequacy of these facilities will contribute towards their academic achievement. When students in high-poverty rural schools have greater access to new technologies and more experienced teachers who know how to use technologies, only then academic performance of students can increase.

The result of the study indicated that female students had better academic achievement than that of male students. The reasons proposed are both biological and environmental. The fact is that female students are more active, resourceful and sincere in their efforts whereas these characteristics are lagging among male students. Male students are classified as emotionally more disturbed than female students. Male students also display a greater amount of negative social behavior than female students in the classroom and this is thought to play a role in their academic performance. This type of problem may be resolved by arranging counseling session for students that in progress of a school there is a single role of student, not male student and female student. Parents and educators should encourage and support all students to do their best in school
regardless of their sex. Hopefully, the environment of schools, that can encourage both male and female students to try to succeed in school and to stay in school, should be developed. Educational planners, administrators and evaluators should supervise, monitor and co-ordinate the activities of schools which decrease gender biasness.

The present study explored that students having high meta-cognitive skills possessed significantly better study habits than students having low meta-cognitive skills. The fact is that students with high meta-cognitive skills are more aware towards their learning. They prepare a time table and follow it during their learning. They make handmade notes of difficult topics with concentration and underline confusing words while reading. They are also aware of the strategies when, why and how a particular strategy is to be adopted. But this ability lacks in students with low meta-cognitive skills. Students’ ability to monitor their learning is one of the key building blocks in self-regulated learning. Therefore, students should aware of their level of mastery of learning material and also adjust their study time and strategies. Teachers should allocate time for teaching learning strategies & reflective thinking activities and they should also encourage students to read books. Teaching learning strategies can be said to develop students’ meta-cognitive skills. In the school, teachers should recognize the influence of student habits on learning outcome with a view of monitoring and determining individual student learning problem for appropriate action.

In the present study it was found that right hemisphere preferred students had better study habits in comparison to left hemisphere preferred students. The fact is that right hemisphere preferred students put study information into categories for better understanding. They use their abilities to know whether something is right or wrong. In the classroom, they don’t mess by thinking of all possibilities in answering questions. Thus, to solve this problem teacher should screened students for level of study habits in the beginning according to their hemisphere dominance. If they are low in the domain, teachers in concurrence with the guidance counselors can work with such students to promote and enhance their study habits. Teachers should plan their teaching accordingly by adopting effective teaching methods, proper teaching strategies and by guiding students in view of their study habits. Left brained students should organize their study
notes properly and study alone because they get frustrated with others. They should not too argue with class teacher and avoid free thinking teachers if they confuse them.

From the results it was inferred that urban students had good study habits in comparison to rural students. The reasons responsible for this may be the family background of students, lack of functional libraries in schools, lack of trained teachers, the failure to provide library periods in schools, shortage of equipment and resources for better study skills etc. The results of the study have implications for curriculum planners as well as teachers in order to give due emphasis in developing study habits among school students. Hence, to improve the study habits of rural students, teachers should motivate them to study during leisure time, reading newspaper, participation in classroom discussion and answer the questions in the classroom frequently. The teachers should also conduct weekly, monthly reading tests, oral tests and written tests by making a fair assessment of the students that could be of great value in the evaluation of study habits of students. Organized and having homework routines are the most important things in helping a student to develop better study habits for life.

It was found that male students had better study habits than female students. The reason behind this may be that female students have more cramming power in comparison to male students as they learn anything in a logical manner. Female students are failure to inform their teachers of their difficulties with school work and don’t ask for their help. Male students prefer to study alone and also display greater confidence in their study skills as compared to female students. Teacher characteristics and the classroom environment also have been identified as contributors to this gender gap. Unfortunately, many females report being passed over in classroom discussions, not encouraged by the teacher, and made to feel stupid. Therefore counseling strategies should be adopted to assist the female students to improve on their study habits. Classroom environments can be made to feel more ‘girl-friendly’ by incorporating female role models and same-sex cooperative learning communities. Parents should always check their female wards at home to ensure that they study properly in a logical manner or not and also provide them study essentials such as textbooks, notes, pen, pencil etc.
5.4 SUGGESTIONS FOR FURTHER RESEARCH

Academic achievement and study habits are the central concept in the area of education. Therefore, immense importance is placed on academic achievement & study habits and the factors involved therein. The present study has thrown some light and insight to study academic achievement and study habits of school students in relation to their meta-cognitive skills, learning & thinking style.

This research is not perfect and complete in its all aspects because every research has got its own limitations. 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:

❖ Similar study can be conducted on a larger sample as the present study was conducted on a sample of 500 school students.

❖ The present piece of research was confined to study the academic achievement of students in all subjects of their study. It would surely be useful to study the achievement of students in a particular subject also.

❖ In the present study, the sample was delimited only to Haryana state. It can also be extended to other states also.

❖ The sample of present study was delimited to schools affiliated to Central Board of Secondary Education. It can be extended to other Board of Education also.

❖ The present study was conducted on a sample of secondary school students only. It can be extended to senior secondary and undergraduate college students and comparison can be made between them.

❖ The present study was delimited to the sample of 9th class students. The similar study can be conducted on other standard also.

❖ The present study was carried out in only Jind and Rohtak districts of Haryana state. It can be extended to other districts also.

❖ Only two demographic variables viz. locality and gender have been taken up in the present study. The other demographic variables such as type of school, academic stream, socio-economic status etc. can also be taken up.
Apart from meta-cognitive skills, and learning & thinking style, other variables like intelligence, creativity, mental health, emotional intelligence, school environment etc. which affects academic achievement and study habits can be explored in further research.

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.

**Sum up**

This chapter is the final phase of research study, which includes main findings, conclusion, educational implications of the findings and suggestions for further research. The investigator has assessed great value for present investigation in terms of educational implication of the findings of the present study. This chapter included all outcomes of the research which may have great value for educational researcher, administrators and planners and every person who wants to contribute something good for the development of students.