CHAPTER - V

FINDINGS, IMPLICATIONS AND SUGGESTIONS
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Based on the analysis and interpretation of results, findings were lined up. Keeping in view the major findings, implications of the study have been peeked into. Some suggestions have also been laid down for further research in the field related to this study. So, this chapter is committed to represent findings, implications of the study and suggestions for further research.

5.1 FINDINGS OF THE STUDY

A Findings Related to Reading Comprehension

1 COMPARISON OF MEAN ACHIEVEMENT SCORES OF EXPERIMENTAL AND CONTROL GROUP IN ENGLISH READING COMPREHENSION (Before Experimental Treatment)

- It has been found that there was no difference in the achievement level of two groups namely experimental and control before conducting experiment. It leads to the conclusion that there is no difference in the achievement scores of two groups (E & C) i.e. initially experimental group and control group were similar in their performance.

- No significant difference was found in achievement scores of boys of experimental group & control group of seventh graders to be taught through cooperative integrated reading composition (CIRC) strategy and conventional method before experimental treatment. It leads to the inference that boys of two groups (E & C) were similar in their performance on achievement test before giving the experimental treatment.

- No significant difference was found in the achievement scores of experimental group girls and control group girls to be taught through cooperative integrated reading composition (CIRC) strategy and conventional method before experimental treatment. It leads to the conclusion that there is no difference in the achievement scores of girls of two groups (E & C) i.e. initially experimental and control group girls were similar in their performance.
EFFECT OF INSTRUCTIONAL TREATMENT AND GENDER ON ACHIEVEMENT IN ENGLISH READING COMPREHENSION (After Experimental Treatment)

There was found a significant effect of treatment on mean achievement scores in English reading comprehension of seventh class students leading to the inference that experimental treatment yielded difference in achievement scores in English reading comprehension. After comparing the mean achievement scores of experimental and control group with t-test, a significant difference was found in both the groups. It discloses the fact that students of experimental group have higher achievement in English reading comprehension than the students of control group. It can therefore be inferred that students who are taught English through cooperative integrated reading composition (CIRC) strategy show significant improvement in their achievement than the students who received instructions through conventional method of teaching.

Gender was found to have a significant effect on achievement scores in English reading comprehension of seventh grade students. There was significant difference in achievement between boys and girls. In context of mean scores it was found that the boys achieved better than their female counterparts.

There was a significant interaction effect of treatment and Gender on achievement in English reading comprehension of seventh grade students leading to the inference that two variables interact with each other. Further investigation with the help of t-test revealed that

- There was found to be a significant difference in the performance of Boys and Girls when exposed to teaching through cooperative integrated reading composition (CIRC) strategy. In context of mean scores it was found that mean scores of boys of experimental group was higher than the mean scores of girls of experimental group which revealed that Boys achieved more than Girls.

- Whereas no significant difference was found when we compare post-test mean achievement scores in English reading comprehension of Boys and Girls of control group, leading to conclusion that Boys and Girls learning through conventional method of teaching were equal in their performance.
The post-test achievement scores in English reading comprehension of boys of experimental group and control group of seventh graders differ significantly in favor of experimental group boys. This implies that boys who were taught English through cooperative integrated reading composition (CIRC) strategy illustrated significant improvement in their achievement than the boys who received instructions through conventional method of teaching. A close inspection of mean scores indicated that boys of experimental group performed better than boys of control group.

The post test achievement scores of girls of experimental group was found significantly higher than the post test achievement scores of control group. This leads to inference that the girls who were taught through cooperative integrated reading composition (CIRC) strategy showed significant improvement in their achievement in English reading comprehension than the girls who received instructions through conventional method. However, in the context of mean scores, girls of experimental group had higher achievement in English reading comprehension with the girls of control group.

3. EFFECT OF INSTRUCTIONAL TREATMENT AND GENDER ON ACHIEVEMENT IN ENGLISH READING COMPREHENSION (in terms of Mean Gain Achievement Scores)

- Instructional treatment had a significant effect on mean gain achievement scores in English reading comprehension of seventh grade students leading to the conclusion that experimental treatment yielded difference in mean gains on achievement scores in English reading comprehension. The mean gain achievement scores in English reading comprehension of experimental group and control group of seventh graders differ significantly in favor of experimental group. It suggests that students who are taught English through cooperative integrated reading composition (CIRC) strategy show significant improvement in their achievement than the students who received instructions through traditional method of teaching.

- Gender was found to have a significant effect on mean gain achievement scores in English reading comprehension of students. After comparing the mean gain achievement scores of boys and girls with the help of t-test, significant difference was
found between boys and girls. This leads to conclusion that Boys group performed better than Girls group after being exposed to experimental treatment.

- Treatment and Gender had a significant interaction effect on mean gain achievement scores in English reading comprehension of seventh class students leading to the inference that two variables interact with each other. After comparing the mean gain achievement scores for the experimental and control group with the help of t-test following conclusion were drawn

  ➢ There was found to be a significant difference in the performance of Boys and Girls when exposed to teaching through cooperative integrated reading composition (CIRC) strategy. An examination of means leads to conclusion that gain achievement scores of boys is more than girls. It can be said that boys were more benefited by instructional strategy (CIRC).

  ➢ Whereas no significant difference was found when we compare mean gain achievement scores of boys and girls of control group, this leads to conclusion that boys and girls learning through conventional method of teaching were equal in this context.

  ➢ However when we compare the mean scores of the boys of experimental group and control group, it was found that boys of both the groups differ significantly in mean gain reading comprehension achievement in favor of experimental group boys. It can be revealed that cooperative integrated reading composition (CIRC) strategy is more effective than conventional teaching strategy in raising the achievement of boys in English reading comprehension.

  ➢ A significant difference was found in mean gain achievement scores in English reading comprehension between the girls of experimental group and control group. When girls of experimental and control group were compared on mean gain achievement score it was found that mean gain achievement score of experimental group girls is higher than that of control group girls. This entails that the girls exposed to cooperative integrated reading composition (CIRC) strategy benefited more in their achievement in comparison to the girls exposed to conventional method of teaching.
B. Findings related to Writing Composition

4. COMPARISON OF MEAN ACHIEVEMENT SCORES OF EXPERIMENTAL AND CONTROL GROUP IN ENGLISH WRITING COMPOSITION (Before Experimental Treatment)

• It has been found that there was no difference in the achievement level of two groups namely experimental and control before conducting experiment. It leads to the conclusion that there is no difference in the achievement scores of two groups (E & C) i.e. initially experimental group and control group were similar in their performance.

• No significant difference was found in achievement scores of boys of experimental group & control group of seventh graders to be taught through cooperative integrated reading composition (CIRC) strategy and conventional method before experimental treatment. It leads to the inference that boys of two groups (E & C) were similar in their performance on achievement test before giving the experimental treatment.

• No significant difference was found in the achievement scores of experimental group girls and control group girls to be taught through cooperative integrated reading composition (CIRC) strategy and conventional method before experimental treatment. It leads to the conclusion that there is no difference in the achievement scores of girls of two groups (E & C) i.e. initially experimental and control group girls were similar in their performance.

5. EFFECT OF INSTRUCTIONAL TREATMENT AND GENDER ON ACHIEVEMENT IN ENGLISH WRITING COMPOSITION (After Experimental Treatment)

• There was found a significant effect of treatment on mean achievement scores in English writing composition of seventh class students leading to the inference that experimental treatment yielded difference in achievement scores in English writing composition. After comparing the mean achievement scores of experimental and control group with t-test, a significant difference was found in both the groups. It discloses the fact that students of experimental group have higher achievement in English writing composition than the students of control group. It can therefore be inferred that students who are taught English through cooperative integrated reading
composition (CIRC) strategy show significant improvement in their achievement than the students who received instructions through conventional method of teaching.

- Gender was found to have a significant effect on achievement scores in English writing composition of seventh grade students. There was significant difference in achievement between boys and girls. In context of mean scores it was found that the girls achieved better than boys.

- There was a significant interaction effect of treatment and Gender on achievement in English writing composition of seventh grade students leading to the inference that two variables interact with each other. Further investigation with the help of t-test revealed that
  - There was found to be a significant difference in the performance of Boys and Girls when exposed to teaching through cooperative integrated reading composition (CIRC) strategy. In context of mean scores it was found that mean scores of girls of experimental group was higher than the mean scores of boys of experimental group which revealed that girls achieved more than boys.
  - Whereas no significant difference was found when we compare post-test mean achievement scores in English writing composition of Boys and Girls of control group, leading to conclusion that Boys and Girls learning through conventional method of teaching were equal in their performance.
  - The post-test achievement scores in English writing composition of boys of experimental group and control group of seventh graders differ significantly in favor of experimental group boys. This implies that boys who were taught English through cooperative integrated reading composition (CIRC) strategy illustrated significant improvement in their achievement than the boys who received instructions through conventional method of teaching. A close inspection of mean scores indicated that boys of experimental group performed better than boys of control group.
  - The post test achievement scores of girls of experimental group was found significantly higher than the post test achievement scores of control group. This leads to inference that the girls who were taught through cooperative integrated
reading composition (CIRC) strategy showed significant improvement in their achievement in English writing composition than the girls who received instructions through conventional method. However, in the context of mean scores, girls of experimental group had higher achievement in English writing composition with the girls of control group.

6. EFFECT OF INSTRUCTIONAL TREATMENT AND GENDER ON ACHIEVEMENT IN ENGLISH WRITING COMPOSITION (in terms of Mean Gain Achievement Scores)

- Instructional treatment had a significant effect on mean gain achievement scores in English writing composition of seventh grade students leading to the conclusion that experimental treatment yielded difference in mean gains on achievement scores in English writing composition. The mean gain achievement scores in English writing composition of experimental group and control group of seventh graders differ significantly in favor of experimental group. It suggests that students who are taught English through cooperative integrated reading composition (CIRC) strategy show significant improvement in their achievement than the students who received instructions through traditional method of teaching.

- Gender was found to have a significant effect on mean gain achievement scores in English writing composition of students. After comparing the mean gain achievement scores of boys and girls with the help of t-test, significant difference was found between boys and girls. This leads to conclusion that girls group performed better than boys group after being exposed to experimental treatment.

- Treatment and Gender had a significant interaction effect on mean gain achievement scores in English writing composition of seventh class students leading to the inference that two variables interact with each other. After comparing the mean gain achievement scores for the experimental and control group with the help of t-test following conclusion were drawn

➢ There was found to be a significant difference in the performance of Boys and Girls when exposed to teaching through cooperative integrated reading composition (CIRC) strategy. An examination of means leads to conclusion
that gain achievement scores of girls is more than boys. It can be said that girls were more benefited by instructional strategy (CIRC).

- Whereas no significant difference was found when we compare mean gain achievement scores of boys and girls of control group, this leads to conclusion that boys and girls learning through conventional method of teaching were equal in this context.

- However when we compare the mean scores of the boys of experimental group and control group, it was found that boys of both the groups differ significantly in mean gain writing composition achievement in favor of experimental group boys. It can be revealed that cooperative integrated reading composition (CIRC) strategy is more effective than conventional teaching strategy in raising the achievement of boys in English writing composition.

- A significant difference was found in mean gain achievement scores in English writing composition between the girls of experimental group and control group. When girls of experimental and control group were compared on mean gain achievement score it was found that mean gain achievement score of experimental group girls is higher than that of control group girls. This entails that the girls exposed to cooperative integrated reading composition (CIRC) strategy benefited more in their achievement in comparison to the girls exposed to conventional method of teaching.

5.2 CONCLUSION

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. Cooperative learning strategy CIRC, Conventional method of teaching and Gender on the dependent variable achievement in Reading Comprehension and Writing Composition in English of seventh grade students. The significant difference in Reading Comprehension achievement in English was observed among the students. It was found that students who were taught English with CIRC had
more achievement in Reading Comprehension and Writing Composition in English than those who were taught with Conventional method of teaching.

The study further revealed a significant difference in Reading Comprehension and Writing Composition achievement of boys and girls taught through CIRC. In Reading Comprehension boys achieved more than girls and in Writing Composition girls achieved more than boys. While there was no significant difference in Reading Comprehension and Writing Composition achievement of boys and girls taught through Conventional method of teaching. That means both girls and boys performed equal. It was also noticed that there was significant interaction effect of Cooperative learning strategy CIRC, Conventional method of teaching and Gender on the dependent variable achievement in Reading Comprehension and Writing Composition in English of seventh grade students. Based on the explanation above it can be seen that the model of Cooperative integrated reading and composition (CIRC), one of the learning techniques based on cooperation, is designed to develop reading, and writing language skills in the upper grades of primary education. The advantages of this technique is the optimization of student participation. Firstly, reading groups are established in the classroom. Next, students are paired off within the groups. When the teacher works with a reading group, couples try to teach each other meaningful reading and writing skills by using reciprocal learning technique. They help each other in performing basic skill-building activities (such as oral reading, contextual guessing, asking questions, summarizing, writing a composition based on the story, revising-correcting composition). In general, team books are published at the end of this process. Teams are rewarded for all reading and writing assignments on the basis of the average performance of group members. Thus, equal change for achievement, group support for achievement, and the performance, all basic components of cooperative learning ensure realization of personal responsibility.

Precisely, it can be said that cooperative integrated reading composition (CIRC) provides greater interaction among the students to learn. It is better than the traditional method of learning. The change from passive reception into active cooperation and
exploration arouses their interest and involvement in classroom activities to improve their academic achievement.

5.3 EDUCATIONAL IMPLICATIONS
The findings of this study could help English language teachers for developing reading comprehension knowledge, Writing Composition, small group cooperative skills, and abilities of students in accordance with the academic requirements. Therefore, this study supports that cooperative learning is better to teach reading comprehension and Writing Composition.

This study also reveals that cooperative learning looks to be a method of instruction that is suitable to the needs and levels of general seventh school students in our context and it is the one that students, who were in the experimental group, respond positively. The experimental group improved more through cooperative learning than non cooperative learning in the control group. Discussions among group members during the cooperative group learning gave an additional feature to the teaching learning process. From the cognitive elaboration perspective, it was stated that the effects of cooperative learning on achievement would be largely due to the use of cooperative tasks where students have the opportunity to discuss, argue, present and hear one another’s viewpoints. Cooperative learning is also a pedagogical approach that promotes student interaction via working in small groups to maximize their learning and reach their goal. It is suitable for the Indian education system due to the National Educational Policy (1994) which emphasizes students’ cooperation in helping each other to acquire knowledge. This type of approach decreases competitiveness and individualism and increases opportunities to actively construct or transform the knowledge among students.

The findings of present study reveal some important educational implications for teachers, students, teacher educators, curriculum planners and school authorities. Changing from traditional competitive classroom to a co-operative one does not slow down students’ achievement, but significantly improves achievement as it is evident from the findings of the study. Dedicated teachers are always looking for better ideas to meet the many challenges they face in a school, especially as diversity increases in
student population. Co-operative learning strategies provide teachers with effective ways to respond to diverse students by promoting academic achievement and cross-cultured understanding. Co-operative learning is a powerful educational approach for helping all students to attain content standards and develop the interpersonal skills needed for succeeding in multicultural world. In the present study, co-operative learning strategy CIRC was found more effective than conventional method of teaching with respect to student’s achievement in Reading Comprehension and Writing Composition in English.

The present study revealed that students taught English through CIRC achieved higher in reading and writing skills. Study also revealed that co-operative learning strategy CIRC significantly improved the achievement of students than conventional method of teaching. Co-operative learning strategies prove practical and more acceptable to students. Sometimes, students are not able to understand what teacher is explaining to them due to some reasons and they don’t ask again due to hesitation. But in groups, they can get explanation of the same topic in simple words and attains greater on achievement.

Besides it, the teacher involved should be experienced teacher with an interest and background in co-operative learning that received continual support and feedback from trainees and other teaching using the co-operative learning structures. Sapon-Shevin and Schnielem wind (1989/1990) found that teacher is essential to the success of co-operative learning. If teacher is inexperienced, not committed to using co-operative learning structures, then result of co-operative learning may be different. So if we want successful results of co-operative learning in Indian classrooms, teacher must be trained in using different co-operative learning structures. So, teachers should be given proper orientation to co-operative learning strategies or in-service training from time to time. School authorities or teacher educators should organize refresher courses, seminars or workshops so that teachers can be trained in different methods of teaching-learning to generate the desired level of learning among the students.

Group rewards are used in the present study, which is essential for the effectiveness of co-operative learning. Group rewards are based on the individual learning of all group
members. This point takes strength from motivational theory of co-operative learning, which is great implication in field of teaching. Students should be given some incentive or reinforcement in terms of praise, encouragement and prizes to bring rapid progress in achievement.

The present study has an important implication for teacher education. Pre-service and in-service teachers should understand how to structure and monitor meaningful experience for students. Important skills such as critical thinking, creative problems solving and synthesis of knowledge can easily be accomplished through co-operative group activities. Co-operative learning assigns a new role to the teacher. It is the teacher who converts the passive listeners in the class into active members and achievers by implementing co-operative learning in perfect way, thus becoming a facilitator in learning process to actively encourage the student to help each other and learn from each other, participate in discussions, facilitate each other’s learning and engage in problems solving in a free democratic way. Further, the study has an important implication for curriculum planners. While constructing the curriculum, all learning experiences including co-operative learning behavior should be added so that students can be more benefitted and enjoy the learning.

5.4 SUGGESTIONS FOR FURTHER RESEARCH

The present study unbolts certain boulevards for further research which are briefly listed below

1. Such a study can be conducted using larger sample groups and schools with different socio-economic levels. It would be of interest to understand the internal dynamics of CIRC, e.g. evidence on peer instructions might be obtained from observations.

2. This study examined only the achievement in reading comprehension and in writing composition of students in English. Further studies can be conducted to investigate the effectiveness of cooperative learning for other variables such as attitude towards Listening and speaking skill, other subjects, self-esteem, peer relation, social skills and academic motivation for different subjects.
3. The study may be extended to the other classes of the elementary, secondary, higher secondary stages and the students of English medium schools and different areas of the country.

4. Further research should also focus on comparison between different strategies of co-operative learning as well as comparison with non co-operative learning approaches in order to determine if other co-operative learning strategies are equally effective in producing desired students outcomes.

5. Studies on co-operative learning strategies should be conducted for the entire year or for long period to determine if student achievement is increased with additional experience in using co-operative learning.

6. There is a broader need to study co-operative learning in the contexts of attempts to the replace homogeneous with heterogeneous grouping, especially in middle and high schools.

7. The strengths of co-operative learning approach and its feasibility should be found in Indian higher education classroom and there is a need for development and evaluations of co-operative strategies for young children especially those in pre-kindergarten and first grade.

8. Research is needed to study the effect of co-operative learning on exceptional children or special children.

Although co-operative learning has been studied in an extraordinary number of field experiments of high methodological quality, there is still much more to be done. Co-operative learning has the potential to become a primary format used by the teachers to achieve both traditional and innovative goals. Research must continue to provide the practical, theoretical, and intellectual underpinnings to enable educators to achieve this potential.

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