

**CHAPTER-IV**  
**RESULTS AND**  
**DISCUSSION**

# CHAPTER - IV

## RESULTS AND DISCUSSION

### 4.0.0 INTRODUCTION

The introduction along with objectives, hypotheses and rationale of the study are presented in chapter – I. The reviews of the related studies are presented in the chapter – II. The methodology of the study is presented in chapter –III. In this chapter, objective-wise analysis and interpretations are given. The objective-wise analysis and interpretation of the results are given, below, under different captions.

#### 4.1.0 Effect of Collaborative Learning on Achievement in English Grammar

The first objective of the study was to study the effect of collaborative learning on achievement in English Grammar of class VII students. The data for achievement in English Grammar were collected with the help of an achievement test, developed by the investigator. The test was administered to both the group after the eight<sup>3</sup> days treatment. Both the groups were also pre-tested through the administration of an achievement test which was also developed by the investigator. The experimental and control group were taught through the collaborative learning and traditional method, respectively. The collected data were analyzed with the help of one-way ANCOVA. The results are presented in table 4.1, below

**Table 4.1: Summary of ANCOVA for Achievement in English Grammar**

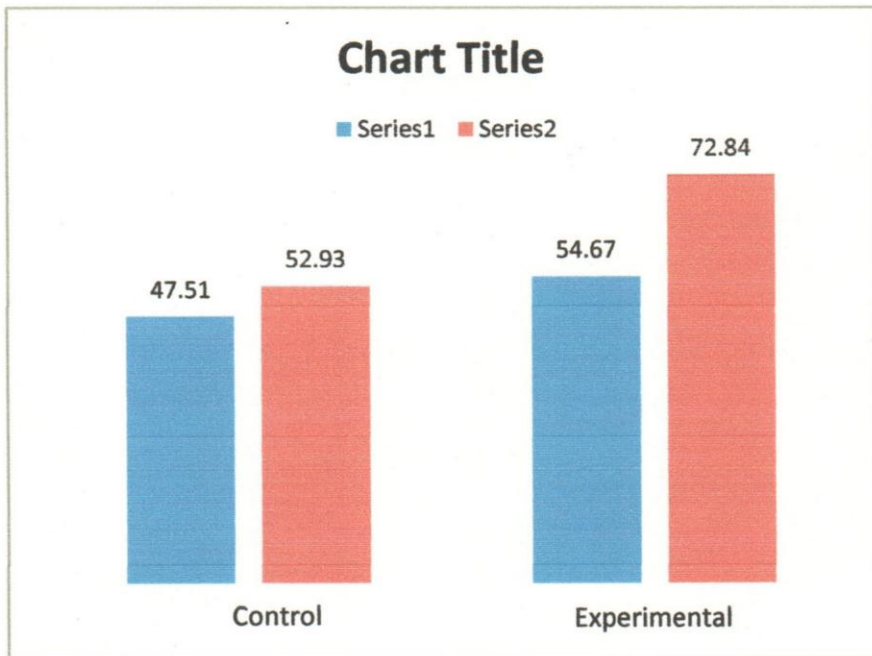
Source of variance	Df	Sum of Squares	Mean Square.y.x	F
Among	1	1847.21	1847.21	17.68**
Within	51	5393.98	104.51	
Total	52	7177.19		

**\*\*Significant at 0.01 level**

**Table 4.2: Mean and standard deviation of the experimental and the control group for Achievement in English Grammar.**

Group	N	MEAN	SD
Control	27	52.93	20.31
Experimental	27	72.89	18.55
Total	54	62.91	21.76

Table 4.1 indicates that the F-value is 17.68 achievement in English Grammar is significant at 0.01 level with df equal to 1/52. It signifies that the treatment, that is, collaborative learning produced a significant differential effect on the achievement in English Grammar of class VII students. Therefore, the  $H_1$  namely, "The students taught through collaborative learning will gain significantly higher scores as compared to their counterpart in Traditional method of teaching", is **accepted**.



**Fig.4.1: Graph Showing the Pretest and Posttest Scores of Experimental and Control Group**

Table 4.2 also demonstrates that the mean values of experimental and control group is 72.89 and 52.93, respectively. It, also, demonstrates that the SD values

of experimental and control group is 18.55 and 20.31, respectively. The experimental group achieved significantly more than the control group.

Comparing the means of the control and the experimental group, it was found that there is a little difference between the means of pre-test of experimental and control group. But, the difference is enlarged when we compare the means of pretest and post-test of experimental group. Therefore, it is concluded that the difference between the posttest scores of the experimental and control group is significant at 0.01 level.

### **Finding**

Teaching students with the collaborative learning is found to be effective in terms of achievement in English Grammar of class VII students than the traditional approach of teaching.

### **Discussion**

The experimental group taught through collaborative learning scored significantly higher than the control group taught through traditional method in terms of achievement in English Grammar. The results so gathered are supported by the following studies:

**Akura(2013)** he investigated the effects of computer-based cooperative learning method on students achievements in English Grammar in Secondary Schools. The result from the study show that the CBCLM led to better achievement than the Traditional method of Teaching.

**Khan, Javaid and others(2015)** investigated on evaluation of the effectiveness of cooperative learning method versus traditional learning method on the writing ability of the students. In this experiment, experimental group performed better as compared to control group it shows that STAD techniques of collaborative learning is more effective instruction paradigm as compared to traditional Method of teaching.

**Gupta and Ahuja(2014)** investigated on cooperative integrated reading composition (CIRC) : impact on reading comprehension achievement in English among seventh graders . Study shows that teaching students through cooperative

learning method scored significantly higher over students taught through traditional method of teaching.

**Pattanpichet(2011)** studied the effect of using collaborative learning to enhance students' English speaking achievement. Findings of the study reveal that improvement of the students' speaking performance and positive feedback from the students on the use of Collaborative Learning activities.

Teaching strategy and learning exposure to the students play an important role in healthy and meaningful learning. Language play a very important role in our life and it is the medium of communication and also important in developing our thoughts because it can only be possible through language. Grammar is an integrated part of language it cannot be separated. In Present scenario English is a global language and for those who has English as a second language in country like India the focus is on communicative competence it means basic proficiency in the language so it required communicative task. By studying some of the researches it was found that collaborative learning has significant effect on students' achievement. where students divided into small group and they have to perform certain task for attaining certain goals, in case of language learning they get situation for communication and face-to-face interaction with the students, appropriate use of social, interpersonal skills and it is interactive and learner centered classroom where students enjoy the learning. So in present research Collaborative learning proved to be effective learning strategy in case of learning of English Language.

#### **4.2.0 Effect Of Gender and its Interaction with the Treatment(Collaborative Learning) on Achievement In English Grammar Of Class VII Students**

The second objective of the investigation was to study the effect of gender on achievement in English grammar. For this purpose the scores of achievement in English grammar both the groups were taken into considered .Treatment had two levels, i.e., teaching through the collaborative learning and traditional method. Gender has two levels, i.e., boys and girls. Achievement in English grammar was collected with the help of an achievement test developed by the investigator. Pretest was taken as covariate. Data were analyzed with the help of

the 2 X 2 Factorial Design ANCOVA of unequal Cell Size. The result is presented in table 4.3

**Table- 4.3: Summary of 2 X 2 Factorial Design ANCOVA for the effect of Treatment, Gender and their interaction on Achievement**

Source of variance	Df	Sum of Squares	Mean Sum of Square	F value
Treatment	1	1573.87	1573.87	14.64**
Gender	1	.043	.043	.009
Treatment X Gender	1	63.005	63.005	.586
Error	49	107.47		
Total	52			

**\*\*Significant at 0.01 level**

**Table-4.4 Mean and Standard Deviation of the Boys and Girls of Experimental and the Control Group for achievement in English Grammar**

GROUP OF THE STUDENT	GENDER OF THE STUDENTS	Mean	Std. Deviation	N
CONTROL	GIRL	56.75	14.80	12
	BOY	81.60	14.87	10
	Total	68.05	19.23	22
EXPERIMENTAL	GIRL	49.87	23.91	15
	BOY	67.76	18.96	17
	Total	59.37	22.94	32
Total	GIRL	52.93	20.31	27
	BOY	72.89	18.55	27
	Total	62.91	21.74	54

#### 4.2.1 Effect of gender on achievement in English Grammar

Table 4.3 shows that the F-value is .009 for gender is not significant at 0.01 level with df equal to 1/52. It signifies that gender does not influence students' achievement in English Grammar. Therefore,  $H_0$ , namely, "There is no

significant effect of gender on achievement in English Grammar of class VII students”, is not rejected.

### **Finding**

It can be inferred that there is no significant effect of gender on achievement in English Grammar of class VII students.

### **Discussion**

The logic behind to take gender as an independent variable is that researches shows that girls has better linguistic abilities as compared to boys as published in Neuropsychologia magazine (Scientific American).But the results shows that achievement is independent of the gender. It is not influenced by gender of the learner.Achievement depends upon many factors such as, intelligence, study habit, creativity, mental development, attitude towards learning, interest and motivation of the learner, etc. Irrespective of the gender, i.e., boys and girls, the students achieved the scores.

#### **4.2.2. Effect of interaction of gender with treatment (collaborative learning) on achievement in English Grammar of class VII students**

Table 4.3 shows that the F-value is .586 for interaction between gender and treatment is not significant at 0.01 level with df equal to 1/52.It signifies that there is no significant interaction effect of gender with collaborative learning on students’ achievement in English Grammar. Therefore,  $H_0$ , namely, “There is no significant effect of interaction of gender and the treatment on achievement in English Grammar of class VII students”, is not rejected.

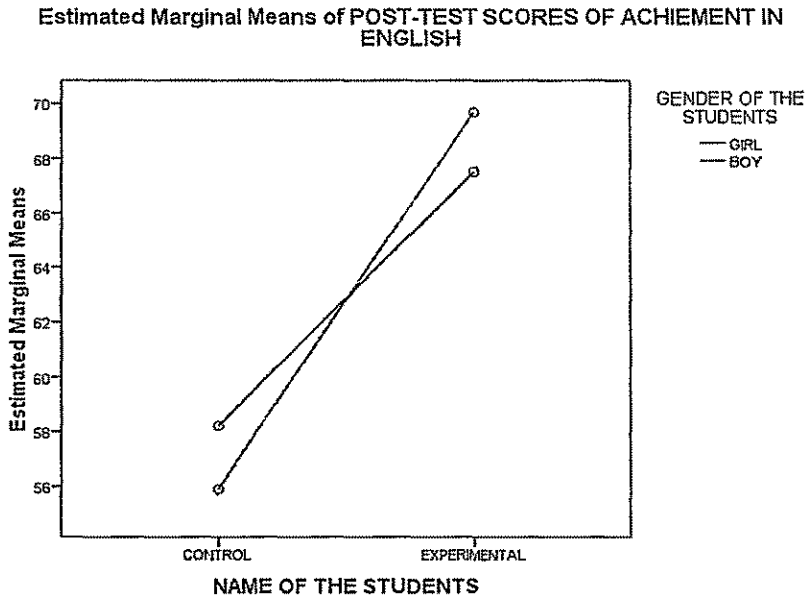
### **Finding**

Thus, it can be inferred that there is no significant effect of interaction between gender and treatment on achievement in English Grammar of class VII students.

### **Discussion**

There is no significant effect of interaction of gender and collaborative learning on achievement in English grammar.The findings are supported by

Zimina(2012), Assma(2010). Gender as carries no independent effect on the achievement of students may not interact with the treatment.



**Figure:4.2: Interaction between gender and treatment on achievement in English Grammar**