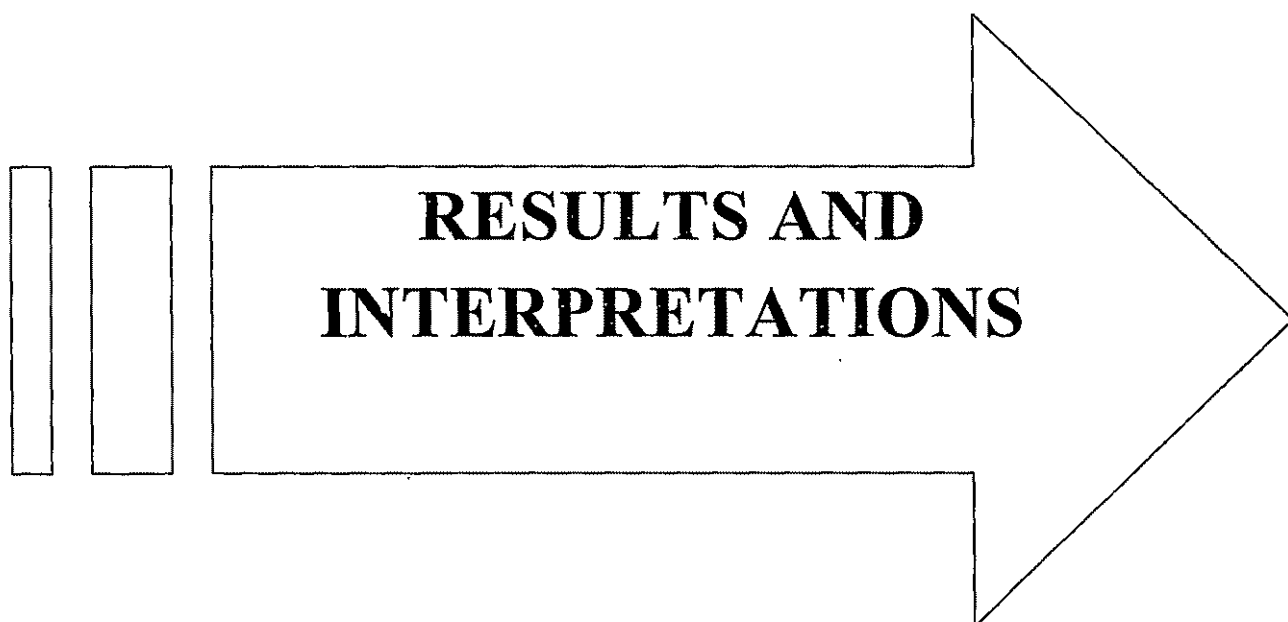


CHAPTER - IV



**RESULTS AND
INTERPRETATIONS**

CHAPTER - IV

RESULTS AND INTERPRETATIONS

4.0.0 INTRODUCTION

Introduction and the review of researches are presented in the chapter I and chapter II, respectively. The methodology employed for the study along with the techniques of sample selection, design of the study, tools, procedure of data collection and the statistical techniques for the analysis of data are presented in the chapter III. In the present chapter, the results and interpretations are presented in the following captions, objective-wise.

4.1.0 EFFECTIVENESS OF THE CONSTRUCTIVIST APPROACH

The first objective of the study was to study the effectiveness of the Constructivist Approach. The effectiveness of the Constructivist Approach was studied in terms of the Achievement in Urdu and the reaction of the students' towards the approach. The results of both the Achievement in Urdu and the reaction of the students' towards the approach were presented separately in the following captions.

4.1.1 EFFECTIVENESS OF THE CONSTRUCTIVIST APPROACH IN TERMS OF ACHIEVEMENT IN URDU

An Achievement test was developed by the Investigator to measure the Achievement in Urdu of students. The test consisted of 36 items. The total marks of the Achievement test in Urdu were fifty. The test was administered to both the groups i.e., experimental and control group, after the completion of the teaching of ten lessons. The

duration of the test was fifty minutes. For the purpose of studying the effectiveness of the Constructivist approach in terms of the Achievement in Urdu, the scores of the Experimental group was taken, here, in to consideration. The scores were analyzed with the help of the Percentiles, Mean, Standard Deviation and the Coefficient of Variation. The results are presented in the table 4.1.

Table - 4.1: Percentiles, Mean, Standard Deviation and the Coefficient of Variation for Achievement in Urdu

Mean		86.53
Std. Deviation		6.95
Variance		48.36
Range		25
Percentiles	10	75.30
	20	80.20
	30	82.30
	40	85.20
	50	88.00
	60	90.00
	70	92.00
	80	92.80
	90	94.90

Table 4.1 reveals that 10% of the students secured more than 75 Fifty percent students secured 88% marks. More than ninety two percent marks secured by 80% students. Ninety Percent marks secured by more than 94% students. Generally, this kind of achievement is not found in students taught through the traditional method of teaching. Therefore, it can be concluded that the Constructive Approach was found to be effective in terms Achievement in Urdu.

4.1.2 EFFECTIVENESS OF THE CONSTRUCTIVIST APPROACH IN TERMS OF REACTION OF THE STUDENTS TOWARDS THE APPROACH

A Reaction Scale was constructed to study the reaction of the students towards the approach employed teaching the lessons. The scale was administered to the experimental group after teaching all the ten lessons. There were fifteen statements in the scale. There were both positive and negative statements for the approach. There were five options Strongly Agree(SA) Agree(A) Undecided(U) Disagree(D) Strongly Disagree(SD). The scoring for the positive statements were 3, 2 and 1 and reverse for the negative statements. The data were analysed with the help of the Percentages. Results are presented in table 4.2.

Table 4.2 indicates the results of the reactions of the students on all 15 statements for the approach. Eighty one percent students opined that Learning through this approach is not time consuming. 79% students is of the opinion that learning through this approach is not boring. 91% students feel that the activities of this approach was interesting.

Therefore, it can be concluded that the Constructive Approach was found to be effective in terms of the Reaction of the students.



Table-4.2: Statement-wise Responses of the Students(given in Percentages)

S.No.	Statements	(SA)	(A)	(U)	(D)	(SD)
1	Learning through this approach is time consuming.				19	81
2	Sometimes it is boring to learn through this strategy.				21	79
3	Learning through these activities is an interesting experience.	91	9			
4	It is difficult to interact with the teacher while s/he is teaching the contents using this approach.				11	89
5	I feel motivated while learning through the debate.	87	11	2		
6	Study through this strategy develops a competitive attitude.	91	7	2		
7	I feel active and happy in the class when I learn through the dialogue.	92	4	4		
8	Brain storming provided me an opportunity to think independently.	87	6	7		
9	I was encouraged to learn when other students attained the concepts in the subject.	91	6	3		
10	Studying through this strategy motivates the students to resolve conflicts mutually.	92	5	3		
11	Presentation through group project helped me to acquire the concept.	86	8	6		
12	Presentations through seminars helped me to develop the tolerance ability.	79	11	10		
13	Learning through this strategy developed my confidence.	81	12	7		
14	Learning through this strategy developed a feeling of cooperativeness.	89	11			
15	Learning through this strategy is very motivating.	90	10			

4.2.0 EFFECT AND INTERACTION OF TREATMENT AND GENDER ON ACHIEVEMENT IN URDU

The second objective of the investigation was to study the Effect and Interaction of Treatment and Gender on Achievement in Urdu by taking the class VIII Urdu scores as covariate. The class VIII Urdu scores were collected from the school register. The Achievement in Urdu was measured by administering the Achievement test

developed by the investigator. The test was administered to both the experimental and control group after the end of the teaching of ten lessons through different approaches. The results are presented in table in 4.3 and interpretations are given in captions 4.2.1, 4.2.2 and 4.2.3.

Table 4.3: F-values for Effect and Interaction of Treatment and Gender on Achievement in Geography

Sources of Variance	df	SS	MSS	F-Value
Treatment	1	26456.56	26456.56	221.73*
Gender	1	814.33	814.33	6.82
Treat X Gender	1	13.92	13.92	.12
Error	62	7398.32	119.33	
Total	65			

* significant at 0.01 level

Table 4.4: Mean and SD of the Boys and Girls of Experimental and Control Groups for Achievement in Urdu

Treatment	Constructive Approach			Traditional Approach		
	N	Mean	SD	N	Mean	SD
Boys	15	90.33	4.53	25	48.72	14.12
Girls	15	82.73	6.97	12	41.33	14.72
Total	30	86.53	6.95	37	46.49	14.50

Table 4.3 indicates that the F-value of 221.73 for Treatment is significant at 0.05 level with df equal to 1/65. It indicates that the Treatment produced a significant differential effect on the Achievement in Urdu. In other words, it can be said that there significant effect of Treatment on the students' Achievement in

Urdu. Therefore, the null hypothesis, namely, “there is no significant effect of Treatment on Adjusted mean score of students’ Achievement in Urdu when Class 8th Achievement in Urdu is taken as covariate”, is rejected.

Further, Table 4.4 shows that the mean Achievement score in Urdu of the students taught through Constructive Approach (86.53) is higher than those taught through the Traditional Method of teaching (46.49). It can therefore be said that the Constructive Approach was found to be more effective in terms of students’ Achievement in Urdu than the Traditional Approach of teaching.

4.2.1 EFFECT OF TREATMENT ON ACHIEVEMENT IN URDU

Table 4.3 reveals that the F-value for the Treatment is not significant at 0.01 level with df equal to 1/65. It indicates that the Gender did not produce a significant differential effect on the Achievement in Urdu. In other words, the Achievement in Urdu of the boy did not differ significantly from the girls. Therefore, the null hypothesis, namely, “There is no significant effect of Treatment on adjusted mean score of Achievement in Urdu of students taught through Constructive Approach and Traditional Approach when previous years’ Urdu scores is taken as covariate”, rejected.

Further, Table 4.4 shows that the mean Achievement score in Urdu of the students taught through Constructive Approach (43.03) is higher than those taught through the Traditional Method of teaching (28.23). It can therefore be said that the Constructive Approach was

found to be more effective in terms of students' Achievement in Urdu than the Traditional Approach of teaching.

4.2.2 EFFECT OF GENDER ON ACHIEVEMENT IN URDU

Table 4.3 reveals that the F-value for Gender is 1.69 which is not significant. It indicates that Gender did not produce any significant differential effect on students' Achievement in Urdu. It shows that the students' Achievement in Urdu is independent of Gender. Therefore, the null hypothesis, namely, "There is no significant effect of Gender on the student's Achievement in Urdu when Class 8th achievement in Urdu is taken as covariate", is not rejected. It signifies that the Achievement in Urdu is independent of the Gender.

4.2.3 INTERACTION OF TREATMENT, GENDER ON ACHIEVEMENT IN URDU

Table 4.3 reveals that the F-value of 0.08 for the interaction of Treatment and Gender is not significant at 0.05 level with df equal to 1/65. It indicates that the interaction of Treatment and Gender did not produce a significant differential effect on the Achievement in Urdu. In other words, it can be said that there was no interactional effect of Treatment and Gender on the students' Achievement in Urdu. Therefore, the null hypothesis, namely, "There is no significant interaction of Treatment and Gender on the Adjusted mean score of students' Achievement in Urdu when Class 8th Achievement in Urdu is taken as covariate," is not rejected.

Fig.- 4.1 : Interaction for Treatment and Gender on Achievement in Urdu

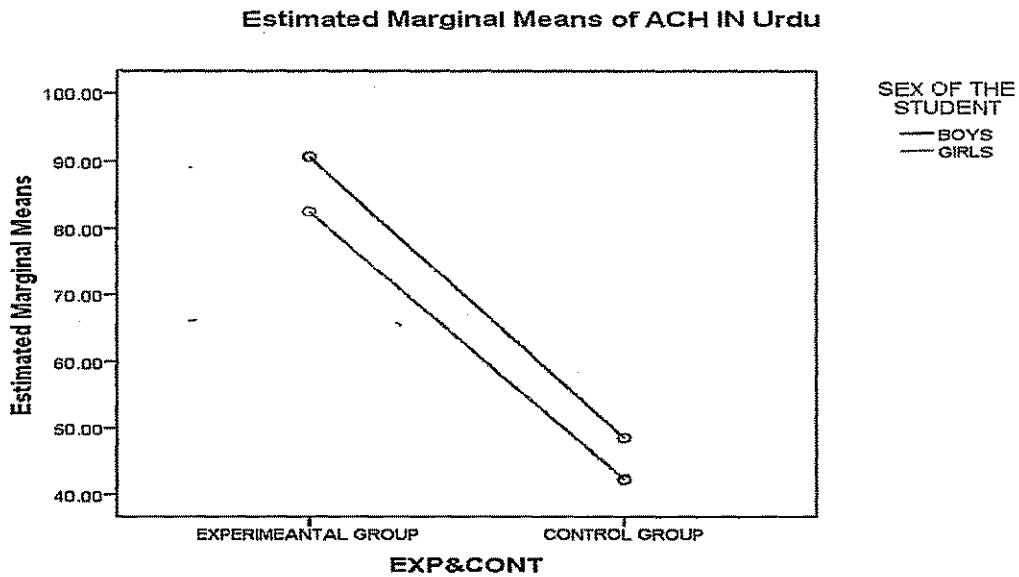


Fig. 4.2: Mean Achievement in Urdu of Boys and Girls of Experimental Group

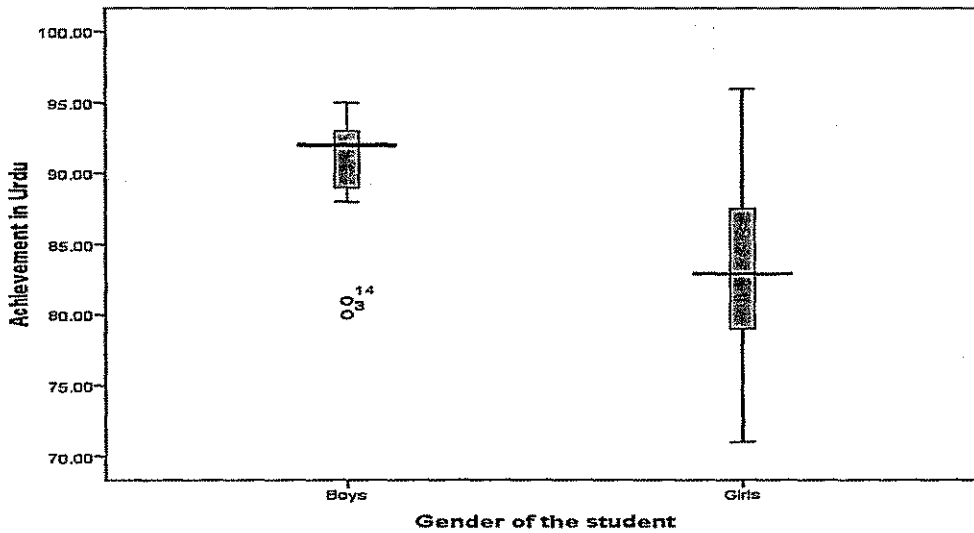
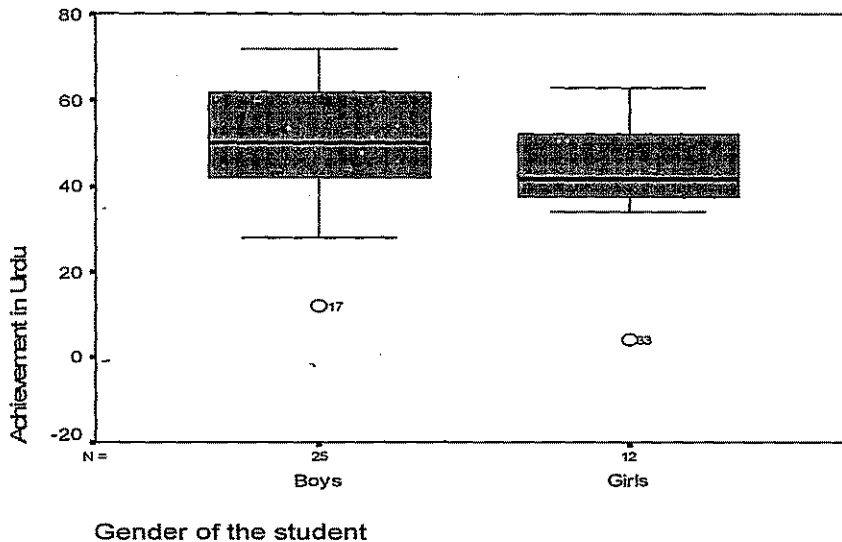


Fig. 4.3: Mean Achievement in Urdu of Boys and Girls of Control Group



4.3.0 COMPARISON OF CLASS ROOM BEHAVIOUR

The third objective of the study was to compare the students' classroom behavior before and after the treatment. Only the experimental group's behavior was observed. For this purpose, an observation checklist was prepared by the investigator. It contained ten aspects of the classroom behavior of the learners. The investigator had to check by ticking in 'yes', 'to some extent' and 'no'. The result is presented in Table 4.5.

Table 4.5 reveals that all the students started participating in class room discussion after the exposure of the new strategy. It was found that students were expressing their views without hesitation after the treatment given. The result also revealed that the students started using right words for expressing their views and emotions after the exposure of the new strategy. They started giving suggestions on others view also and they started sharing their personal experiences.

Table 4.5: COMPARISON OF CLASS ROOM BEHAVIOUR

Statements	FIRST DAY INTERACTION			LAST DAY INTERACTION		
	YES	TO SOME EXTENT	NO	YES	TO SOME EXTENT	NO
All the students participated in the class room discussion			v		v	
Students are not hesitating in expressing their views		v		v		
They are doing their work/project with their partner(s) cooperatively	v			v		
Students are expressing their views easily		v		v		
Expressing their novel and different views and emotions easily			v	v		
In expressing their views and emotions they are using right words		v			v	
Expressing their simple responses and views in words or symbols easily		v		v		
Giving suggestions on other's views		v		v		
Students are sharing their personal experiences			v	v		
Listening other's views interestingly	v			v		

They were working co-operatively to complete their assigned projects. They were expressing their simple responses and views in words or symbols easily. Tolerance ability was improved in them, because they were listening to the views of others interestingly.

Therefore, it can be inferred that Constructivist Approach can make the students active in the class and can develop some affective aspects in the students.