CHAPTER – IV

ANALYSIS OF DATA AND INTERPRETATION OF RESULTS AND FINDINGS

4.0.0 INTRODUCTION

The first chapter deals with the introduction, conceptual framework, rationale of the study, objectives, hypotheses and delimitations of the research. The second chapter deals with the review of related literature. The methodology, sample, design, tools and procedure of data collection and statistical techniques used for the analysis of data have been presented in detail in Chapter – III. The present chapter is devoted to the presentation of data, analysis, results and their interpretations. Objectives-wise results and its interpretations are presented below under separate captions.

4.1.0 EFFECT OF UJJWAL PROGRAMME ON ACHIEVEMENT OF STUDENTS IN ODIA

The first objective of the investigation was to study the effect of Ujjwal programme on achievement of students in Odia of Kalahandi District of Odisha. The scores secured by the students in achievement test was conducted by school authority, were collected from school directly by the researcher. School conducted an achievement test of 10 marks before implementing the programme and of 40 marks after implementing the programme. The maximum marks of Achievement Test in Odia further converted to 100 marks for analysis. The data were analyzed with the help of Mean, SD, Range and Quartiles. The results are presented in Table 4.1, below.

Table – 4.1: Mean, SD, Variance, Skewness, Range and Standard Error for Achievement in Odia of Pre-test and Post-test Scores

Achievement in Odia	Post Test Score	Pre-Test Score
N	52	52
Mean	68.99	51.73
Std. Deviation	9.50	11.32
Variance	90.26	128.31

Skewness		-0.40	0.23
Std. Error of Skewness		0.33	0.33
Range		40.00	50.00
Quartiles	Q1	62.50	40.00
	Q2	70.00	50.00
	Q3	77.50	60.00

Table 4.1 indicates that the post-test mean, SD, Variance, Skewness and Range of achievement in Odia is 68.99, 9.50, 90.26, -0.40 and 40, respectively. Table 4.1 indicates that the pre-test mean, SD, Variance, Skewness and Range of achievement in Odia is 51.73, 11.32, 128.31, 0.23 and 50 respectively.

The mean score of Post-test is higher than the mean score of the pre-test of achievement in Odia. The SD of Post-test is lower than the SD of the pre-test of achievement in Odia. The Range of Post-test is lower than the Range of the pre-test of achievement in Odia. The Range indicates that the scores of Post-test achievement in Odia is less than the Pre-test scores of achievement in Odia. Therefore, it can be said that the score of Post-test was more concentrated around the mean as compared to the Pre-test scores of achievement in Odia.

The Quartiles for Achievement in Odia of Post-test Group demonstrates that 62.50 marks or below scored by 25% of students. It shows that 75% students scored more than 62.50 marks. Likewise, 50% students scored more than 70 marks out of 100 and 75% students scored less than 77.50 marks out of 100.

The Quartiles for Achievement in Odia of Pre-test Group demonstrates that 25% students scored less than 40 marks out of 100. . It shows that 75% students scored more than 40 marks out of 100. Likewise, 50% students scored more than 50 marks out of 100 and 75% students scored less than 60 marks out of 100. It means only 25% students score more than 60 marks out of 100.

Table – 4.2: t-Value for Achievement in Odia of Primary Level Students of Kalahandi District, Odisha

Scores	N	Mean	SD	Df	t-value
Pre- Test Scores	52	51.73077	9.50	51	
Post-Test Scores	52	68.99038	11.32		16.46**

*** Significant at 0.01 Level*

Table 4.2 shows that the t-value with df equal to 1/51 for achievement in Odia of students of Kalahandi district of Odisha is 16.46 which is significant at 0.01 level. Therefore, the null hypothesis, namely, "there is no significant difference in Pre-test and Post--test scores of achievement in Odia of primary level students of Kalahandi district" is rejected. It may be inferred that the 'Ujjwal' Programme produced a significant differential effect on the achievement in Odia of primary level students of Kalahandi district. It can be concluded that the 'Ujjwal' Programme was effective in terms of achievement in Odia of primary level students of Kalahandi district. We can say that the Ujjwal program enhance the learning of the students in Odia i.e. Mother Tongue.
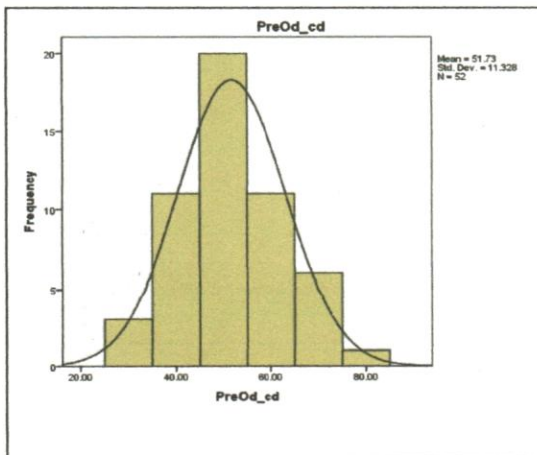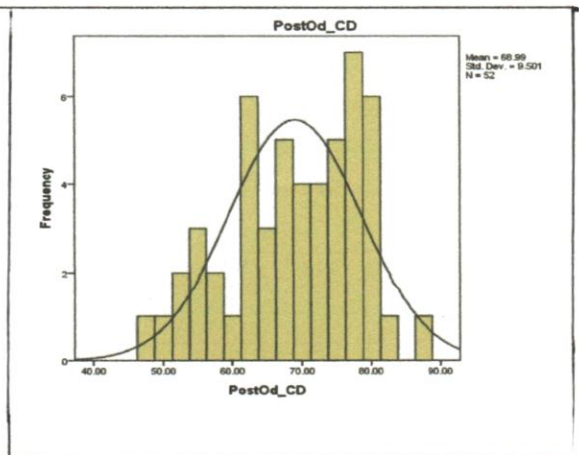
Fig. 4.1: Pre-test scores of Achievement in Odia	Fig. 4.2: Post-test scores of Achievement in Odia

Findings: There is significant difference in Pre-test and Post--test scores of achievement in Odia of primary level students of Kalahandi district, Odisha.

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4.2.0 TO COMPARE THE EFFECT OF UJJWAL PROGRAMME BASED ON ACHIEVEMENT IN ODIA BETWEEN BOYS AND GIRLS IN POST ACHIEVEMENT TEST

The second objective of the investigation was to compare the effect of Ujjwal programme on achievement of boys and girls students in Odia of Kalahandi District of Odisha. The scores secured by the students in achievement test was conducted by school authority were collected from school directly by the researcher. School conducted an achievement test of 10 marks before implementing the programme and of 40 marks after implementing the programme. The maximum marks of Achievement Test in Odia further converted to 100 marks for analysis. The data were analyzed with the help of Mean, SD, Range and Quartiles. The results are presented in Table 4.2, below.

Table – 4.3: Mean, SD, N and Standard Error of Mean for Achievement in Odia of Boys and Girls of Primary Level Students of Kalahandi District, Odisha

Group	Gender	N	Mean	Std. Deviation	Std. Error Mean
Post-test	Boys	24	68.75	9.29	1.89
	Girls	28	69.19	9.83	1.85

Table 4.1 indicates that the post-test mean, SD and SEM of boy's achievement in Odia is 68.75, 9.29 and 1.89 respectively. Table 4.1 indicates that the pre-test mean, SD and SEM of girl's achievement in Odia is 69.19, 9.83 and 1.85 respectively.

The mean score of boys in post-test is slightly lower than the mean score of the girls in achievement in Odia. The SD of boys in Post-test is slightly lower than the SD of girls in achievement in Odia. The SEM of boys in post-test is slightly higher than the SEM of girls in achievement in Odia. Here the difference in Mean, SD, SEM of boys and girls are negligible and the scores are nearly same.

Table – 4.4: t-Value for Achievement in Odia of Boys and Girls of Primary Level Students of Kalahandi District

Gender	N	Mean	SD	df	t-value
Boys	24	68.75	9.29	51	0.867
Girls	28	69.19	9.83		

Table 4.4 shows that the t-value with df equal to 1/51 for achievement in Odia of boys and girls students of Kalahandi district of Odisha is 0.867which is not significant at 0.05 level. Therefore, the null hypothesis, namely, "there is no significant difference in mean scores of achievement in Odia of boys and girls of primary level students of Kalahandi district" is not rejected. It may be inferred that the 'Ujjwal' Programme did not produce significant differential effect on the achievement of boys and girls in Odia of primary level students of Kalahandi district. Therefore, it can be said that the achievement in Odia of primary level students of Kalahandi district is independent of gender.

Finding: There is a no significant effect of Ujjwal programme on Gender in terms of Achievement in Odia Subject of Primary level students of Kalahandi district, Odisha.

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