



Chapter - IV

ANALYSIS AND INTERPRETATION

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4.1 Introduction :-

The first chapter introduced the problem. The objectives and hypothesis were formulated. The 2nd chapter provided a solid foundation to the work. The third chapter employed methodology to achieve the objectives of the study. Tools were developed and data was collected. In this fourth chapter analysis and interpretation of numerical data with the help of statistics will be done. The statistical data describes group behaviour which makes generalization possible. It also enables the researcher to analyze and interpreted the data for drawing conclusion. The interpretation of data makes it possible to utilize the collected data in the various field of the study.

4.2. Technique used in Data Analysis :

This study has undertaken a comparative effect of achievement in English language between the students studying in Traditional approach and Structural approach gender and locale were also analysed in relations to their effect. Thus the -

- (1) Independent variable is - Intervention (Traditional approach and Structural approach)
- (2) Demographic variables are -
 - (a) Locale (Urban and Rural)
 - (b) Gender (male and female)

The effect studied was in relation to the achievement in English language.

(3) Dependent variable is - Achievement in English language.

The score obtained were grouped Intervention –wise, Local-wise and according to gender of the students. The mean scores and standard deviations for each group were computed and mean scores were compared using 't' test.

4.3. Achievement Analysis :

4.3.1 Intervention -wise :

- H_{01} There is no significant difference in the achievement in 'English Language' between the students studying through Traditional approach and Structural approach.

Table No. 4.1 't' value for the mean scores difference of achievement in the 'English Language' component of students studying through Traditional approach and Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Traditional approach	35	18.46	12.38	5.10*	68
Structural approach	35	32.34	10.29		

* Significant of 't'

=> Critical value of 't' at 0.05 level = 2.00

Critical value of 't' at 0.01 level = 2.65

The table 4.1 gives mean difference of the achievement in English language of students studying in traditional approach and Structural

approach. The calculated value of 't' is found to be 5.10. The calculated value of 't' is greater than that of table value of 't' at 0.01 level of significance. The value of 't' is significant at 0.01 level. Hence the null hypothesis is rejected at 0.01 level.

From the above table it is found that there is significant difference in the achievement in English language of the students studying the Traditional approach and the structural approach. The comparison of the means of the both approaches show that the student's achievement exposed to the Structural approach is better than those under the Traditional approach. This vindicates to findings of study Khare (1986)

H₀₂ There is no significant difference in the achievement in 'Word Power' Component between the students studying through Traditional approach and Structural approach.

Table No. 4.2 't' value for the mean scores difference of achievement in the 'Word Power' component of students studying through Traditional approach and Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Traditional approach	35	6.29	2.3	3.38	68
Structural approach	35	3.69	3.92		

* Significant of 't'

=> Critical value of 't' at 0.05 level = 2.00

Critical value of 't' at 0.01 level = 2.65

The table 4.2 gives mean differences of the achievement in Word Power Component of students studying through Traditional approach and Structural approach. The calculated value of 't' is found to be 3.38. The calculated value of 't' is greater than that of table value of 't' at 0.01 level of significance. The value of 't' is significant at 0.01 level. Hence the null hypothesis is rejected at 0.01 level.

The above presented findings clearly show that there is significant difference found in the achievement in word power component of English Language of students studying through Traditional approach and the structural approach. The comparison of the means of the both approaches show that the student's achievement under the Traditional approach is better than those under the Structural approach. Thus the students achievement in 'Word Power' is better in Traditional approach. The studies of RenuVanikat and Prithvi Vasudev(2003) favours L₁ (mother tongue) to develop more productive skill in learner. It would be pragmatic to use L₁ (mother tongue) towards meaningful communication. However it should be limited to legitimate translation of difficult words into L₁ (mother tongue) It should have purpose to correct communication with the learners. The failure of the structural approach in developing vocabulary may be due to its over emphasis on structure of sentence than vocabulary.

- **H₀₃** There is no significant difference in the achievement in 'Grammar Component' between the students studying through Traditional approach and Structural approach.

Table No. 4.3 't' value for the mean scores difference of achievement in the 'Grammar' component of students studying through Traditional approach and Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Traditional approach	35	3.43	3.17	5.09*	68
Structural approach	35	7.4	3.37		

* Significant of 't'
=> Critical value of 't' at 0.05 level = 2.00
Critical value of 't' at 0.01 level = 2.65

The table 4.3 gives mean difference of the achievement in Grammar Component of students studying in Traditional approach and structural approach. The calculated value of 't' is found to be 5.09. The calculated value of 't' is greater than that of table value of 't' at 0.01 level of significance. The value of 't' is significant at 0.01 level. Hence the null hypothesis is rejected at 0.01 level.

The value of table informs us about the significant difference found in the students achievement studying through Traditional approach and the structural approach. The comparison of the means of the both approaches show that the student's achievement under the Structural approach is better than those under the Traditional approach. The result shows that 'Grammar' should not be taught in rote memorization of rules in L₁ (mother tongue). The rules that are discovered by the pupils are easily be remembered in structural approach. There is no need to memorize the rules. As the pupils are

active participant in Structural approach in learning Grammar, their achievement is found to be high.

- H_{04} There is no significant difference in the achievement in 'Sentence formation' between the students studying through Traditional approach and Structural approach.

Table No. 4.4 't' value for the mean scores differences of achievement in the 'Sentence formation component' of students studying through Traditional approach and Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Traditional approach	35	2.26	3.11	5.99*	68
Structural approach	35	6.57	2.89		

* Significant of 't'

=> Critical value of 't' at 0.05 level = 2.00

Critical value of 't' at 0.01 level = 2.65

The table 4.4 gives mean difference of the achievement in Sentence formation component of students studying in Traditional approach and Structural approach. The calculated value of 't' is found to be 5.99. The calculated value of 't' is greater than that of table value of 't' at 0.01 level of significance. The value of 't' is significant at 0.01 level. Hence the null hypothesis is rejected at 0.01 level.

From the above table it is evident that there is significant difference in achievement in the Sentence formation component of English Language of the students studying through the Traditional

approach and the Structural approach comparison of the means of the both approaches show that the student's achievement under the structural approach is better than those under the Traditional approach. The mastery of the 'Sentence Structure' is basic feature of the structural approach. The different 'Sentence pattern are learned through habit formation. The children learnt 'Sentence structure' and easily formed sentences through Structural approach.

- **H₀₅** There is no significant difference in the achievement in 'Comprehension' between the students studying through Traditional approach and Structural approach.

Table No. 4.5 't' value for the mean scores differences of achievement in the 'Comprehension component' of students studying through Traditional approach and Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Traditional approach	35	3.83	3.27	5.23*	68
Structural approach	35	7.86	3.27		

* Significant of 't'

=> Critical value of 't' at 0.05 level = 2.00

Critical value of 't' at 0.01 level = 2.65

The table 4.5 gives mean difference of the achievement in Comprehension component of students studying in traditional approach and structural approach. The calculated value of 't' is found to be 5.23. The calculated value of 't' is greater than that of table value

of 't' at 0.01 level of significance. The value of 't' is significant at 0.01 level. Hence the null hypothesis is rejected at 0.01 level.

From the above table it can be concluded that there is significant difference in achievement in comprehension component of English Language of the students studying through Traditional approach and the Structural approach. The comparison of the means of the both approaches show that the student's achievement under the structural approach is better than those under the Traditional approach. When we compare the mean of two approach the structural approach is better than the traditional approach. The child-centred approach helped to improve the comprehension of the children.

- **H₀₆** There is no significant difference in the achievement in 'Listening comprehension' between the students studying through Traditional approach and Structural approach.

Table No. 4.6 't' value for the mean scores difference of achievement in the 'Listening comprehension component' of students studying through Traditional approach and Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Traditional approach	35	2.66	2.29	5.52*	68
Structural approach	35	6.80	3.37		

* Significant of 't'

=> Critical value of 't' at 0.05 level = 2.00

Critical value of 't' at 0.01 level = 2.65

The table 4.6 gives mean differences of the achievement in Listening comprehension component of students studying in traditional approach and structural approach. The calculated value of 't' is found to be 5.52. The calculated value of 't' is greater than that of table value of 't' at 0.01 level of significance. The value of 't' is significant at 0.01 level. Hence the null hypothesis is rejected at 0.01 level.

The above table indicates that there is significant difference in achievement in Sentence formation component of English language of in through students studying the Traditional approach and the structural approach. The comparison of the means of the both approaches show that the student's achievement under the structural approach is better than those under the Traditional approach. The students studying through structural approach gives importance to listening and speaking. Listeners construct meaning from oral input in the target language and make interpretation of the text. The structural approach facilitates listening. Therefore it improves listening comprehension. Whereas the listener in traditional approach is passive recipient hence failed to achieve better.

Analysis of these hypothesis (hypothesis 1 to 6 excepting H₀₂) reveals a achievement of the students studying through Structural approach in English language except word power component. is significantly higher that the achievement of the students studied through traditional approach. The achievement of Traditional approach is better in vocabulary component. Thus the present study categorically proves that students studying through structural

approach acquire more understanding and knowledge of English language.

Having seen the results of the study hypothesis wise, researcher, here under, makes an attempt to present the overall results to have a birds eye-view on the findings of the study. This exercise is done with a view to see the overall effect of both the approaches, namely, structural and traditional on English language learning of class-VI students of Maharashtra. This exercise is primarily undertaken to see the whole study in a perspective. Results of all the components of language are given here under :-

Table 4.7

Component	Means of Approaches		
	Mean of structural approach	Mean of traditional approach	t
Method			
Word Power	3.69	6.29	3.38
Grammar in Use	7.4	3.43	5.09
Sentence Formation	6.57	2.26	5.99
Comprehension	7.86	3.83	5.17
Listening comprehension	6.80	2.66	5.52

The table 4.7 reveals that the mean of student achievement under the structural approach is highest in 'comprehension' and least in 'word power'. The students studying through structural approach

achieved better in comprehension grammar, Listening comprehension and sentence formation respectively and achieved least in 'Word Power' Component. Whereas students achievement exposed to Traditional approach, the mean of 'word power' is highest and lowest in sentence formation.

The results of the present study add a new dimension to English languages teaching. The new perspective (approach) in teaching English emphasis of in the use of target language whereas in traditional approach there its use is negligent. The present study provides a perspective that teacher can use mother tongue but he /she should aware extend the use of L₁ and purpose to the use of L₁. The teacher can translate difficult words into L₁. But teacher should not too much engaged in translating sentences and cramming up of grammatical rules. The structural approach to be better in competencies such as grammar, comprehension and listening comprehension.

The studies of K Revaty and Kamlesh Sadanda favours the use of Aural - oral approach in teaching English. The listening and speaking should be developed because 90%of human activities are being performed through these skills. Again the study shows that the listening and speaking., skills should given preference over writing and reading while teaching English at elementary level. As the structural approach gives importance to speaking and listening than writing, the students in structural approach gain better

4.3.2. Localwise :

- H_{07} There is no significant difference in the achievement in 'English language' of the urban students studying through Traditional approach and Structural approach.

Table No. 4.8 't' value for the mean scores differences of achievement in the 'English Language' of the urban students studying through Traditional approach and Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Traditional approach	20	19.15	9.16	5.12*	38
Structural approach	20	33.8	8.64		

* Significant of 't'

=> Critical value of 't' at 0.05 level = 2.02

Critical value of 't' at 0.01 level = 2.71

The table 4.8 gives mean differences of the achievement in English language of urban students studying in traditional approach and structural approach. The calculated value of 't' is found to be 5.12. The calculated value of 't' is greater than that of table value of 't' at 0.01 level of significance. The value of 't' is significant at 0.01 level. Hence the null hypothesis is rejected at 0.01 level and there is only 1% chance of there being no difference in achievement.

This table informs that, there is significant difference in the achievement in English language of the urban students studying through Traditional approach and structural approach. The comparison of means of both approaches show that urban students

achievement under the structural approach is better than traditional approach.

- **H₀₈** There is no significant difference in the achievement in 'English language' of the Rural students studying through Traditional approach and Structural approach.

Table No. 4.9 't' value for the mean scores differences of achievement in the 'English Language' of the Rural students studying through Traditional approach and Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Traditional approach	15	17.22	10.67	3.69*	28
Structural approach	15	29.67	9.98		

* Significant of 't'

=> Critical value of 't' at 0.05 level = 2.05

Critical value of 't' at 0.01 level = 2.76

The table 4.9 gives mean differences of the achievement in English language of Rural students studying in traditional approach and structural approach. The calculated value of 't' is found to be 3.69. The calculated value of 't' is greater than that of table value of 't' at 0.01 level of significance. The value of 't' is significant at 0.01 level. Hence the null hypothesis is rejected at 0.01 level and there is only 1% chance of there being no difference in achievement.

The table shows that there is significant difference in the achievement in English language of the Rural students studying

through Traditional approach and structural approach. The comparison of means of both approaches show that Rural students achievement under the structural approach is better than traditional approach.

- H_0 : There is no significant difference in the achievement in 'English language' of the Urban & Rural students studying through Structural approach.

Table No. 4.10 't' value for the mean scores differences of achievement in the 'English Language' of the Urban & Rural students studying through Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Urban	20	33.8	8.64	1.28*	33
Rural	15	29.67	9.98		

* Not significant

=> Critical value of 't' at 0.05 level = 2.03

Critical value of 't' at 0.01 level = 2.72

The table 4.10 gives mean differences of the achievement in English language of Urban & Rural students studying in traditional approach and structural approach. The calculated value of 't' is found to be 1.28 The calculated value of 't' is greater than that of table value of 't' at 0.01 level of significance. The value of 't' is not significant at 0.01 level. Hence the null hypothesis is accepted at 0.01.

So, the table informs us that there is no significant difference in the achievement in English language of the Urban & Rural students studying through Traditional approach and structural approach. The 't' value computed in this analysis reveal that locale is not playing any role in the achievement when the students are taught through structural approach. The structural approach proves to be equally effective for both Urban and Rural students.

4.3.3. Genderwise :

- H_{010} There is no significant difference in the achievement in 'English language' of the Boy studying through Traditional approach and Structural approach.

Table No. 4.11 't' value for the mean scores differences of achievement in the 'English Language' of the boys studying through Traditional approach and Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Traditional approach	21	18	10.78	4.50*	40
Structural approach	21	32.28	9.78		

* Significant of 't'

=> Critical value of 't' at 0.05 level = 2.02

Critical value of 't' at 0.01 level = 2.71

The table 4.11 gives mean differences of the achievement in English language of Boys studying in Traditional approach and structural approach. The calculated value of 't' is found to be 4.50. The calculated value of 't' is greater than that of table value of 't' at 0.01

level of significance. The value of 't' is significant at 0.01 level. Hence the null hypothesis is rejected at 0.01 level.

So, the table informs us that there is significant difference in the achievement in English language of the Boys studying through Traditional approach and structural approach. The comparison of means of both approaches show that boys studying achievement under the Structural approach is better than Traditional approach.

- H_{011} There is no significant difference in the achievement in 'English language' of the Girls studying through Structural approach.

Table No. 4.12 't' value for the mean scores differences of achievement in the 'English Language' of the Girls studying through Structural approach.

Category	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Traditional approach	14	19.14	10.78	3.41	26
Structural approach	14	32.43	9.84		

* Significant of 't'

=> Critical value of 't' at 0.05 level = 12.06

Critical value of 't' at 0.01 level = 2.98

The table 4.12 gives mean differences of the achievement in English language of Girls studying in Traditional approach and structural approach. The calculated value of 't' is found to be 3.41 The calculated value of 't' is greater than that of table value of 't' at 0.01

level of significance. The value of 't' is significant at 0.01 level. Hence the null hypothesis is rejected at 0.01 level.

From the above table it is evident that there is significant difference in the achievement in English language of the Girls studying through Traditional approach and structural approach. The comparison of means of both approaches show that Girls studying achievement under the Structural approach is better than Traditional approach.

- **H₀₁₂** There is no significant difference in the achievement in 'English language' of the Girls & Boys studying through Structural approach.

Table No. 4.13 't' value for the mean scores differences of achievement in the 'English Language' of the Urban & Rural students studying through Structural approach.

Gender	N	Mean (m)	Standard deviation (σ)	't' value	degree of freedom (df)
Boys	21	32.28	9.78	0.042*	33
Girls	14	32.43	10.84		

* Not significant

=> Critical value of 't' at 0.05 level = 2.03

Critical value of 't' at 0.01 level = 2.72

The table 4.13 gives mean differences of the achievement in English language of Girls & Boys studying through structural approach. Table 4.13 gives 't' value for the man scores in English

language of boys and girls studying through structural approach. The calculated value of 't' is found to be 0.042. The calculated value of 't' is less than table value of 't' at 0.01 level of significance. The 't' value is not significant at 0.01 level of significance. Hence the null hypothesis is accepted at 0.01 level of significance.

From the above table it is evident that there is no significant difference in the achievement in the English language of the boys and girls studying through structural approach. The 't' value computed in the analysis reveals that gender is not playing a role in the achievement when the students are taught through structural approach. The structural approach proves to be equally effective for both genders i.e. boys and girls.