

CHAPTER-5

**PROFICIENCY OF
THE TEACHERS
OF UPPER
PRIMARY LEVEL**

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PROFICIENCY OF THE TEACHERS OF UPPER

PRIMARY LEVEL

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5.1 Introduction

This chapter deals with the hypothesis testing and variable studies. The effect of each variable viz sex, age, educational qualifications, teaching experience and special subject/method is studied in detail in this chapter.

5.2 Testing of Teachers' Proficiency in English: Variables Study

According to the variables the null hypothesis were formulated by the investigator. To study the effect of independent variables on the part wise score and overall score of proficiency in English the investigator has analyzed the data for variables study.

5.2.1 Sex difference in the Proficiency in English

5.2.1.1 Proficiency in terms of vocabulary

To study the sex differences in the vocabulary test, mean, S.D. and t-ratio were computed which are shown below in the table no 5.1

Table 5.1: 't' ratio of vocabulary of male and female teachers

Part-1	Sex (Male=1, Female=2)	N	Mean	Std. Deviation	't' ratio
	1	50	21.40	5.079	-1.066
	2	100	22.31	4.607	

It is observed from the table 5.1 that the obtained t ratio is -1.066, which is less than the table 't' ratio 1.96, at 0.05 level of significance. Therefore the null hypothesis: "There is no significant difference in the mean score of vocabulary of the teachers working in the RMC in relation to sex" is accepted. So, it is concluded that there is no significant sex difference in the mean score of vocabulary test of proficiency in English.

It is also observed from the table that the mean score of male is 21.40 and mean score of female is 22.31. So the mean score of female is higher than the mean score of male. The difference does not reach at the any level of significance. So, the difference is negligible.

5.2.1.2 Proficiency in terms of functional grammar

Table 5.2: 't' ratio of functional grammar of male and female teachers

Part-2	Sex	N	Mean	Std. Deviation	't' ratio
	1	50	20.24	5.988	-0.953
	2	100	21.14	4.183	

It is observed from the table 5.2 that the obtained t ratio is -0.953, which is less than the table 't' ratio 1.96, at 0.05 level of significance. Therefore the null hypothesis: "There is no significant difference in the mean score of grammar of the teachers working in the RMC in relation to sex" is accepted. So, it is concluded that there is no significant sex difference in the mean score of grammar test of proficiency in English.

It is also observed from the table that the mean score of male is 20.24 and mean score of female is 21.14. So the mean score of female is higher than the mean score of male. The difference does not reach at the any level of significance. So, the difference is negligible.

5.2.1.3 Proficiency in terms of reading comprehension

Table 5.3: 't' ratio of reading comprehension of male and female teachers

Part-3	Sex	N	Mean	Std. Deviation	't' ratio
	1	50	11.28	4.743	-1.498
	2	100	12.52	4.848	

It is observed from the table 5.3 that the obtained t ratio is -1.498, which is less than the table 't' ratio 1.96, at 0.05 level of significance. Therefore the null hypothesis: "There is no significant difference in the mean score of reading comprehension of the teachers working in the RMC in relation to sex" is accepted. So, it is concluded that there is no significant sex difference in the mean score of reading comprehension test of proficiency in English.

It is also observed from the table that the mean score of male is 11.28 and mean score of female is 12.52. So the mean score of female is higher than the mean score of male. The difference does not reach at the any level of significance. So, the difference is negligible.

5.2.1.4 Proficiency in terms of overall score

Table 5.4: 't' ratio of overall score of male and female teachers

Total Marks	Sex	N	Mean	Std. Deviation	't' ratio
	1	50	52.92	13.721	-1.344
	2	100	55.97	11.755	

It is observed from the table 5.4 that the obtained t ratio is -1.344, which is less than the table 't' ratio 1.96, at 0.05 level of significance. Therefore the null hypothesis: "There is no significant difference in the mean of overall score of the teachers working in the RMC in relation to sex" is accepted. So, it is concluded that there is no significant sex difference in mean of overall score of proficiency test in English.

It is also observed from the table that the mean score of male is 52.92 and mean score of female is 55.97. So the mean score of female is higher than the mean score of male. The difference does not reach at the any level of significance. So, the difference is negligible.

5.2.2 Age differences in the Proficiency in English

5.2.2.1 Proficiency in terms of vocabulary

To study the age differences in the vocabulary test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.5 and 5.6 respectively.

Table 5.5: Summary of the data of proficiency in Vocabulary

	Groups	N	Sum	Mean	Variance
Part-1	Up to 30=1	68	1586	23.32	23.745
	31 to 40=2	53	1142	21.55	18.676
	Above 40=3	29	573	19.76	19.833

Table 5.6: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	275.669	2	137.834	6.500
Within Groups	3117.325	147	21.206	
Total	3392.993	149		

* Significance at 0.05 level=3.0576

* Significance at 0.01 level=4.7525

It is observed from the table 5.5 and table 5.6 that the value of 'F' ratio is 6.500. The critical value of 'F' ratio at df 2 and 147 is 3.0576 at 0.05 level of significance and 4.7525 at 0.01 level of significance. The obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no significant difference in the mean score of vocabulary of the teachers working in the RMC in relation to their age" is rejected. Significant 'F' ratio indicates that a set of three age groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.7 shows the difference between the pairs of mean.

Table 5.7: Least significant difference between the pairs of mean

Pairs of Age group	't' ratio	Mean Difference
Up to 30 and 31 to 40	2.124	1.776
Up to 30 and Above 40	3.507	3.565
31 to 40 and Above 40	1.757	1.789

From the table 5.7 it is observed that the least significant difference between the means of age groups of up to 30 and 31 to 40 is 2.124, which is higher than the least significant difference at 0.05 level of significance. The obtained Mean Difference between this pair is 1.776. The mean of up to 30 age group is 23.32 and the mean of 31 to 40 age group is 21.25. It shows that the age group of up to 30 is higher than the age group of 31 to 40 in the vocabulary score of English proficiency test.

The least significant difference between the means of age groups up to 30 and above 40 is 3.507, which is higher than the least significant difference at 0.05 level of significance. The obtained Mean Difference between this pair is 3.565. The mean of up to 30 age group is 23.32 and the mean of above 40 age group is 19.76. It shows that the age group of up to 30 is higher than the age group of 31 to 40 in the vocabulary score of English proficiency test.

The least significant difference between the means of age groups of 31 to 40 and above 40 is 1.757 at 0.05 level of significance, which is not higher than the least significant difference. The obtained Mean Difference between this pair is 1.789. The mean of 31 to 40 age group is 21.25 and the mean of above 40 age group is 19.76. It shows that the age group of 31 to 40 is higher than the age group of above 40 in the vocabulary score of English proficiency test.

Thus it is observed that the proficiency of the age group of up to 30 is higher than the other groups in terms of vocabulary.

5.2.2.2 Proficiency in terms of functional grammar

To study the age differences in the functional grammar test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.8 and 5.9 respectively.

Table 5.8: Summary of the data of proficiency in functional grammar

Part-2	Age	N	Sum	Mean	Variance
	1	68	1479	21.75	23.175
	2	53	1101	20.77	23.717
	3	29	546	18.83	19.862
	Total	150	3126	20.84	23.598

Table 5.9: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	173.989	2	86.995	3.826
Within Groups	3342.171	147	22.736	
Total	3516.160	149		

It is observed from the table 5.8 and table 5.9 that the value of 'F' ratio is 3.826. The critical value of 'F' ratio at df 2 and 147 is 3.0576 at 0.05 level of significance and 4.7525 at 0.01 level of significance. Obtained 'F' ratio is higher than the critical value of 'F' ratio at only 0.05. Therefore, the null hypothesis: "There is no significant difference in the mean score of functional grammar of the teachers working in the RMC in relation to their age" is rejected. Significant 'F' ratio indicates that a set of three age groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.10 shows the difference between the pairs of mean.

Table 5.10: Least significant difference between the pairs of mean

Pairs of Age group	't' ratio	Mean Difference
Up to 30 and 31 to 40	1.100	0.976
Up to 30 and Above 40	2.886	2.922
31 to 40 and Above 40	1.829	1.946

From the table 5.10 it is observed that the least significant difference between the means of age groups up to 30 and 31 to 40 is 1.100 at 0.05 level of significance, which is slightly higher than the least significant difference. The obtained Mean Difference between this pair is 0.976. The mean of up to 30 age group is 21.75 and the mean of 31 to 40 age group is 20.77. It shows that the age group of up to 30 is higher than the age group of 31 to 40 in the functional grammar score of English proficiency test.

The least significant difference between the means of age groups up to 30 and above 40 is 2.886 at 0.05 level of significance, which is higher than the least significant difference. The obtained Mean Difference between this pair is 2.922. The mean of up to 30 age group is 21.75 and the mean of above 40 age group is 18.83. It shows that the age group of up to 30 is higher than the age group of 31 to 40 in the functional grammar score of English proficiency test.

The least significant difference between the means of age groups of 31 to 40 and above 40 is 1.829 at 0.05 level of significance, which is not higher than the least significant difference. The obtained Mean Difference between this pair is 1.946. The mean of 31 to 40 age group is 20.77 and the mean of above 40 age group is 18.83. It shows that the age group of 31 to 40 is higher than the age group of above 40 in the functional grammar score of English proficiency test.

Thus it is observed that the proficiency of the age group of up to 30 is higher than the others in terms of functional grammar.

5.2.2.3 Proficiency in terms of reading comprehension

To study the age differences in the reading comprehension test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.11 and 5.12 respectively.

Table 5.11: Summary of the data of proficiency in reading comprehension

	Age	N	Sum	Mean	Variance
Part-3	1	68	867	12.75	27.116
	2	53	632	11.92	22.340
	3	29	317	10.93	15.424
	Total	150	1816	12.11	23.358

Table 5.12: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	69.983	2	34.992	1.508
Within Groups	3410.310	147	23.199	
Total	3480.293	149		

It is observed from the table 5.11 and table 5.12 that the value of 'F' ratio is 1.508. The critical value of 'F' ratio at df 2 and 147 is 3.0576 at 0.05 level of significance and 4.7525 at 0.01 level of significance. Obtained 'F' ratio is not higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no significant difference in the mean score of reading comprehension of the teachers working in the RMC in relation to their age" is accepted. Significant 'F' ratio indicates that a set of three age groups mean is not significantly different.

5.2.2.4 Proficiency in terms of overall score

To study the age differences in the overall score of proficiency test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.13 and 5.14 respectively.

Table 5.13: Summary of the data of proficiency in terms of overall score

Total Score	Age	N	Sum	Mean	Variance
	1	68	3932	57.82	174.446
	2	53	2875	54.25	134.227
	3	29	1436	49.52	110.830
	Total	150	8243	54.95	155.803

Table 5.14: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	1443.738	2	721.869	4.874
Within Groups	21770.935	147	148.102	
Total	23214.673	149		

It is observed from the table 5.13 and table 5.14 that the value of 'F' ratio is 4.874. The critical value of 'F' ratio at df 2 and 147 is 3.0576 at 0.05 level of significance and 4.7525 at 0.01 level of significance. Obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no significant difference in the mean of overall score of the teachers working in the RMC in relation to their age" is rejected. Significant 'F' ratio indicates that a set of three age groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.15 shows the difference between the pairs of mean.

Table 5.15: Least significant difference between the pairs of mean

Pairs of Age group	't' ratio	Mean Difference
Up to 30 and 31 to 40	1.585	3.578
Up to 30 and Above 40	3.287	8.306
31 to 40 and Above 40	1.876	4.728

From the table 5.15 it is observed that the difference between the means of age groups up to 30 and 31 to 40 is 1.585 at 0.05 level of significance, which is not higher than the least significant difference. The obtained Mean Difference between this pair is 3.578. The

mean of up to 30 age group is 57.82 and the mean of 31 to 40 age group is 54.25. It shows that the age group of up to 30 is higher than the age group of 31 to 40 in the overall score of English proficiency test.

The difference between the means of age groups up to 30 and above 40 is 3.287 at 0.05 level of significance, which is higher than the least significant difference. The obtained Mean Difference between this pair is 8.306. The mean of up to 30 age group is 57.82 and the mean of above 40 age group is 49.52. It shows that the age group of up to 30 is higher than the age group of 31 to 40 in the overall score of English proficiency test.

The difference between the means of age groups of 31 to 40 and above 40 is 1.876 at 0.05 level of significance, which is not higher than the least significant difference. The obtained Mean Difference between this pair is 4.728. The mean of 31 to 40 age group is 54.25 and the mean of above 40 age group is 49.52. It shows that the age group of 31 to 40 is higher than the age group of above 40 in the overall score of English proficiency test.

Thus it is concluded that the proficiency of the age group of up to 30 is higher than the other groups in terms of overall score of proficiency test.

5.2.3 Educational Qualifications wise difference in the Proficiency in English

5.2.3.1 Proficiency in terms of vocabulary

To study the educational qualifications wise differences in the vocabulary test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.16 and 5.17 respectively.

Table 5.16: Summary of the data of proficiency in Vocabulary

E.Q.	N	Sum	Mean	Variance
B.A. B.Ed.=1	29	578	19.93	15.067
M.A. B.Ed.=2	50	1135	22.70	25.398
B.A. PTC=3	37	786	21.24	14.689
M.A. PTC=4	18	420	23.33	13.176
Additional Qualification=5	16	382	23.88	47.717
Total	150	3301	22.01	22.772

Table 5.17: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	258.070	4	64.518	2.984
Within Groups	3134.923	145	21.620	
Total	3392.993	149		

* Significance at 0.05 level=2.4341

* Significance at 0.01 level=3.4512

It is observed from the table 5.16 and table 5.17 that the value of 'F' ratio is 2.984. The critical value of 'F' ratio at df 4 and 145 is 2.4341 at 0.05 level of significance only. Obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 level of significance only. Therefore, the null hypothesis: "There is no significant difference in the mean of vocabulary score of teachers working in the RMC in relation to the Education Qualifications" is rejected. Significant 'F' ratio indicates that a set of five educational qualification groups mean is significantly different.

Table 5.18: Least significant difference between the pairs of mean

Pairs of EQ group	't' ratio	Mean Difference
M.A. B.Ed. and B.A. B.Ed.	2.732	2.769
B.A. PTC and B.A. B.Ed.	1.371	1.312
M.A. PTC and B.A. B.Ed.	3.041	3.402
Additional Q. and B.A. B.Ed.	2.108	3.944
M.A. B.Ed. and B.A. PTC	1.531	0.129
M.A. PTC and M.A. B.Ed.	0.569	0.573
Additional Q. and M.A. B.Ed.	0.629	0.536
M.A. PTC and B.A. PTC	1.967	2.090
Additional Q. and B.A. PTC	1.432	2.632
Additional Q. and M.A. PTC	0.281	0.542

It is observed from the table 5.18 that there is a significant difference between the pairs of mean at 0.05 level of significance. Out of 10 pairs of mean, the significant difference is found in only 4 pairs of the educational qualifications. They are:

1. The group of M.A. B.Ed. and B.A. B.Ed.
2. The group of M.A. PTC and B.A. B.Ed.
3. The group of Additional Q. and B.A. B.Ed.
4. The group of M.A. PTC and B.A. PTC

It is concluded from the result that educational qualifications affect significantly over the proficiency of vocabulary of the teachers.

5.2.3.2 Proficiency in terms of functional grammar

To study the educational qualifications wise differences in the functional grammar test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.19 and 5.20 respectively.

Table 5.19: Summary of the data of proficiency in functional grammar

E.Q.	N	Sum	Mean	Variance
1	29	533	18.38	21.030
2	50	1093	21.86	25.960
3	37	737	19.92	7.632
4	18	378	21.00	10.824
5	16	385	24.06	51.396
Total	150	3126	20.84	23.598

Table 5.20: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	425.618	4	106.405	4.992
Within Groups	3090.542	145	21.314	
Total	3516.160	149		

It is observed from the table 5.19 and table 5.20 that the value of 'F' ratio is 4.992. The critical value of 'F' ratio at df 4 and 145 is 2.4341 at 0.05 level of significance and 3.4512 at 0.01 level of significance. Obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no significant difference in the mean score of functional grammar of the teachers working

in the RMC in relation to the educational qualifications” is rejected. Significant ‘F’ ratio indicates that a set of five educational qualification groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.21 shows the difference between the pairs of mean.

Table 5.21: Least significant difference between the pairs of mean

Pairs of EQ group	‘t’ ratio	Mean Difference
M.A. B.Ed. and B.A. B.Ed.	3.12	3.481
B.A. PTC and B.A. B.Ed.	1.595	1.540
M.A. PTC and B.A. B.Ed.	2.275	2.621
Additional Q. and B.A. B.Ed.	2.864	5.683
M.A. B.Ed. and B.A. PTC	2.279	1.941
M.A. B.Ed. and M.A. PTC	0.812	0.860
Additional Q. and M.A. B.Ed.	1.140	2.203
M.A. PTC and B.A. PTC	1.203	1.081
Additional Q. and B.A. PTC	2.241	4.144
Additional Q. and M.A. PTC	1.568	3.063

It is observed from the table 5.21 that there is a significant difference between the pairs of mean at 0.05 level of significance. Out of 10 pairs of mean, the significant difference is found in 5 pairs of the educational qualifications. They are:

1. The group of M.A. B.Ed. and B.A. B.Ed.
2. The group of M.A. PTC and B.A. B.Ed.
3. The group of Additional Q. and B.A. B.Ed.
4. The group of M.A. B.Ed. and B.A. PTC
5. The group of Additional Q. and B.A. PTC

It is concluded from the result that educational qualifications affect significantly over the proficiency of functional grammar of the teachers.

5.2.3.3 Proficiency in terms of reading comprehension

To study the educational qualifications wise differences in the reading comprehension test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.22 and 5.23 respectively.

Table 5.22: Summary of the data of proficiency in reading comprehension

E.Q.	N	Sum	Mean	Variance
1	29	300	10.34	19.805
2	50	659	13.18	21.498
3	37	377	10.19	9.158
4	18	239	13.28	19.271
5	16	241	15.06	51.129
Total	150	1816	12.11	23.358

Table 5.23: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	448.137	4	112.034	5.358
Within Groups	3032.156	145	20.911	
Total	3480.293	149		

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.24 shows the difference between the pairs of mean.

Table 5.24: Least significant difference between the pairs of mean

Pairs of EQ group	't' ratio	Mean Difference
M.A. B.Ed. and B.A. B.Ed.	2.688	2.835
B.A. B.Ed. and B.A. PTC	0.161	0.156
M.A. PTC and B.A. B.Ed.	2.215	2.933
Additional Q. and B.A. B.Ed.	2.395	4.718
M.A. B.Ed. and B.A. PTC	3.634	2.991
M.A. B.Ed. and M.A. PTC	0.080	0.098
Additional Q. and M.A. B.Ed.	0.989	1.904
M.A. PTC and B.A. PTC	2.690	3.089
Additional Q. and B.A. PTC	2.626	4.873
Additional Q. and M.A. PTC	0.864	1.785

It is observed from the table 5.24 that out of 10 pairs of mean, the significant difference is found in 6 pairs. They are:

1. The group of M.A. B.Ed. and B.A. B.Ed.
2. The group of M.A. PTC and B.A. B.Ed.
3. The group of Additional Q. and B.A. B.Ed.
4. The group of M.A. B.Ed. and B.A. PTC
5. The group of M.A. PTC and B.A. PTC
6. The group of Additional Q. and B.A. PTC

There is no significant difference between other four pairs of mean.

It is concluded from the result that educational qualifications significantly affect over the score of reading comprehension.

5.2.3.4 Proficiency in terms of overall score

To study the age differences in the overall score of proficiency test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table no. 5.25 and 5.26 respectively.

Table 5.25: Summary of the data of proficiency in terms of overall score

E.Q.	N	Sum	Mean	Variance
1	29	1411	48.66	118.377
2	50	2887	57.74	150.523
3	37	1900	51.35	49.512
4	18	1037	57.61	96.840
5	16	1008	63.00	394.267
Total	150	8243	54.95	155.803

Table 5.26: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	3181.791	4	795.448	5.758
Within Groups	20032.882	145	138.158	
Total	23214.673	149		

It is observed from the table 5.25 and table 5.26 that the value of 'F' ratio is 5.758. The critical value of 'F' ratio at df 4 and 145 is 2.4341 at 0.05 level of significance and 3.4512 at 0.01 level of significance. Obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no significant difference in the mean of overall score of the teachers working in the RMC in relation to the age" is rejected. Significant 'F' ratio indicates that a set of five educational qualifications groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.27 shows the difference between the pairs of mean.

Table 5.27: Least significant difference between the pairs of mean

Pairs of EQ group	't' ratio	Mean Difference
M.A. B.Ed. and B.A. B.Ed.	3.411	9.085
B.A. PTC and B.A. B.Ed.	1.158	2.696
M.A. PTC and B.A. B.Ed.	2.912	8.956
Additional Q. and B.A. B.Ed.	2.677	14.375
M.A. B.Ed. and B.A. PTC	3.064	6.389
M.A. B.Ed. and M.A. PTC	0.044	0.129
Additional Q. and M.A. B.Ed.	1.000	5.260
M.A. PTC and B.A. PTC	2.415	6.260
Additional Q. and B.A. PTC	2.285	11.649
Additional Q. and M.A. PTC	0.984	5.389

It is observed from the table 5.27 that out of 10 pairs of mean, the significant difference is found in 6 pairs. They are:

1. The group of M.A. B.Ed. and B.A. B.Ed.
2. The group of M.A. PTC and B.A. B.Ed.
3. The group of Additional Q. and B.A. B.Ed.
4. The group of M.A. B.Ed. and B.A. PTC
5. The group of M.A. PTC and B.A. PTC
6. The group of Additional Q. and B.A. PTC

There is no significant difference between other four pairs of mean.

It is concluded from the result that educational qualifications significantly affect over the score of reading comprehension. The results also show that the teachers with the master degree and with additional degrees like M.Ed., M.Phil., or Ph.D. score higher than the teachers with the bachelor degree which means that the proficiency of highly educated teachers is higher.

5.2.4 Teaching experience wise difference in the Proficiency in English

To study the teaching experience difference in the vocabulary test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.28 and 5.29 respectively.

5.2.4.1 Proficiency in terms of vocabulary

Table 5.28: Summary of the data of proficiency in Vocabulary

Teaching Exp	Mean	N	Std. Deviation	Sum
Below 5 =1	18.81	43	3.996	809
5 to 10 =2	24.29	75	4.152	1822
above 10=3	20.94	32	4.325	670

Table 5.29: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	867.060	2	433.530	25.230
Within Groups	2525.933	147	17.183	
Total	3392.993	149		

* Significance at 0.05 level=3.0576

* Significance at 0.01 level=4.7525

It is observed from the table 5.28 and table 5.29 that the value of 'F' ratio is 25.230. The critical value of 'F' ratio at df 2 and 147 is 3.0576 at 0.05 level of significance and 4.7525 at 0.01 level of significance. The obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no

significant difference in the mean score of vocabulary of the teachers working in the RMC in relation to their teaching experience” is rejected. Significant ‘F’ ratio indicates that a set of three teaching experience groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.30 shows the difference between the pairs of mean

Table 5.30: Least significant difference between the pairs of mean

Pairs of Teaching Exp.	‘t’ ratio	Mean Difference
5 to 10 and Below 5	7.067	5.479
above 10 and Below 5	2.172	2.124
5 to 10 and above 10	3.719	3.356

From the table 5.30 it is observed that the least significant difference between the means of teaching experience groups 5 to 10 years and below 5 years is 7.067 which are higher than the least significant difference at 0.05 level of significance. The obtained Mean Difference between this pair is 5.479. The mean of 5 to 10 years group is 24.29 and the mean of below 5 years group is 18.81. It shows that the teaching experience group of 5 to 10 years is higher than the teaching experience group of below 5 years in the vocabulary score of English proficiency test.

The least significant difference between the means of teaching experience groups of above 10 and below 5 is 2.172 at 0.05 level of significance, which is higher than the least significant difference. The obtained Mean Difference between this pair is 2.124. The mean of above 10 years experience group is 20.94 and the mean of below 5 years experience group is 18.81. It shows that the teaching experience group of above 10 years is higher than the below 5 years experience group in the vocabulary score of English proficiency test.

The least significant difference between the means of teaching experience groups of 5 to 10 and above 10 is 3.719 at 0.05 level of significance, which is higher than the least significant difference. The obtained Mean Difference between this pair is 3.356. The

mean of 5 to10 years experience group is 24.29 and the mean of below above 10 years experience group is 20.94. It shows that the teaching experience group of 5 to10 years is higher than the above 10 years experience group in the vocabulary score of English proficiency test.

It is concluded from the results that the teaching experience significantly affects to the score of vocabulary.

5.2.4.2 Proficiency in terms of functional grammar

To study the teaching experience difference in the functional grammar test the ANOVA was used and ‘F’ ratio was computed. The summary of the data and ANOVA is shown in the Table no. 5.31 and 5.32 respectively.

Table 5.31: Summary of the data of proficiency in functional grammar

Teaching Exp	Mean	N	Std. Deviation	Sum
1	18.09	43	4.439	778
2	22.95	75	3.952	1721
3	19.59	32	5.161	627
Total	20.84	150	4.858	3126

Table 5.32: ANOVA

Source of Variation	SS	Df	MS	F
Between Groups	707.027	2	353.513	18.499
Within Groups	2809.133	147	19.110	
Total	3516.160	149		

It is observed from the table 5.31 and table 5.32 that the value of ‘F’ ratio is 18.499. The critical value of ‘F’ ratio at df 2 and 147 is 3.0576 at 0.05 level of significance and 4.7525 at 0.01 level of significance. Obtained ‘F’ ratio is higher than the critical value of ‘F’ ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: “There is no significant difference in the mean score of functional grammar of the teachers working in the RMC in relation to their teaching experience” is rejected. Significant ‘F’ ratio indicates that a set of three teaching experience groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.33 shows the difference between the pairs of mean.

Table 5.33: Least significant difference between the pairs of mean

Pairs of Teaching Exp.	't' ratio	Mean Difference
5 to 10 and Below 5	5.945	4.854
above 10 and Below 5	1.321	1.501
5 to 10 and above 10	3.287	3.353

From the table 5.33 it is observed that the least significant difference between the means of teaching experience groups 5 to 10 years and below 5 years is 5.945 which are higher than the least significant difference at 0.05 level of significance. The obtained Mean Difference between this pair is 4.854. The mean of 5 to 10 years group is 22.95 and the mean of below 5 years group is 18.09. It shows that the teaching experience group of 5 to 10 years is higher than the teaching experience group of below 5 years in the grammar score of English proficiency test.

The least significant difference between the means of teaching experience groups of above 10 and below 5 is 1.321 at 0.05 level of significance, which is not higher than the least significant difference. The obtained Mean Difference between this pair is 1.501. The mean of above 10 years experience group is 19.59 and the mean of below 5 years experience group is 18.09. It shows that the teaching experience group of above 10 years is higher than the below 5 years experience group in the vocabulary score of English proficiency test.

The least significant difference between the means of teaching experience groups of 5 to 10 and above 10 is 3.287 at 0.05 level of significance, which is higher than the least significant difference. The obtained Mean Difference between this pair is 3.353. The mean of 5 to 10 years experience group is 22.95 and the mean of above 10 years experience group is 19.59. It shows that the teaching experience group of 5 to 10 years is higher than the above 10 years experience group in the functional grammar score of English proficiency test.

It is concluded from the results that the teaching experience significantly affects the score of grammar.

5.2.4.3 Proficiency in terms of reading comprehension

To study the teaching experience difference in the reading comprehension test the ANOVA was used and ‘F’ ratio was computed. The summary of the data and ANOVA is shown in the Table 5.34 and 5.35 respectively.

Table 5.34: Summary of the data of proficiency in reading comprehension

Teaching Exp	Mean	N	Std. Deviation	Sum
1	9.60	43	3.600	413
2	13.81	75	5.064	1036
3	11.47	32	4.166	367
Total	12.11	150	4.833	1816

Table 5.35: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	500.659	2	250.329	12.350
Within Groups	2979.634	147	20.270	
Total	3480.293	149		

It is observed from the table 5.34 and table 5.35 that the value of ‘F’ ratio is 12.350. The critical value of ‘F’ ratio at df 2 and 147 is 3.0576 at 0.05 level of significance and 4.7525 at 0.01 level of significance. Obtained ‘F’ ratio is higher than the critical value of ‘F’ ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: “There is no significant difference in the mean score of reading comprehension of the teachers working in the RMC in relation to the teaching experience” is rejected. Significant ‘F’ ratio indicates that a set of three teaching experience groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.36 shows the difference between the pairs of mean.

Table 5.36: Least significant difference between the pairs of mean

Pairs of Teaching Exp.	't' ratio	Mean Difference
5 to 10 and Below 5	5.248	4.209
above 10 and Below 5	2.029	1.864
5 to 10 and above 10	2.493	2.345

From the table 5.36 it is observed that the least significant difference between the means of teaching experience groups 5 to 10 years and below 5 years is 5.248 which are higher than the least significant difference at 0.05 level of significance. The obtained Mean Difference between this pair is 4.209. The mean of 5 to 10 years group is 13.81 and the mean of below 5 years group is 9.60. It shows that the teaching experience group of 5 to 10 years is higher than the teaching experience group of below 5 years in the reading comprehension score of English proficiency test.

The least significant difference between the means of teaching experience groups of above 10 and below 5 is 2.029 at 0.05 level of significance, which is higher than the least significant difference. The obtained Mean Difference between this pair is 1.864. The mean of above 10 years experience group is 11.47 and the mean of below 5 years experience group is 9.60. It shows that the teaching experience group of above 10 years is higher than the below 5 years experience group in the reading comprehension score of English proficiency test.

The least significant difference between the means of teaching experience groups of 5 to 10 and above 10 is 2.493 at 0.05 level of significance, which is higher than the least significant difference. The obtained Mean Difference between this pair is 2.345. The mean of 5 to 10 years experience group is 13.81 and the mean of above 10 years experience group is 11.47. It shows that the teaching experience group of 5 to 10 years is higher than the above 10 years experience group in the reading comprehension score of English proficiency test.

It is concluded from the results that the teaching experience significantly affect to the score of reading comprehension.

5.2.4.4 Proficiency in terms of overall score

To study the teaching experience difference in the overall score test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.37 and 5.38 respectively.

Table 5.37: Summary of the data of proficiency in terms of overall score

Teaching Exp	Mean	N	Std. Deviation	Sum
1	46.51	43	8.160	2000
2	61.05	75	11.505	4579
3	52.00	32	12.032	1664
Total	54.95	150	12.482	8243

Table 5.38: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	6134.142	2	3067.071	26.396
Within Groups	17080.531	147	116.194	
Total	23214.673	149		

It is observed from the table 5.37 and table 5.38 that the value of 'F' ratio is 26.396. The critical value of 'F' ratio at df 2 and 147 is 3.0576 at 0.05 level of significance and 4.7525 at 0.01 level of significance. Obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no significant difference in the mean of overall score of the teachers working in the RMC in relation to their teaching experience" is rejected. Significant 'F' ratio indicates that a set of three teaching experience groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.39 shows the difference between the pairs of mean.

Table 5.39: Least significant difference between the pairs of mean

Pairs of Teaching Exp.	't' ratio	Mean Difference
5 to 10 and Below 5	7.989	14.542
above 10 and Below 5	2.227	5.488
5 to 10 and above 10	3.610	9.053

From the table 5.39 it is observed that the least significant difference between the means of teaching experience groups 5 to 10 years and below 5 years is 7.989 which are higher than the least significant difference at 0.05 level of significance. The obtained Mean Difference between this pair is 14.542. The mean of 5 to 10 years group is 61.05 and the mean of below 5 years group is 46.51. It shows that the teaching experience group of 5 to 10 years is higher than the teaching experience group of below 5 years in the overall score of English proficiency test.

The least significant difference between the means of teaching experience groups of above 10 and below 5 is 2.227 at 0.05 level of significance, which is higher than the least significant difference. The obtained Mean Difference between this pair is 5.488. The mean of above 10 years experience group is 52.00 and the mean of below 5 years experience group is 46.51. It shows that the teaching experience group of above 10 years is higher than the below 5 years experience group in the overall score of English proficiency test.

The least significant difference between the means of teaching experience groups of 5 to 10 and above 10 is 3.610 at 0.05 level of significance, which is higher than the least significant difference. The obtained Mean Difference between this pair is 9.053. The mean of 5 to 10 years experience group is 61.05 and the mean of above 10 years experience group is 52.00. It shows that the teaching experience group of 5 to 10 years is higher than the above 10 years experience group in the overall score of English proficiency test.

It is concluded from the results that the teaching experience significantly affect to the overall score. Thus, the result shows that the less experienced teachers' proficiency in English is lower.

5.2.5 Special Subject/ Method wise difference in the Proficiency in English

5.2.5.1 Proficiency in terms of vocabulary

To study the special subject/method wise difference in the vocabulary test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.40 and 5.41 respectively.

Table 5.40: Summary of the data of proficiency in vocabulary

Subject	N	Sum	Mean	Variance
1	61	1496	24.52	22.720
2	47	935	19.89	18.488
3	14	291	20.79	12.643
4	28	579	20.68	12.893
Total	150	3301	22.01	22.772

Table 5.41: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	666.848	3	222.283	11.904
Within Groups	2726.145	146	18.672	
Total	3392.993	149		

* Significance at 0.05 level=2.6666

* Significance at 0.01 level=3.9186

It is observed from the table 5.40 and table 5.41 that the value of 'F' ratio is 11.904. The critical value of 'F' ratio at df 3 and 146 is 2.6666 at 0.05 level of significance and 3.9186 at 0.01 level of significance. Obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no significant difference in the mean score of vocabulary of the teachers working in the RMC in relation to the special subject/method" is rejected. Significant 'F' ratio indicates that a set of four subject of specialization groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.42 shows the difference between the pairs of mean.

Table 5.42: Least significant difference between the pairs of mean

Pairs of subject of specialization.	't' ratio	Mean Difference
English and Gujarati	5.292	4.631
English and Hindi	3.311	3.739
English and Sanskrit	4.214	3.846

Hindi and Gujarati	0.783	0.892
Sanskrit and Gujarati	0.849	0.785
Hindi and Sanskrit	0.092	0.107

It is observed from the table 5.42 that out of 6 pairs of mean, the significant difference is found in three pairs. They are:

1. English and Gujarati
2. English and Hindi
3. English and Sanskrit

There is no significant difference between other three pairs of mean.

It is concluded from the result that the special subject/method significantly affect the score of vocabulary.

5.2.5.2 Proficiency in terms of functional grammar

To study the special subject/method wise difference in the functional grammar test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.43 and 5.44 respectively.

Table 5.43: Summary of the data of proficiency in functional grammar

Subject	Mean	N	Std. Deviation	Sum
1	22.66	61	4.990	1382
2	19.94	47	3.732	937
3	18.86	14	4.092	264
4	19.39	28	5.480	543
Total	20.84	150	4.858	3126

Table 5.44: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	353.188	3	117.729	5.434
Within Groups	3162.972	146	21.664	
Total	3516.160	149		

It is observed from the table 5.43 and table 5.44 that the value of 'F' ratio is 5.434. The critical value of 'F' ratio at df 3 and 146 is 2.6666 at 0.05 level of significance and 3.9186 at 0.01 level of significance. Obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no significant difference in the mean score of grammar of the teachers working in the RMC in relation to the special subject/method" is rejected. Significant 'F' ratio indicates that a set of four special subject/method groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.45 shows the difference between the pairs of mean.

Table 5.45: Least significant difference between the pairs of mean

Pairs of subject of specialization.	't' ratio	Mean Difference
English and Gujarati	3.240	2.720
English and Hindi	2.999	3.799
English and Sanskrit	2.682	3.263
Gujarati and Hindi	0.883	1.079
Gujarati and Sanskrit	0.464	0.543
Sanskrit and Hindi	0.356	0.536

It is observed from the table 5.45 that out of 6 pairs of mean, the significant difference is found in three pairs. They are:

1. English and Gujarati
2. English and Hindi
3. English and Sanskrit

There is no significant difference between other three pairs of mean.

It is concluded from the result that the special subject/method significantly affect the score of functional grammar.

5.2.5.3 Proficiency in terms of reading comprehension

To study the special subject/method wise difference in the reading comprehension test the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.46 and 5.47 respectively.

Table 5.46: Summary of the data of proficiency in reading comprehension

Subject	Mean	N	Std. Deviation	Sum
1	14.67	61	5.088	895
2	10.62	47	3.633	499
3	10.00	14	3.258	140
4	10.07	28	4.294	282
Total	12.11	150	4.833	1816

Table 5.47: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	683.887	3	227.962	11.902
Within Groups	2796.406	146	19.153	
Total	3480.293	149		

It is observed from the table 5.46 and table 5.47 that the value of 'F' ratio is 11.902. The critical value of 'F' ratio at df 3 and 146 is 2.6666 at 0.05 level of significance and 3.9186 at 0.01 level of significance. Obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no significant difference in the mean score of reading comprehension of the teachers working in the RMC in relation to the subject of specialization" is rejected. Significant 'F' ratio indicates that a set of four subject of specialization groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.48 shows the difference between the pairs of mean.

Table 5.48: Least significant difference between the pairs of mean

Pairs of subject of specialization.	't' ratio	Mean Difference
English and Gujarati	4.829	4.055
English and Hindi	4.296	4.672
English and Sanskrit	4.421	4.601
Gujarati and Hindi	0.605	0.617
Gujarati and Sanskrit	0.563	0.546
Sanskrit and Hindi	0.060	0.071

It is observed from the table 5.48 that out of 6 pairs of mean, the significant difference is found in three pairs. They are:

1. English and Gujarati
2. English and Hindi
3. English and Sanskrit

There is no significant difference between other three pairs of mean.

It is concluded from the result that the special subject/method significantly affect the score of reading comprehension.

5.2.5.4 Proficiency in terms of overall score

To study the special subject/method wise difference in the overall score of proficiency the ANOVA was used and 'F' ratio was computed. The summary of the data and ANOVA is shown in the Table 5.49 and 5.50 respectively.

Table 5.49: Summary of the data of proficiency in terms of overall score

Subject	Mean	N	Std. Deviation	Sum
1	61.85	61	13.138	3773
2	50.45	47	9.315	2371
3	49.64	14	8.828	695
4	50.14	28	10.459	1404
Total	54.95	150	12.482	8243

Table 5.50: ANOVA

Source of Variation	SS	df	MS	F
Between Groups	4900.741	3	1633.580	13.023
Within Groups	18313.932	146	125.438	
Total	23214.673	149		

It is observed from the table 5.49 and table 5.50 that the value of 'F' ratio is 13.023. The critical value of 'F' ratio at df 3 and 146 is 2.6666 at 0.05 level of significance and 3.9186 at 0.01 level of significance. Obtained 'F' ratio is higher than the critical value of 'F' ratio at 0.05 and 0.01 level of significance. Therefore, the null hypothesis: "There is no significant difference in the mean of overall score of the teachers working in the RMC in relation to the subject of specialization" is rejected. Significant 'F' ratio indicates that a set of four subject of specialization groups mean is significantly different.

To study the difference between the pairs of mean, paired sample t test in SPSS software was used and results were interpreted. Table 5.51 shows the difference between the pairs of mean.

Table 5.51: Least significant difference between the pairs of mean

Pairs of subject of specialization.	't' ratio	Mean Difference
English and Gujarati	5.275	11.406
English and Hindi	4.214	12.210
English and Sanskrit	4.512	11.710
Gujarati and Hindi	0.295	0.771
Gujarati and Sanskrit	0.127	0.304
Hindi and Sanskrit	0.162	0.500

It is observed from the table 5.51 that out of 6 pairs of mean, the significant difference is found in three pairs. They are:

1. English and Gujarati
2. English and Hindi

3. English and Sanskrit

There is no significant difference between other three pairs of mean.

It is concluded from the result that subject of specialization significantly affect the overall score of proficiency. The results show that the teachers who have studied English as a special subject/method scores higher which means that their proficiency in English is higher than the other teachers.

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