



Study of Impact of Teachers' Commitment on their Teaching Aptitude

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Abstract:

This paper deals with the study of the impact of Teachers' commitment on their teaching aptitude of Primary School Teachers. To know the Teachers' Commitment of the Primary School Teachers the standardized tool of Kant (2021) was used and for knowing the Teaching Aptitude of the teachers the standardized tool of Shukla (2012) was used. The main objective of the study was to know the effect of independent variables like commitment, gender and experience of Primary Teachers on the Teaching Aptitude. The t test was done to know the main effects of independent variables and their effects on Teaching Aptitude. The population of the study consists of Primary school Teachers of English Medium Schools from Five zones of Gujarat. Stratified Random sampling technique was used to collect sample. The findings reveal that there is no effect of commitment, gender and experience on teaching aptitude.

Keywords: *Teaching aptitude, Teacher Commitment, Primary School Teachers, English Medium*

1. Introduction

Teacher's aptitude test has always been considered to be the main reason for appointing the teachers in the teaching field. The Indian government has introduced the Teachers' Eligibility Test in 2011 to improve the standard of teaching in primary schools. But only two to four percent candidates who appear in TET are able to clear it. It is known to the system that the teachers with good teaching aptitude are able to teach well. The subject related knowledge as well as the commitment of the teacher towards teaching is high. It is said that the commitment teacher has better impact on the teaching. The higher the commitment, effective will be the teaching of the teacher. The aptitude of the teacher may have a reason of increasing and decreasing. Now the question arises that whether such teachers have commitment to teaching or not. Moreover, it is also a point to check if there is and difference between the low, medium and high commitment as far as their teaching aptitude is concerned. Keeping all these aspects in mind the study was decided.

2. Review of Earlier Studies

The reviewing of the 5th and 6th Surveys of Educational Researches by Shukla (2018) it is found that very few researches related to teaching aptitude of teachers have been carried out in India and most of them are based on the higher secondary teachers teaching competency.

By reviewing the past researches, it is found that the study of the effect of teaching commitment on the teaching aptitude has not been done on the primary teachers were as the effect of leadership and the effect of the salary on the teaching aptitude and commitment was studied.

Reviewing the work of Misra (2013), Khan (2019), Kamalakannan (2014), Kumar (2013), Patil (2016) and Bashir (2017), it is found that the research was conducted on the college and university professors to check their commitment. On one hand by reviewing the work of Londhe (2003), Kushwaha (2002), Singh (2018), Sharma and Bedi, Shukla (2013) and Pany (2013) it was found that there is no difference between the teaching aptitude of male and female teachers. On the other hand, by reviewing the work of Gondhi (2015) and Mitra (2017) it was found that female and male teachers have different teaching aptitude.

3. Rationale of the Study

Analyzing these studies, controversy reveals in relation to the Teaching aptitude and teaching commitment of male and female teachers.

According to Thilakan (2012), Jain (2013) and Bashir (2017) teaching experience has no effect on the teaching commitment, whereas Gupta and Ghelawat (2013), Sharma (2017) and Vaghela (2014) more than 10 years of teaching experience are more committed to less than 10 years of experience.

According to Sen (2017) and KamalaKannan (2014) less experienced teachers have more commitment and more experienced teacher has less commitment whereas according to Patil (2016), Kumar (2013), and Rupa (2015) more experienced teacher has less commitment.

According to Kaur (2015), Yadav (2017), Joshi (2003), Jain (2013), Kumar (2016) and Gupta and Gehlawat (2013) it was found that gender has no impact on the teacher's commitment whereas according to Kaur (2015), Sethi (2017), Shukla (2017), Kaur (2013), Kumar (2013), Sharma (2017) and Kamalakannan (2014) female teachers were found more committed to male teachers.

According to Londhe (2003), Kushwaha (2002), Singh (2018), Sharma and Bedi, Shukla (2013) and Pany (2013) it was found that there was no difference between the teaching aptitude of male and female teachers whereas according to Gondhi (2015) and Mitra (2017) female and male teachers have different teaching aptitude.

Controversy that is revealed in gender and experience will be removed by making gender wise and experience wise comparison of Teaching aptitude of Teachers.

4. Variables

The variables of the study are as shown in the table 1

Table 1: Variables of Study

Sr.	Variables	Type	Level/Stratum
1	Teacher Commitment	Independent	1. Higher 2. Middle 3. Lower
2	Teaching Aptitude	Dependent	1. Higher 2. Middle 3. Lower
3	Section	Controlled	1. Primary Section
4	Gender and experience	Moderator	1. Male 2. Female 3. >10 years 4. <10 years
5	Interest, Eagerness to teach, salary expectation, type of family	Intervening	-----

5. Objectives of the Study

The investigator has worked for the following objectives of this study:

1. To study the teaching aptitude of the teachers.
2. To study the commitment of the teachers.
3. To compare teaching aptitude of low and medium commitment level.
4. To compare teaching aptitude of medium and high commitment level.
5. To compare teaching aptitude of low and high commitment level.
6. To compare the teaching aptitudes of male and female teachers.
7. To compare the commitment of male and female teachers.
8. To compare the teaching aptitude of male teachers with more than 10 years and less than 10 years of teaching experience.
9. To compare the teaching aptitude of female teachers with more than 10 years and less than 10 years of teaching experience.
10. To compare the teaching aptitude of male and female teachers with more than 10 years of teaching experience.
11. To compare the teaching aptitude of male and female teachers with less than 10 years of experience

6. Null Hypotheses of the Study

- H₀₁ There is no significant difference between the mean scores of Teaching Aptitude of teachers having low and medium commitment level.
- H₀₂ There is no significant difference between the mean scores of Teaching Aptitude of teachers having medium and high commitment level.
- H₀₃ There is no significant difference between the mean scores of Teaching Aptitude of teachers having low and high commitment level.
- H₀₄ There is no significant difference between the mean scores of Teaching Aptitude of male and female teachers.
- H₀₅ There is no significant difference between the mean scores of Teachers' Commitment of male and female teachers.
- H₀₆ There is no significant difference between the mean scores of teaching aptitude of male teachers having more than 10 years of experience and having less than 10 years of experience.
- H₀₇ There is no significant difference between the mean scores of teaching aptitude of female teachers having more than 10 years of experience and female teaching having less than 10 years of experience.
- H₀₈ There is no significant difference between the mean scores of teaching aptitude of male and female teachers having more than 10 years of experience.
- H₀₉ There is no significant difference between the mean scores of teaching aptitude of male and female teachers having less than 10 years of experience.

7. Research Hypotheses of the Study

- H₁ There is significant difference between the mean scores of Teaching Aptitude of teachers having low and medium commitment level.
- H₂ There is significant difference between the mean scores of teaching Aptitude of teachers having medium and high commitment level.
- H₃ There is significant difference between the mean scores of Teaching Aptitude of teachers having low and high commitment level.
- H₄ There is significant difference between the mean scores of teaching aptitude of male and female teachers
- H₅ There is significant difference between the mean scores of Teachers Commitment of male and female teachers.

- H₆ There is significant difference between the mean scores of teaching aptitude of male teachers having more than 10 years of experience and male teachers having less than 10 years of experience.
- H₇ There is no significant difference between the mean scores of teaching aptitude of female teachers having more than 10 years of experience and female teaching having less than 10 years of experience.
- H₈ There is no significant difference between the mean scores of teaching aptitude of male and female teachers having more than 10 years of experience.
- H₉ There is significant difference between the mean scores of teaching aptitude of male and female teachers having less than 10 years of experience.

8. Limitations of Study

1. The research was limited to the English medium school primary teachers for the study.
2. The sample was selected from among the teaches of Primary section of English Medium schools from central, north, south, east and west zone of Gujarat in academic year 2019-2020 for the research
3. Shukla (2012) constructed teaching aptitude test was used as a research tool in the research.
4. Situational test of Teacher Commitment Test was prepared and standardized and was used as a research tool in the research
5. Data was collected through Email and Google form.

9. Method of the Study

A survey method was adopted to know the teaching aptitude and teaching commitment of Primary English Medium School Teachers.

10. Statistical Method

t- test was done for analysis of data.

11. Population and sample of the Study

The primary teachers were selected from both government and non-government schools. Sampling was done by dividing the state to Gujarat into four zones as follows: South Zone, Central Zone, North Zone and East Zone.

The Stratified Random sampling technique was selected for this research. 2000 primary teachers of English Medium School were selected for the study. The sample selection is shown in table - 2

Table 2: Sample of Study

Zone	North Gujarat				South Gujarat				Central Gujarat				East Gujarat				West Gujarat			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
Experience	>10 years	<10 years	>10 years	<10 years	>10 years	<10 years	>10 years	<10 years	>10 years	<10 years	>10 years	<10 years	>10 years	<10 years	>10 years	<10 years	>10 years	<10 years	>10 years	<10 years
N	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

12. Tool of the Study

The following two tools were used for the study:

1. Teachers' Commitment Situational Reaction Test: A self-developed tool was used which was standardized for the purpose of the study.

Reliability of the test was found by three different methods as shown in Table – 3

Table 3: Reliability of the test

Method	N	Reliability
Test-retest	100	0.93
Split half	100	0.83
KR ₂₀	100	0.8

13. Validity

While developing the test, experts were asked to rate the options given for each question from most favourable to least favourable. They were also asked to check whether the questions would be able to check the commitment of the teacher or not. In this way the content validity of the test was checked.

The Teacher Commitment Rating scale of Janelle Kant was administered to 100 individuals along with the final draft of TCT and correlation between scores was found to be 0.81.

2. Teachers' Aptitude Test: Ready-made tool was used for the purpose of the study.

- The tool was developed by Satishprakash Shukla.
- The reliability of the test is as given in Table 4.

Table 4: Reliability of the test

Method	N	Reliability
Test-Retest	370	0.83
Rullon	370	0.93
Flangon	370	0.91
Kuder		
Richardson	370	0.84

- The validity of the test was checked by asking the experts to rate the options given for each question from most favourable to least favourable.

14. Data Collection and Analysis

The data was collected by making a google form of the tool. The tool was sent on an online platform to various teachers by contacting the school personally. The tool was sent through an online google form link as well as through an email both of which contained the proper instruction for teachers to follow while filling up the tool. The t-test was used for testing the hypotheses.

Study: 1**Critical Ratio (CR) on the basis of Scores of Low commitment and Medium Commitment levels in Teacher Commitment Test**

Levels of Commitment	N	Mean	SD	Mean Difference	SED	Critical Ratio
1	2	3	4	5	6	7
Low Commitment	561	21.82	11.91	0.095	0.195	0.486
Medium Commitment	716	21.91	12.07			

For df = 1275 t_{tab} at .05 level of significance = 1.96

t_{tab} at .01 level of significance = 2.58

Observed value of CR that is computed on the basis of the scores of aptitudes obtained from the low and medium commitment level of primary teachers of Gujarat state in Teacher Aptitude Test is 0.486 as shown in the Table, which is less than $t_{tab} = 1.96$ that is required for significant mean difference at .05 levels of significance for df = 1275. Therefore, the null hypothesis 'There is no significant difference between the mean scores of Teaching Aptitude of teachers having low and medium

commitment level' is not rejected and it is concluded that commitment has no significant effect on teaching aptitude of primary school teachers of Gujarat State. Further it is seen that there is no significant difference found between 21.82 and 21.91 but the difference in their means is found due to chance factor and not due to commitment level.

Study: 2

Critical Ratio (CR) on the basis of Scores of Medium commitment and High Commitment levels in Teacher Commitment Test

Levels of Commitment	N	Mean	SD	Mean Difference	SED	Critical Ratio
1	2	3	4	5	6	7
Medium Commitment	716	21.91	12.07	0.14	0.187	0.750
High Commitment	723	21.77	12.98			

For df = 1437 t_{tab} at .05 level of significance = 1.96

t_{tab} at .01 level of significance = 2.58

Observed value of CR that is computed on the basis of the scores of aptitudes obtained from the Medium and high commitment level of primary teachers of Gujarat state in Teacher Aptitude Test is 0.486 as shown in the Table, which is less than $t_{tab} = 1.96$ that is required for significant mean difference at .05 levels of significance for df = 1437. Therefore, the null hypothesis 'There is no significant difference between the mean scores of Teaching Aptitude of teachers having medium and low commitment level' is not rejected and it is concluded that commitment has no significant effect on teaching aptitude of primary school teachers of Gujarat State. Further it is seen that there is no significant difference found between 21.77 and 21.91 but the difference in their means is found due to chance factor and not due to commitment level.

Study: 3

Critical Ratio (CR) on the basis of Scores of Low commitment and High Commitment levels in Teacher Commitment Test

Levels of Commitment	N	Mean	SD	Mean Difference	SED	Critical Ratio
1	2	3	4	5	6	7
Low Commitment	561	21.82	11.91	0.05	0.198	0.252
High Commitment	723	21.77	12.98			

For df = 1282 t_{tab} at .05 level of significance = 1.96

t_{tab} at .01 level of significance = 2.58

Observed value of CR that is computed on the basis of the scores of aptitudes obtained from the low and high commitment level of primary teachers of Gujarat state in Teacher Aptitude Test is 0.252 as shown in the Table, which is less than $t_{tab} = 1.96$ that is required for significant mean difference at .05 levels of significance for df = 1282. Therefore, the null hypothesis 'There is no significant difference between the mean scores of Teaching Aptitude of teachers having low and high commitment level' is not rejected and it is concluded that commitment has no significant effect on teaching aptitude of primary school teachers of Gujarat State. Further it is seen that there is no significant difference found between 21.82 and 21.77 but the difference in their means is found due to chance factor and not due to commitment level.

Study: 4**Critical Ratio (CR) on the basis of Scores of male and female in TAT**

Gender	N	Mean	SD	Mean Difference	SED	Critical Ratio
1	2	3	4	5	6	7
Male	927	21.86	12.32	0.04	0.158	0.254
Female	1073	21.82	12.40			

For df = 1998

 t_{tab} at .05 level of significance = 1.96 t_{tab} at .01 level of significance = 2.58

Observed value of CR that is computed on the basis of the scores of aptitudes obtained from the male and female teachers of primary teachers of Gujarat state in Teacher Aptitude Test is 0.647 as shown in the Table, which is less than $t_{tab} = 1.96$ that is required for significant mean difference at .05 levels of significance for df = 1998. Therefore, the null hypothesis 'There is no significant difference between the mean scores of Teaching Commitment of male and female teachers' is not rejected and it is concluded that gender has no significant effect on the Commitment of the primary school teachers of Gujarat State. Further it is seen that there is no significant difference found between 21.86 and 21.82 but the difference in their means is found due to chance factor and not due to gender.

Study: 5 Critical Ratio (CR) on the basis of Scores of male and female in TCT

Gender	N	Mean	SD	Mean Difference	SED	Critical Ratio
1	2	3	4	5	6	7
Male	927	4.96	4.40	0.06	0.093	0.647
Female	1073	4.90	4.13			

For df = 1998

 t_{tab} at .05 level of significance = 1.96 t_{tab} at .01 level of significance = 2.58

Observed value of CR that is computed on the basis of the scores of aptitudes obtained from the male and female teachers of primary teachers of Gujarat state in Teacher Aptitude Test is 0.647 as shown in the Table, which is less than $t_{tab} = 1.96$ that is required for significant mean difference at .05 levels of significance for df = 1998. Therefore, the null hypothesis 'There is no significant difference between the mean scores of Teaching Commitment of male and female teachers' is not rejected and it is concluded that gender has no significant effect on the teaching aptitude of the primary school teachers of Gujarat State. Further it is seen that there is no significant difference found between 4.96 and 4.90 but the difference in their means is found due to chance factor and not due to gender.

Study: 6**Critical Ratio (CR) on the basis of Scores of male teachers having >10years experience and <10years experience in TAT**

Male Experience	N	Mean	SD	Mean Difference	SED	Critical Ratio
1	2	3	4	5	6	7
>10 years' experience	601	21.84	12.61	0.05	0.239	0.209
<10 years' experience	326	21.89	11.77			

For df = 925

 t_{tab} at .05 level of significance = 1.96 t_{tab} at .01 level of significance = 2.58

Observed value of CR that is computed on the basis of the scores of aptitudes obtained from the male and female teachers of primary teachers of Gujarat state in Teacher Aptitude Test is 0.647 as shown in the Table, which is less than $t_{tab} = 1.96$ that is required for significant mean difference at .05 levels of significance for $df = 925$. Therefore, the null hypothesis 'There is no significant difference between the mean scores of Teaching Aptitude of male teachers having >10 years' experience and <10 years' experience teachers' is not rejected and it is concluded that experience has no significant effect on the teaching aptitude of the primary school teachers of Gujarat State. Further it is seen that there is no significant difference found between 21.84 and 21.89 but the difference in their means is found due to chance factor and not due to experience.

Study: 7

Critical Ratio (CR) on the basis of Scores of female teachers >10years experience and <10years experience in TAT

Female Experience	N	Mean	SD	Mean Difference	SED	Critical Ratio
1	2	3	4	5	6	7
>10 years' experience	482	21.81	12.53	0.01	0.216	0.059
<10 years' experience	591	21.82	12.29			

For $df = 1071$ t_{tab} at .05 level of significance = 1.96

t_{tab} at .01 level of significance = 2.58

Observed value of CR that is computed on the basis of the scores of aptitudes obtained from the male and female teachers of primary teachers of Gujarat state in Teacher Aptitude Test is 0.647 as shown in the Table, which is less than $t_{tab} = 1.96$ that is required for significant mean difference at .05 levels of significance for $df = 1071$. Therefore, the null hypothesis 'There is no significant difference between the mean scores of Teaching Aptitude of female teachers having >10 years' experience and <10 years' experience teachers' is not rejected and it is concluded that experience has no significant effect on the teaching aptitude of the primary school teachers of Gujarat State. Further it is seen that there is no significant difference found between 21.81 and 21.82 but the difference in their means is found due to chance factor and not due to experience.

Study: 9

Critical Ratio (CR) on the basis of Scores of male and female teachers with <10 years' of experience in TAT

<10 years' experience	N	Mean	SD	Mean Difference	SED	Critical Ratio
1	2	3	4	5	6	7
Male	326	21.89	11.8	0.07	0.239	0.293
Female	591	21.82	12.3			

For $df = 915$ t_{tab} at .05 level of significance = 1.96

t_{tab} at .01 level of significance = 2.58

Observed value of CR that is computed on the basis of the scores of aptitudes obtained from the male and female teachers of primary teachers of Gujarat state in Teacher Aptitude Test is 0.647 as shown in the Table, which is less than $t_{tab} = 1.96$ that is required for significant mean difference at .05 levels of significance for $df = 915$. Therefore, the null hypothesis 'There is no significant difference between the mean scores of Teaching Aptitude of male and female teachers having <10 years of experience in TAT' is not rejected and it is concluded that experience has no significant effect on the teaching

aptitude of the primary school teachers of Gujarat State. Further it is seen that there is no significant difference found between 21.89 and 21.82 but the difference in their means is found due to chance factor and not due to experience.

Study: 10

Critical Ratio (CR) on the basis of Scores of male and female teachers with >10 years' of experience in TAT

>10 years' experience Gender	N	Mean	SD	Mean Difference	SED	Critical Ratio
1	2	3	4	5	6	7
Male	601	21.84	12.6	0.03	0.217	0.133
Female	482	21.81	12.5			

For df = 1081 t_{tab} at .05 level of significance = 1.96

t_{tab} at .01 level of significance = 2.58

Observed value of CR that is computed on the basis of the scores of aptitudes obtained from the male and female teachers of primary teachers of Gujarat state in Teacher Aptitude Test is 0.647 as shown in the Table, which is less than $t_{tab} = 1.96$ that is required for significant mean difference at .05 levels of significance for df = 1081. Therefore, the null hypothesis 'There is no significant difference between the mean scores of Teaching Aptitude of male and female teachers having >10 years of experience in TAT' is not rejected and it is concluded that experience has no significant effect on the teaching aptitude of the primary school teachers of Gujarat State. Further it is seen that there is no significant difference found between 21.84 and 21.81 but the difference in their means is found due to chance factor and not due to experience.

15. Findings

The findings of the study are as under:

1. There was no significant difference found in the teaching aptitude of teachers who had low and medium commitment levels
2. There was no significant difference found in the teaching aptitude of teachers who had medium and high commitment levels
3. There was no significant difference found in the teaching aptitude of teachers who had low and high commitment levels
4. There was no significant difference found in the teaching aptitude of male and female primary teachers of Gujarat state
5. There was no significant difference found in the commitment of male and female teachers of Gujarat state
6. There was no significant difference found in the teaching aptitude of male teachers having more than 10 years of experience and less than 10 years of experience.
7. There was no significant difference found in the teaching aptitude of female teachers having more than 10 years of experience and less than 10 years of experience.
8. There was no significant difference found in the teaching aptitude of both male and female teachers with more than 10 years of experience.
9. There was no significant difference found in the teaching aptitude of both male and female teachers with less than 10 years of experience.

16. Implications of the Study

1. Teachers of English medium primary schools should implement regular in service trainings for the increase of the teachers' teaching aptitude.

2. Teachers of English medium primary schools should practice classroom interaction strategies to increase the teaching aptitude
3. Teachers of English medium primary schools should do metacognitive activities to increase the teaching aptitude.
4. Teachers of English medium primary schools should do regular observations of others to increase the teaching aptitude.
5. Teachers of English medium primary school should take regular feedback of one's own session to increase the teaching aptitude.
6. Teachers of English medium primary school should make proper goals for their teaching session.
7. Teachers of English medium primary school should be prepared for the session with a well-thought-out lesson plan.
8. Teachers of English medium primary school should equip themselves with subject knowledge.
9. Teachers of English medium primary school should gather information regarding the latest teaching techniques.
10. Teachers of English medium primary school should be provided with non-judgemental culture to foster growth.
11. Teachers of English medium primary school should be given observation sessions outside the domain classes to gain strategies.
12. Teachers of English medium primary school should be provided with sessions of different management styles such as google, hospitals etc.

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