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## **A study of teaching aptitude and attitude of prospective primary school teachers towards teaching profession in relation to their gender, type of institution and stream of study**

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### **Abstract**

Teaching is a very respectable profession but even then not all the teachers who are in this pious profession like it. They are disinterested towards teaching profession. Hence we must be very careful at the time of admission of prospective teachers and should select those individuals for training who adopt this profession as their best choice; taking it as a challenge and not as a last resort after losing in other fields of life. They must possess high level of teaching aptitude and favourable attitude towards teaching profession besides personal qualities like grooming personality, psychological information concerning child growth and development, good physical and mental health etc. The present study investigates the teaching aptitude and attitudes of prospective- primary school teachers towards teaching profession in relation to their gender, type of institution and stream of study. A sample of 640 prospective primary school teachers, 320 from private and 320 from government institutions (DIET) of junior basic teacher training colleges of Himachal Pradesh was taken through random sampling method. "Teaching Aptitude Test Battery" by Dr. R.P. Sharma and S.N. Sharma and "Attitude towards teaching profession scale" by Umme kulsum were used to collect the data. Mean, S.D, and ANOVA were used for the analysis of the data. Research findings revealed that there was a significant difference in the teaching aptitude of male and female prospective primary school teachers. Also, there was a significant difference in the teaching aptitude of prospective primary school teachers studying in government (DIET) and private institutions. The study also found that there was significant difference in the attitudes of male/female, and arts/science stream prospective primary school teachers towards teaching profession.

**Keywords:** Teaching aptitude, attitude towards teaching profession, prospective primary teachers, gender, type of institution, stream of study

### **Introduction**

The quality of a nation depends upon the quality of its citizens and the quality of the citizens, in turn depends upon on their quality of teachers. In fact, the qualities of teachers depend upon the training they receive during their pre-service teacher training course. It also depends upon the teacher education programme, selection procedure adopted for the admission of trainees, instructional materials evaluation of teacher's performance and curriculum they followed. Only competent, committed and resourceful teachers can give quality education. Quality is not only the quantum of knowledge imparted to students but also the effectiveness with which they are applies that knowledge in meeting the challenge of tomorrow.

People choose the profession depending on some importance features such as prestige, power, salary etc. no doubt these features are important but these features become meaningful only to those who value them. The value of a particular feature of a job is determined by the personality, social and psychological background of the person. Every profession has to make arrangements for its own development; if this is not done the profession will be rejected by the society in the long run, the combination of motivation, aptitude, attitude and commitment that forms the real basis for the professional development. Though teaching is considered to be the noblest of all the professions, it requires keenness, intelligence, practical skills and a high sense of duty and integrity.

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Therefore, drawing out the right person for this profession is of utmost importance for the progress of education system. Pre service education is a process of transformation of a lay person into a competent and committed professional practitioner. In the preparation of efficient teachers, the concerned authorities try to develop teaching aptitude and positive attitude among the student teachers and give sound knowledge of the content matter.

### Review of related literature

Jamwal (2015) <sup>[4]</sup> conducted a study on attitude of prospective teachers towards teaching. The main finding of the study was that there was no significant difference between attitude of prospective male and female teachers towards factor teaching. It also reveals that prospective teachers have high level of teaching and their attitude does not differ with respect to variable sex

Singh (2015) <sup>[10]</sup> conducted a study on teaching aptitude of B.Ed. teacher trainees of Himachal Pradesh in relation to their gender and stream. Findings of study reveals that (i) There was no significant difference in teaching aptitude of male and female B.Ed. teacher trainees. (ii) Teaching aptitude of arts and science teacher trainee differs significantly. (iii) Teacher aptitude did not differ significantly in case of male and female science and arts B.Ed.

Pancholi (2015) <sup>[9]</sup> explored a study on student teachers' attitude towards teaching profession. The finding of study revealed that (i) there is a significant difference exists between teachers in relation to their gender. Female teachers have higher attitude than that of male teachers. (ii) there is no significant difference exists between teachers in relation to their stream.

Kalita (2016) <sup>[10]</sup> conducted a study on teaching aptitude of high school teachers in relation to gender and educational level. The finding of study revealed that there was no significant difference in the mean scores of teaching aptitude of the male and female teachers of high school and male teachers' teaching aptitude was higher than female teachers.

### Objectives

1. To study the difference in teaching aptitude of prospective primary school teachers in relation to gender, type of institution and stream of study.
2. To study the double and triple interaction effect of teaching aptitude of prospective primary school teachers in in relation to gender, type of institution and stream of study.
3. To study the difference in attitude of prospective primary school teachers towards teaching profession in in relation to gender, type of institution and stream of study.
4. To study the double and triple interaction effect of attitude of prospective primary school teachers towards

teaching profession in relation to gender, type of institution and stream of study.

### Hypotheses

1. There will be no significant difference in teaching aptitude of prospective primary school teachers in relation to gender, type of institution and stream of study.
2. There will be no double and triple interaction effect on teaching aptitude of prospective primary school teachers in relation to gender, type of institution and stream of study.
3. There will be no significant difference in attitude of prospective primary school teachers towards teaching profession in relation to gender, type of institution and stream of study.
4. There will be no double and triple interaction effect on attitude of prospective primary school teachers towards teaching profession in relation to gender, type of institution and stream of study.

**Methodology:** This study falls under the category of descriptive research. Thus, survey method was adopted to carry out the research work.

**Sample:** In the present study, sample consisted of 640 prospective primary school teachers, 320 from private and 320 from govt. institutions from six districts of Himachal Pradesh through random sampling method was selected.

**Research Tools Employed:** "Teaching Aptitude Test Battery" by Dr. R.P. Sharma and S.N. Sharma (1998) and "Attitude towards teaching profession scale" by Umme kulsum (2008) were used to collect the data from prospective primary school teachers.

### Statistical techniques used

The statistical techniques employed to concise picture of the whole data. Mean, S.D, and ANOVA were used for the analysis of the data.

### Analysis and Interpretation of Data

#### (A) Teaching aptitude of prospective primary school teachers in relation to gender, type of institution and stream of study

In order to find out the main effects of gender, type of institution and stream of study along with their interactional effects on the teaching aptitude of prospective primary school teachers analysis of variance (2x2x2 factorial design involving 2 level of gender i.e. male and female, 2 levels of type of institution i.e. government institution and private institution and 2 levels of stream of study i.e. arts, science) was applied on the means of teaching aptitude scores. The means of teaching aptitude scores of students are given in Table 1 below

**Table 1:** Mean and S.D at Various Level of Gender, Type of Institution and Stream of Study of Prospective Primary School Teachers on Teaching Aptitude.

Type of Institution		Gender								
		Male			Female			Total		
		Arts	Science	Total	Arts	Science	Total	Arts	Science	Total
Government	Mean	84.48	83.42	83.95	85.16	85.67	85.41	84.82	84.55	84.68
	SD	9.30	8.96	9.12	7.08	6.88	6.96	8.24	8.05	8.13
Private	Mean	81.16	82.26	81.71	81.07	84.81	82.94	81.11	83.53	82.32
	SD	8.23	7.59	7.91	8.11	7.34	7.94	8.15	7.55	7.94
Total		82.82	82.84	82.83	83.11	85.24	84.18	82.97	84.04	83.50

**Table 2:** The Complete Summary ANOVA: Teaching Aptitude in Relation to Gender, Type of Institution and Stream of Study

Source of variation	Sum of squares	DF	Mean squares variance	'F'
Gender(A)	290.252	1	290.25	4.55*
Institution(B)	890.664	1	890.64	13.97**
Stream (C)	183.827	1	183.82	2.8 8
Gender X Institution (A X B)	2.139	1	2.13	.03
Institution X Stream (B X C)	290.252	1	290.25	4.55*
Gender X Stream (A X C)	177.452	1	177.45	2.78
Gender X Institution X Stream (A X B X C)	11.289	1	11.28	.17
Error	40280.088	632	63.73	
Corrected Total	42125.961	639		

\*significant at 0.05 level of confidence  
 \*\*significant at 0.01 level of confidence

**Main Effects**

**(a) Gender (A)**

From Table 2, it is clear that F-value for the main effect of gender on teaching aptitude of prospective primary school teachers has come out to be 4.554, which is higher than the table value (3.86) at .05 level of confidence for 1/632 df. It means that there exists a significant difference in mean scores of male and female prospective primary school teachers on teaching aptitude. In the light of this, the hypothesis stated as, “There will be no significant difference in teaching aptitude of prospective primary school teachers with respect to gender,” was rejected.

Table 1 show that the mean score of teaching aptitude for the male prospective primary school teachers is 82.83 and for the female prospective primary school teachers 84.18. From this, it may be interpreted that prospective primary school female teachers have high teaching aptitude as compared to male prospective primary school teachers.

**(b) Type of Institution (B)**

Table 2 further exhibits that F-value for the main effect of type of institution on teaching aptitude which compares the means of prospective primary school teachers who studying in government institution and private institution has come out to be 13.975, which is much higher than the table value (6.69) even at .01 level of confidence for 1/632 df. In the light of this, the hypothesis stated as, “There will be no significant difference in teaching aptitude of prospective primary school teachers with respect to type of institution,” was rejected.

Table 1 shows that the mean scores for teaching aptitude of the prospective primary school teachers of government institution is 84.68 and for the prospective primary school teachers of private institution is 82.32. From this, it may be interpreted that prospective primary school teachers of private institution have high teaching aptitude as compared to prospective primary teachers of government institution

**(c) Stream of Study (C)**

Table 2 indicative of the fact that computed value of F for the main effect of stream of the study on the teaching

aptitude of prospective primary school teachers has come out to be 2.884 which is much below the table value (3.86) even at 0.05 level of confidence for 1/638 df. It means that there exists no significant difference in mean scores of prospective primary school teachers of arts stream and science stream towards teaching aptitude. Hence, the hypothesis stated as, “There will be no significant difference in teaching aptitude of prospective primary school teachers with respect to stream of study,” was accepted. However, from the mean Table 1, it is evident that arts stream prospective primary school teachers have higher mean of teaching aptitude scores(84.94) than the science stream (82.32), but this difference is not statistically significant.

**Two Way Interactions**

**(a) Gender X Type of Institution (A X B)**

Table 2, reveals that F-ratio for interactional effect of gender and type of institution (A x B) on teaching aptitude has been found to be 0.34, which is much below the Table value (3.86) even at 0.05 level of significance for 1/632 df. In the light of this, the hypothesis stated as, “There will be no interactional effect on teaching aptitude of prospective primary school teachers with respect to gender and type of Institution,” was accepted. From this, it may be interpreted that there exists no significant interactional effects of gender and type of institution on teaching aptitude of prospective primary school teacher.

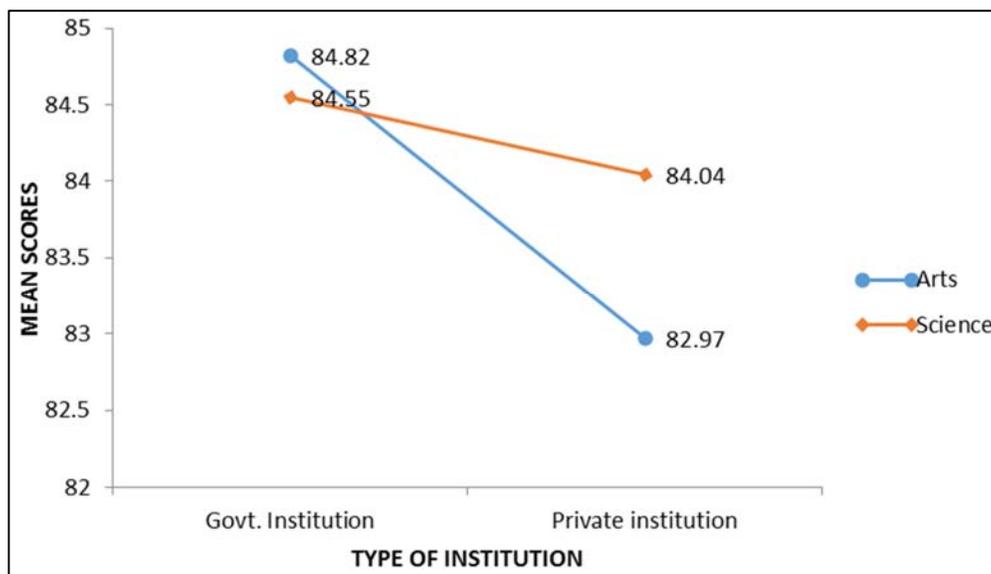
**(b) Gender X Stream of Study (A x C)**

From Table 2, it is clear that F-value for interactional effect of gender and stream of study (A x C) on teaching aptitude has been found to be 2.784, which is much below the table value(3.86)even at 0.05 level of significance for df 1 and 632. In the light of this, the hypothesis stated as, “There will be no interactional effect on teaching aptitude of prospective primary school teachers with respect to Gender and stream of study,” was accepted. From this, it may be interpreted that there exists no significant interactional effects of gender and stream of study on teaching aptitude of prospective primary school teachers.

**(c) Stream of Study and Type of Institution (B X C)**

Table 2, shows that F- ratio for interactional effect of stream of study and type of institution (B x C) on teaching aptitude has come out to be to be 4.554, which is much higher than the table value (3.86) at 0.05 level of significance for 1/632 df. It is indicative of fact that there is significant interactional effect of type of institution and stream of study on the teaching aptitude of prospective primary school teachers. In the light of this, the hypothesis stated as, “There will be no interactional effect on teaching aptitude of

prospective primary school teachers with respect to stream of study and type of institution” was rejected. From Figure1 the line showing the mean scores of arts stream and science stream prospective primary school teachers studying in government institution and private institution are intersecting each other. It may be said that the magnitude of differences in the mean of teaching aptitude scores of arts stream and science stream prospective primary school teachers is not same, within the limits of random variations for government institution and private institution.



**Fig 1:** Interactional Effect of Stream of Study and Type of Institution with Respect to Teaching Aptitude Scores of Prospective Primary School Teachers.

From the above it may, be interpreted that there exists significant interactional effects of stream of study and type of institution on teaching aptitude of prospective primary school teachers. It may be interpreted that both stream of study and type of institution are related to teaching aptitude of prospective primary school teachers but not independently of each others. One variable interfere in the effect of other variable on the teaching aptitude of prospective primary school teachers.

**(d) Gender X Type of Institution X Stream of Study (AXBXC)**

Table 2, shows that the computed value of F-ratio for the triple interactional of gender, type of institution and stream of study on teaching aptitude of prospective primary school teachers has come out to be .177, which is very less than the Table value and not significant at any level. In the light of this, the hypothesis stated as, “There will be no interactional effect on teaching aptitude of prospective primary school teachers with respect to gender, stream of study and type of

institution” was accepted. From this, it may be interpreted that there exists no significant interactional effect of gender, type of institution and stream of study on teaching aptitude of prospective primary school teacher.

**(B) Attitude towards teaching profession of prospective primary school teachers in relation to gender, type of institution and stream of study**

In order to find out the main effects of gender, type of institution and stream of study along with their interactional effects on the attitude of prospective primary school teachers towards teaching professions analysis of variance (2x2x2 factorial design involving 2 levels of gender i.e. male and female, 2 levels of type of institution i.e. government institution and private institution and 2 levels of stream of study i.e. arts and science ) was applied on the means of attitude towards teaching profession scores. The means of attitude towards teaching profession scores of students are given in Table 3 below:

**Table 3:** Various Level of Gender, Type of Institution and Stream of Study of Prospective Primary School Teachers on Teaching Aptitude.

Type of Institution		Gender								
		Male			Female			Total		
		Arts	Science	Total	Arts	Science	Total	Arts	Science	Total
Government	Mean	166.81	168.23	167.52	168.20	170.69	169.44	167.51	169.46	168.48
	SD	14.27	12.11	13.21	12.11	11.45	11.82	13.21	11.82	12.55
Private	Mean	159.26	162.84	161.05	161.25	165.70	163.48	160.26	164.27	162.26
	SD	12.75	12.91	13.22	12.91	16.42	14.89	12.83	15.06	14.11
Total		163.03	165.53	164.28	164.72	168.19	166.46	163.88	166.86	165.37

**Table 4:** The Complete Summary ANOVA: Attitude towards Teaching Profession In Relation to Gender, Type of Institution and Stream of Study

Source of variation	Sum of squares	DF	Mean squares variance	'F'
Gender(A)	756.90	1	756.90	4.29*
Institution(B)	6187.66	1	6187.66	35.08**
Stream (C)	1422.06	1	1422.06	8.06**
Gender X Institution (A X B)	10.00	1	10.00	.057
Institution X Stream (B X C)	170.16	1	170.16	.965
Gender X Stream (A X C)	38.02	1	38.02	.216
Gender X Institution X Stream (A X B X C)	.40	1	.40	.002
Error	111464.30	632	176.37	
Corrected Total	120049.49	639		

\* significant at 0.05 level of confidence

\*\*significant at 0.01 level of confidence

**Main Effects****(a) Gender (A)**

From Table 4, it is clear that F-value for the main effect of gender on attitude of prospective primary school teachers towards teaching profession has come out to be 4.29, which is higher than the table value (3.86) at .05 level of confidence for 1/632 df. It means that there exists a significant difference in the mean scores of attitude of male and female prospective primary school teachers towards teaching profession. In the light of this, the hypothesis stated as, "There will be no difference in attitude towards teaching profession of prospective primary school teachers with respect to gender," was rejected.

Table 3, show that the mean score for the male prospective primary school teachers is 164.28 and for the female prospective primary teachers is 166.46. From this, it may be interpreted that prospective primary female teachers have more favourable attitude towards teaching profession as compared to prospective primary male teachers.

**(b) Type of Institution (B)**

Table 4, further exhibits that F-value for the main effect of type of institution on attitude towards teaching profession which compares the means of prospective primary school teachers who studying in government institution and private institution has come out to be 35.29, which is much higher than the table value (6.69) even at .01 level of confidence for 1/632 df. It means that there exists a significant difference in the mean scores of attitude of government and private prospective primary school teachers towards teaching profession. In the light of this, the hypothesis stated as, "There will be no difference on attitude towards teaching profession of prospective primary school teachers with respect to type of institution," was rejected.

Table 3 shows that the mean score for the prospective primary school teachers of government institution is 168.48 and for the prospective primary school teachers of private institution is 162.26. This indicates that there exists significant difference between prospective primary school teachers of government institution and private institution on their attitude towards teaching profession. In other words, it may be said that government and private teacher differ in their attitude towards teaching profession. From this, it may be interpreted that prospective government primary school teachers have more favourable attitude towards teaching profession as compared to prospective primary school teachers of private institution.

**(c) Stream of Study (C)**

Table 4, indicative of the fact that computed value of F for the main effect of stream of the study on the attitude of prospective primary school teachers towards teaching profession has come out to be 8.063, which is much higher than the table value (6.69) even at .01 level of confidence for 1/632 df. It means that there exists a significant difference in the mean score of attitude towards teaching profession of arts stream and science stream prospective primary school teachers. In the light of this, the hypothesis stated as, "There will be no difference on attitude towards teaching profession of prospective primary school teachers with respect to stream of study" was rejected.

Table 3 shows that the mean score for prospective primary school teachers of arts stream is 163.88 and for the prospective primary teachers of science stream is 166.86. From this, it may be inferred that the prospective primary school teachers of different stream of study i.e. arts and sciences differ in their attitude towards teaching profession. It also shows that prospective primary school teachers of science stream have more favourable attitude towards teaching profession as compared to prospective primary school teachers of arts stream.

**Two Way Interactions****Gender X Type of institution**

From the Table 4, it can be seen that computed value of F-ratio for the interactional effect of gender and type of institution (A x B) on attitude towards teaching profession has come out to be 0.057, which is not significant at 0.05 level of significance for 1/632 df. From this, it can be interpreted that there exists no significant interactional effects of gender and type of institution on attitude towards teaching profession of prospective primary school teachers.

**Gender X Stream of study**

Table 4, reveals that F-ratio for gender and stream of study (A x C) on attitude towards teaching profession has been found to be 0.57, which is not significant at 0.05 level of significance for df 1 and 632. From this, it may be interpreted that there exists no significant interactional effects of gender and stream of study on attitude towards teaching profession of prospective primary school teachers. It may be interpreted that the difference in the attitude towards teaching profession of male and female prospective primary school teachers is of the same form for different streams of study i.e. arts and science.

**Stream of Study X Type of institution**

Table 4, shows that F- ratio for stream of study and type of institution (B x C) on attitude towards teaching profession has been found to be 0.965, which is not significant at 0.05 level of significance for 1/632 df. From this, it may be interpreted that there exists no significant interactional effects of stream of study and type of institution on attitude towards teaching profession of prospective primary school teachers. In other words, arts and science prospective primary school teachers have equal mean scores on attitude towards teaching profession irrespective of type of institution. On the other hand, the arts and science primary prospective teachers have equal mean scores on attitude towards teaching profession, irrespective of type of institution.

**Gender X Type of Institution X Stream of Study**

Table 4, is also indicative of fact that computed value of F-ratio for the interaction of gender, type of institution and stream of study for attitude of prospective primary school teachers towards teaching profession has come out to be .002 for 1/632 df. From this, it may be interpreted that there exists no significant interactional effect of gender, type of institution and stream of study on attitude of prospective primary school teacher towards teaching profession.

**Findings of the Study**

1. There was a significant difference in the teaching aptitude of male and female prospective primary school teachers. It means that teaching aptitude of male and female prospective primary school teachers is affected or determined by their gender.
2. There was a significant difference in the teaching aptitude of prospective primary school teachers studying in govt. institution (DIET) and private institution of junior basic teacher training. It means that types of institution influence the teaching aptitude of prospective primary school teachers.
3. There was no significant difference in the teaching aptitude of arts and science stream prospective primary school teachers.
4. There was significant interactional effect of type of institution and stream of study on the teaching aptitude of prospective primary school teachers.
5. There was no triple interaction effect of type of institution, gender and stream of study on attitude of prospective primary school teachers towards teaching profession.
6. There was no significant difference in the attitudes of female and male prospective primary school teachers towards teaching profession. It means that attitudes of female and male prospective primary school teachers is affected or determined by their gender.
7. There was a significant difference in the attitudes of prospective primary school teachers studying in govt. institution (DIET) and private institution of junior basic teacher training towards teaching profession. It means that types of institution i.e., govt. and private influences the attitudes of prospective teachers towards teaching profession.
8. There was significant difference in the attitudes of arts and science stream prospective primary school teachers towards teaching profession. It means that attitudes of arts and science stream prospective primary school

teachers is affected or determined by their choice of streams.

9. There was no double and triple interaction effect of type of institution, gender and stream of study on attitude of prospective primary school teachers towards teaching profession.

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