Normality of teaching aptitude of high school teachers

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Abstract---A study is being conducted to determine the normality of high school teachers' teaching aptitude in the Tamilnadu districts of Salem and Namakkal. Two hundred and fifty teachers were randomly chosen from thirty six Community Developmental (CD) educational blocks for a brief survey. *Battery of Teaching Aptitude Test*, standardized by *Shamim Karim & Ashok Kumar Dixit (1986)* has been employed to assess teaching aptitude. The data were subjected to descriptive analysis in order to determine the normality of the high school teachers' teaching aptitude scores. The results demonstrated that high school teachers' normal distribution scores deviated slightly from normality. The sample's general teaching aptitude was average in character, and 60.80% of teachers scoring lies within the Mean±1σ boundary limit of the normal probability curve. 22.0 percent of high school teachers have a low level of teaching aptitude in the range of less than Mean-1σ range limit. According to the Mean+1σ mentioned range limitations, 17.20% of school teachers have excellent teaching aptitude. The pre-service teacher education training programmes for prospective student teachers are strengthened with training strategies to promote and enhance required teaching aptitude.

Keywords---Normality, Teaching Aptitude, and High School Teachers

Aptitude

Aptitude appears to be a measure of a person's ability to learn a specific behavioural pattern of interest, knowledge, and skill. The aptitude test is used to predict what an individual will be able to learn, but the ability test shows what an

individual can perform now or in the future without additional training if he/she puts in the effort. However, it should be highlighted that, in practice, obtaining an aptitude measure that does not suggest a specific amount of training appears to be nearly impossible. Traditionally, it has been considered that individuals have been exposed to certain similar experiences and that a person with greater aptitude will perform better on a standardized test. *Bingham (1937)* defined aptitude as a state or combination of qualities that are sympathetic to a person's ability to acquire answers.

Aptitude is primarily tested by tests and is based on differentiated psychology. An aptitude test seeks to evaluate and measure a person's ability to learn a given set of abilities through future training (intellectual, motor or interpersonal and so on). Diverse people have different skills, and these variances in ability can predict their future success. An aptitude test indicates the abilities that individuals in a specific activity might expect. According to *Bingham (1937),* they determine what an individual actually does in specific standardized settings, and the estimate of future accomplishment potential is an inference on a statistical likelihood, not a certainty based on these measures. *Kumar & Gupta (2012)* defined teaching aptitude as an interest in teaching work orientation, as well as the implementation of teaching concepts and methodologies.

Teaching Aptitude

Teaching aptitude is the ability to gain proficiency with a certain level of teacher education training. It refers to a person's ability to become a skilled teacher through formal or informal training. Thus, after giving suitable opportunity and training, teaching aptitude might assist an individual's future performance in the teaching sector.

Teaching is the process of influencing a learner's behaviour and acquiring desired skills for his overall development. Effective teachers are required for the teaching process to be successful. No amount of new technology can change classroom teaching unless there are skilled and dedicated teachers in the profession. A teacher's success is determined by his self-control, instructional ability, and work ethic. Teaching is a disciplined social activity in which teachers use curriculum and content to affect the behaviour of less experienced students and help them develop in accordance with societies objectives and goals *(Morrison Keith, 1998)*

Training is well known for improving a learner's performance in any subject. It not only improves his or her abilities, but it also increases his or her self-assurance. In our daily lives, we try to learn new things by getting information and training in the relevant field. Without the necessary information or expertise, which can only be acquired through sufficient training, no one can become efficient. A teacher with good teaching skills enables students to use active learning approaches to gain additional knowledge, then to reflect on and discuss what they're doing and how their understandings are evolving. According to research, a teacher's content knowledge, students' learning, and teaching methods are all significant components of effective teaching, and they are all linked to teaching aptitude. Even if an educational system has good resources, the teachers lack in teaching

ability and are incompetent or unconcerned about their obligations, the entire programme will be ineffective and wasteful.

Bases of the research

Teaching is the name given to the profession of initiating, directing, supporting, and achieving the learning process in individuals, in order to achieve a specific goal. With a certain amount of instruction, teaching aptitude is the ability to gain expertise or skill. *Dabir (1986)* investigated that the teachers' vocational objectives were influenced by their socioeconomic condition as well as their aptitudes. *Joshi (2003)* investigated the teaching ability of Gujarat state higher secondary school teachers in relation to several psycho-socio factors and discovered that the biggest difference in teaching aptitude scores was in favour of trainees with a low leadership attribute. Lata, K. (2017) found that teaching aptitude was significantly related to level of aspiration which shows the importance of this variable in the selection of teaching profession. *Kalaivani & Pugalenthi (2015)* found that teaching aptitude doesn't influence gender, locality and type of school and it was common for all the teachers. Teachers must have teaching aptitude in order to accomplish their work well. Any teacher who lacks a significant amount of teaching aptitude will be unable to fulfil his or her responsibilities.

Problem and title

To the present context, it is very mandatory to assess a teacher's aptitude to deliver instructional strategies that will have the greatest impact on the desired student outcomes. This study was done to identify the teaching aptitude of instructors at secondary education level in order to determine the role of teaching aptitude in the teaching profession. The title of the problem taken for the present study is *"Normality of Teaching Aptitude of High School Teachers"*.

Key Term Definitions
- Normality: According to the researcher, normality refers to the distribution of the scores of the sample which explains how far it obeys and deviate the normal distribution property of the bell shaped curve.
- Teaching Aptitude: According to the researcher, teaching aptitude is an individual's intrinsic ability or learned skill in the area of teaching.
- High School Teachers: According to the researcher, teachers who work in high schools teach students in grades starting from six to ten.

Objectives of the study
The study on normality of teaching aptitude of high school teachers focuses the following objectives of the present study.
- To determine the normalcy of high school teachers' teaching aptitude scores.
- To measure the overall degree of high school teachers' teaching aptitude.
- To determine the high, average, and low levels of teaching aptitude among high school teachers as a whole.

Hypotheses of the study
The hypotheses of the present study are

- The high school teachers' teaching aptitude scores are distributed normally.
- The overall degree of high school teachers' teaching aptitude is high.
- Majority of the high school teachers are belongs to high level of teaching aptitude.

Methodology

To investigate the issue, the researcher used normative methodology and a survey technique. A total of two hundred and fifty high school teachers were chosen from 36 CD blocks in Salem and Namakkal districts by using a random sampling technique for this study.

Research Tool

The current investigation used a Teaching Aptitude Test Battery developed and standardised by *Shamim Karim & Ashok Kumar Dixit (1986)*. This battery had eighty positive statements with eight dimensions ranging from agree to disagree on a three-point scale. The scoring was done according to the manual's scoring technique, and norms were calculated using Mean ±1σ. The higher the score, the better the teaching aptitude, and the lower the score, the lesser be the teaching aptitude. The tool's lowest and maximum scores were 80 and 240, respectively. A pilot study was undertaken to ensure the research tool's reliability and validity. The battery's reliability was determined by using the split half method of reliability measurement and it was found as 0.6221. The intrinsic validity is calculated by taking the square root of dependability. As a result, the Teaching Aptitude Test Battery's internal validity was 0.7887.

Analysis and Findings
Normality of Teaching Aptitude of High School Teachers

The Table.1.1 shows the normalcy of high school teachers' teaching aptitude scores in order to investigate the deviation from the normal distribution property of the scores on gathered data.

Table.1.1 Distribution of High School Teachers' Teaching Aptitude Scores

S.No	Descriptive Statistics	Values	S.No	Descriptive Statistics	Values
1	N	250	7	Variance	40.554
2	Mean	212.13	8	Skewness	-0.041
3	Std. Error of Mean	0.430	9	Kurtosis	-0.149
4	Median	212.00	10	Range	30
5	Mode	214	11	Minimum	199
6	Std. Deviation	6.368	12	Maximum	229
Interpretation of Test Scores					
S.No	Level	Range	N (%)	Mean	Interpretation
13	Mean+1σ	219 to 240	43 (17.20)	221.56	High

	Mean ±1σ	205 to 218	152 (60.80)	212.54	Average
	Mean-1σ	80 to204	55 (22.00)	203.62	Low
14	Overall Level	80-240	250(100.00)	212.13	Average
15	25 Percentiles	206.00		50 Percentiles	213.00
	75 Percentiles	215.00		99 Percentiles	228.00

The general degree of teaching competence of high school teachers is evidently shown to be ordinary (212.13). The mean, median, and mode values are not nearly equal. The normal probability curve distribution is asymmetrical in character. The curve is positively skewed (214≠212=212.13), and it conforms to the negative skewness value (-0.041), which is less comparable to zero. The curve is warped on the left side of the normal probability distribution, as indicated by the negative skewness.

The fact that the peakedness of the curve (-0.149) is not equal to the kurtosis value 0.263 suggests that the curve's height is platykurtic. The percentiles indicate that the level of scores obtained in the 25th, 50th, 75th, and 99th percentiles are 206, 213, 215, and 228 respectively. Mean ±1σ (205 to 218) implies that 68.26% of the sample is distributed within the range between Mean+1σ and Mean-1σ.

The slightly different scores were supported by the greater range value (229-199=30) and standard deviation (6.36). The entire distribution was negatively skewed, with a platykurtic tendency. Table.1.1 demonstrates that the mean (212.13) and standard deviation (6.36) scores of high school teachers have average teaching aptitude for the entire sample. Table 4.5 shows that out of 250 high school teachers, 17.20 % (43) have high level teaching aptitude (Mean=221.56, S.D=2.76), 60.80 % (152) have average level teaching aptitude (Mean=212.54, S.D=2.90), and 22.00 % (55) have low level teaching aptitude (Mean=203.62, S.D=3.52). Figure No.1.1 shows the histogram with a normal curve, indicating that the normal distribution is almost normal.
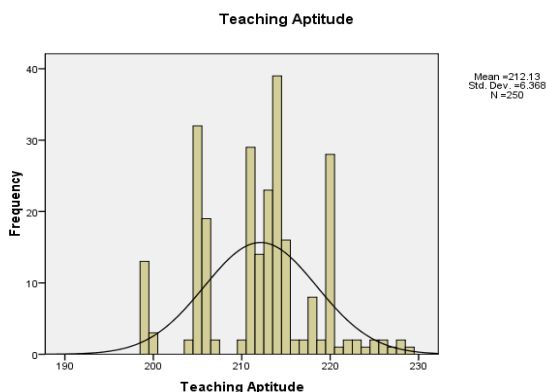

Figure 1.1. Shows the Normal Distribution of High School Teachers' Teaching Aptitude

Research Outcomes

- The distribution of high school teachers' teaching aptitude scores is not regular.
- Teachers at secondary schools have an average level of teaching aptitude.
- High, average, and low level teaching aptitude are found in 17.20 %, 60.80%, and 22.00 % of high school teachers.

Discussion

The descriptive statistics of the current investigation revealed that the sample scores obtained are deviated slightly from normalcy. This demonstrates the variance in high school teachers' teaching aptitude level scores. If the teaching aptitude score is similar or very near among the high school teachers, the other properties of the normal probability curve will be obeyed with no further discussion. Teachers in the entire sample have average teaching aptitude. Only 17.20 % of teachers have high teaching aptitude. This suggests that high school teachers need more training to improve their teaching abilities, and current teacher education training institutions should devote more attention to promote more teaching aptitude among prospective student teachers.

Implications

According to *Kalaivani & Pugalenthi (2015),* Teachers should receive training that will have a substantial impact on their self-concept, social maturity, and attitude toward the profession of teaching. *Traxler (1957)* explained that aptitude is a current state that indicates a person's future potential and different facets of teaching practice contribute to instructors' professional growth. Inculcating these characteristics will lead to mastery of the subject content topic, the development of lesson planning abilities and presentation style, and the personal growth of future teachers. It is proposed that a comprehensive written test or pre entrance examination be required for entry level to a teacher education programme. Individuals with strong teaching aptitude and attitude will become more competent teachers if they pursue the teaching profession. This procedure will also aid in the identification of misfits in the teaching profession.

Conclusion

Any country fate is determined by the quality of its education, teachers, and institutions. Teachers and students behaviour has a greater impact on the academic climate of the school than any other element. This has a long-term impact on kids' personalities, so it's vital that all teachers have a positive attitude and aptitude toward their jobs are tremendously fulfilled, and are enthusiastic about what they do. So that teachers can assist students in achieving academic achievement and developing the citizens who are physically, mentally, and morally healthy. Man-making education can only be provided by a group of dedicated, pleased teachers who have a good attitude and aptitude towards their work.

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