



A Comparative Analysis of School Teachers' Teaching Aptitude

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Abstract: *The teaching profession is incomplete without teachers' personal aptitude towards their profession as teaching aptitude uplifts teachers' teaching competencies and gives them confidence in their profession. Keeping in view the utmost significance of teaching aptitude for school teachers, this study was conducted with the purpose of comparing the teaching aptitude of elementary school teachers and secondary school teachers in schools of three districts of the Multan division in Punjab province. The sample for the study was comprised of 300 teachers including 171 ESTs and 129 SSTs which were selected by using a simple random sampling technique. For the measurement of the aptitude of teachers of both cadres, Dahiya & Singh's Teaching Aptitude Test (2004) was used. For the analysis of data, Mean score and z-test was used. The results revealed that ESTs had greater teaching aptitude than SSTs. However, the difference between the teaching aptitudes of ESTs and SSTs is insignificant. Similarly, male ESTs had a low-level teaching aptitude than male SSTs. The study recommended that teaching aptitude should be measured at the time of induction of teachers.*

Key Words: Teaching Profession, Teaching Aptitude, ESTs, SSTs

Introduction

Human beings are not alike. We have individual differences as we have particular abilities and personality traits which help us in living a better life and making adjustments uniquely in society. Some are general abilities and some are specific abilities. These specific God-gifted abilities are termed as the aptitude of an individual. Aptitude reflects vital and critical traits of an individual's unique personality. These specific traits with other aspects compose the personality of an individual. It predicts a person's achievement or failure in his profession or any area of that particular profession (Rajeeva & Vanketsha, 2021). We may define aptitude as a definite

interest and natural inclination of an individual towards some specific profession or skill. In short, we can say that aptitude may be considered as a particular skill and a specific capability that enables the individual to attain a degree of expertise in a particular area. At the more advanced level, we can take aptitude as a situation or a position of traits with reference to indicative of a person's capability to attain learning, training, some information and skills or responses like the capability to speak a language (Blerkom, 2009). According to Tasleema (2012, p. 48)

"Aptitude is a combination of characteristics which are indicative of an individual's capacity to acquire (with training) some specific

knowledge, to become a musician and to do any mechanical work.”

Thus we can say that aptitude is a mixture of an individual's capabilities and skills which helps him to become an expert and further outshine in his profession on the basis of these capacities and potential. Working or training in a specific field of knowledge or profession based on aptitude makes an individual successful. In this way, an individual can perform maximum by using fewer resources or efforts. Although, aptitude is a non-tangible characteristic it can be measured. Different tools or aptitude tests are used to measure aptitude (Khan, Hashmi, & Khan, [2022](#)).

For the measurement of aptitude, various aptitude tests or other tools may be used to predict the abilities or the extent of attainment that may be required by an individual to be performed a specific task. So, psychologists can measure traits, prospective abilities and other characteristics that are indicators of future success and achievements in specific circumstances (Ghatvisave, [2012](#)). Aptitude tests can measure and illustrate abilities and traits in specific areas as well as special talents and potential which are expected from any individual's personality for the required level of achievement or accomplishment in a specific area, activity, profession or field of study. Like intelligence, aptitude belongs to the cognitive domain, however; more complex to measure and specific in nature for different fields like scholastic aptitude is specific for aptitude in any subject (Ranjith, & Achari, [2017](#)).

Tests like Aptitude tests are used to measure aptitude for a specific kind of training or any field and prediction about success in that training or field. For example, Scholastic aptitude tests (SATs) are used in college or school for success in future for specific courses or programs. Scholastic aptitude tests (SATs) are commonly used for academic and employment purposes to judge academic achievement and determine the future fields of study or profession. SATs describe the chance of success in different fields of study at the school or secondary level (Farhana, [2011](#)). Aptitude tests for vocational programs or

occupations predict success in vocational programs. For vocational fields, Vocational aptitude tests (VATs) are used to predict success in future for the said profession (Godard, et al., [2012](#)).

For aptitude in music, natural and God-gifted characteristics like pitch, pattern, and rhythm are measured that are necessary for successful musical performance. In this way, aptitude in music can be measured. An individual who possesses the aptitude for clerical work requires the skills in instruction deftness, and consideration speed with recurring odd jobs to accomplish different kinds of clerical work successfully and professionally in an effective and efficient manner. In a wide range of fields of life, previous presentation and performance are the most excellent analyst of future recitals in the same domain of action (Tasleema & Hamid, [2012](#)). So, the aptitude to teaching can be measured through aptitude tests specifically developed for the teaching profession to measure the traits of an individual to be a successful teacher in future (Godard, et al., [2012](#)).

Teaching means providing knowledge to the students. The major role of the teacher is to give knowledge to the students and the main responsibility of the teacher is often official and continuing, carried out at a school or other places of formal education (Sharma & Bedi, [2016](#)). A below-average educator tells; a good educator teaches; a tremendous educator demonstrates; a marvellous teacher stimulates the pupil; a brilliant teacher exhibits; a good teacher only teaches and a poor teacher only describes (Hammond, 2006). In the present era of knowledge explosion and digitalization, teaching profession only teachers with high qualifications and experiences are not enough but teachers' dedication, commitment to the teaching profession, attitude towards the teaching profession and most important their aptitude; altogether make the teacher a perfect blend of needed traits for the teaching profession (Tasleema & Hamid, [2012](#)).

It is necessary for a teacher to have two kinds of knowledge, content and pedagogical.

Along with these two types of knowledge, he should gain two kinds of qualities personal and occupational (Singh & Kaur, [2018](#)). A teacher should be able to attain his aims if he connects both kinds of traits with content and functional areas and then he may be called the best teacher. So to become a model teacher, it is necessary for a teacher that he should have a good teaching aptitude. It is very necessary and vital to measure the aptitude of the teaching of individuals while recruiting them for the teaching profession (Lata, [2017](#)). The factors that are included to measure the aptitude of a teacher have a wide range of individual personal characteristics and traits, which are very crucial for a successful teacher. Without aptitude for teaching, an individual cannot be a successful teacher and no one can neglect the importance of aptitude for teaching. For this holy and important job or profession of teaching, the measurement of aptitude for teaching is necessary so that a suitable person may be selected for the teaching job (Eysenk, et al. [2011](#); Choudhry, [2016](#)).

The present study is an addition to the field of aptitude testing of teachers particularly with reference to teachers teaching at schools in Southern Punjab as teaching aptitude of teachers, teaching elementary classes and secondary classes were found to be a neglected area of research grounded or based on attitude measurement. This study may be helpful for policymakers for recruitment for the profession of teaching. The right person may be recruited for teaching. So, it was thought appropriate to compare the teaching aptitude of these both cadres by highlighting the aptitude levels of ESTs and SSTs.

Review of Related Literature

Teaching aptitude denotes the probability of a teacher's future success in his teaching profession while demonstrating the teacher's innate inclination for the interest in teaching and ultimately opting for required teaching principles and effective teaching methods and display of dedication and devotion towards his profession. Teaching aptitude is a particular talent found in a teacher that is indicative of his

future success in his field. However, it is discrete from general intelligence. If a teacher has a high level of teaching aptitude along with he receives appropriate training, then his future is more bright (Rajeeva & Venkatesha, [2021](#)). Teaching aptitude is an occupation-based test through which teachers' intelligence, achievement and interest in the teaching profession are evaluated (Rohiwal, [2018](#)). Aptitude is a characteristic and features to be suitable for a rationale and situation, and then teaching aptitude is belonged to the quality of the profession of teaching. That is why it is considered the preliminary contributory aspect of valuable teaching. A person with having teaching attitude is considered to be a successful teacher in future having a high-quality fraction of the characteristics for teaching (Lata, [2017](#)).

Sharma & Bedi ([2016](#)) worked on secondary school teachers' aptitude in the teaching profession and explored that both male and female teachers have the same aptitude and the difference between them is insignificant and have the same characteristics and traits for teaching. Rohiwal ([2018](#)) worked on the environment of home and teaching aptitude among male and female college students. The correlation between home environment and teaching aptitude revealed a low, however, positive correlation which exposed that home environment has little impact on teaching aptitude. Singh and Kaur ([2018](#)) worked to find the teaching aptitude of teachers regarding both gender, IQ and academic achievement and found no significant difference in aptitude in relation to intelligence and academic achievement.

On the other hand, Guru ([2020](#)) studied teaching aptitude and academic achievement of TTIS and deduced insignificant differences between pupil-teacher of high-level academic backgrounds and low-level academic backgrounds. Abdullah et al. ([2022](#)) worked on teaching the aptitude of trained and untrained SSTs and found that teaching the aptitude of trained SSTs is better than teaching the aptitude of untrained SSTs. Rajeeva & Venkatesha ([2021](#)) worked on achievement motivation in relation to the teaching aptitude

of future and prospective teachers. The research study found that different variables of achievement motivation are significantly related to future teachers'

teaching aptitude.

Kalaivani & Pugalenth (2015) worked on the teaching aptitude of high school teachers based on demographic data. The finding shows that there is no significant difference between male and female as well as urban and rural teachers in terms of teaching aptitude. Ranjith & Ummadisingu (2017) examined the level of teacher aptitude in relation to teacher effectiveness in practice teaching among pre-service teachers. The study found that there is a significant difference in the level of teachers' effectiveness in practice teaching among the pre-service teachers

Palled & Devarmani (2019) highlighted the attitude, satisfaction of job and aptitude of primary school teachers in Belgium and found it as the most potent factors. Khan, Hashmi & Khan (2022) studied the correlation between students' aptitude and their academic achievement at the secondary school level in the Khanewal district and found a positive correlation between study variables.

Research Questions

The current study was conducted to answer the following questions

1. What is the level of SSTs' and ESTs' teaching aptitude?
2. Is there any significant difference in the teaching aptitude of ESTs and SSTs?

Research Methodology

The present research study is descriptive in nature and a comparative research design was adopted. The study was delimited to only public sector high schools of Multan, Khanewal and Muzzafargarh districts. Furthermore, only

elementary school teachers and secondary school teachers were taken as respondents of the present study. There were 3144 SSTs (1223 in Multan, 1066 in Khanewal and 855 in Muzaffargarh) and 6084 ESTs (2129 in Multan, 2123 in Khanewal and 1832 in Muzaffargarh) in respective districts at the time of data collection (School Information System, 2022). By using Raosoft (Sample Size Calculator, 2022) total sample was drawn as 369 of which there were 236 ESTs and 133 SSTs. However, on the basis of the return rate of the tool, a total of 300 teachers were considered as respondents of the study in which there were 171ESTs and 129 SSTs participated. For the measurement of the teaching aptitude of ESTs and SSTs, Teaching Aptitude Test Battery developed by Dahiya and Singh (2004) was used as a research tool to determine the aptitude of the teachers. There was a total of 50 items in this test battery based on various dimensions of aptitude as mental ability, attitude towards children, adaptability, professional information and interest in the profession. The teaching Aptitude Test Battery is a standardized test and valid for measuring the aptitude of teachers. The aptitude test was used after prior permission of test developers through e-mail. The test developer also mailed a manual which included Z scores and standard score norms, percentile norms as well as the process of validity for the test. For the scoring of the test, the guidelines provided in the manual were followed as the test manual guide was provided by the test developers. The reliability of the Teaching Aptitude Test Battery was calculated by Split Half Method (using even and odd items) which is 0.828.

Both descriptive and inferential statistics were employed as mean scores, standard deviations were calculated under descriptive statistics and the z-test was used as inferential statistics for the comparison.

Results

Table 1. Z-test between ESTs and SSTs

S. No	Teachers	N	Mean	Standard Deviation
1	ESTs	171	25.89	5.235

S. No	Teachers	N	Mean	Standard Deviation
2	SSTs	129	25.35	6.184
3	Male ESTs	84	24.09	5.547
4	Male SSTs	63	26.32	5.913
5	Female ESTs	87	27.63	5.102
6	Female SSTs	66	24.42	6.391

The above table reveals that the mean scores of ESTs and SSTs are 25.89 and 25.35 respectively. Similarly, the standard deviation of the ESTs and SSTs are 5.235 and 6.184 respectively. The mean scores of male ESTs and male SSTs are 24.09 and 26.32 respectively. Similarly, the standard deviation of the male ESTs and male SSTs are 5.547 and 5.913 respectively and the mean scores of female

ESTs and female SSTs are 27.63 and 24.42 respectively. Similarly, the standard deviation of the female ESTs and female SSTs are 5.102 and 6.391 respectively. It can be inferred that ESTs have more teaching aptitude as compared to SSTs as a score on the test. Similarly, female ESTs have higher teaching aptitude and female SSTs have low teaching aptitude.

Table 2. Z-test between ESTs and SSTs

	Designation	N	Mean	Std.Deviation	Z-Value	Significance (0.05)
Teaching Aptitude	Elementary	171	25.89	5.235	0.79	1.96
	Secondary	129	25.35	6.184		

The above table reveals that the mean scores of ESTs and SSTs are 25.89 and 25.35 respectively. Similarly, the standard deviation of the ESTs and SSTs are 5.235 and 6.184 respectively and calculate the value for the z-

test between ESTs and SSTs is 0.79 at 0.05 (level of significance.) There is an insignificant difference between the teaching aptitude of ESTs and SSTs.

Table 3. Z-test between Male ESTs and Male SSTs

	Designation	N	Mean	Std. Deviation	Z-Value	Significance(0.05)
Teaching Aptitude	Male Elementary	84	24.09	5.547	2.22	1.96
	Male Secondary	63	26.32	5.913		

The above table reveals that the mean scores of male ESTs and male SSTs are 24.09 and 26.32 respectively. Similarly, the standard deviation of the male ESTs and male SSTs are 5.547 and 5.913 respectively and calculate the value for

the z-test between male ESTs and male SSTs is 2.22 at 0.05 (level of significance). There is an insignificant difference between the teaching aptitude of male ESTs and male SSTs.

Table 4. Z-test between Female ESTs and Female SSTs

	Designation	N	Mean	Std.Deviation	Z-Value	Significance(0.05)
Teaching Aptitude	Female Elementary	87	27.63	5.102	3.34	1.96
	Female Secondary	66	24.42	6.391		

The above table reveals that the mean scores of female ESTs and female SSTs are 27.63 and 24.42 respectively. Similarly, the standard deviation of the female ESTs and female SSTs are 5.102 and 6.391 respectively and calculate the value for the z-test between female ESTs and female SSTs is 3.34 at 0.05 (level of significance). There is an insignificant difference between the teaching aptitude of female ESTs and female SSTs.

Discussion and Conclusions

The present study was an effort to compare the teaching aptitude of teachers teaching at high schools. Respondents were working as EST and SST in sampled schools and their cadre was the major demographic of comparison and gender was the secondary demographic of this study. For this comparative analysis, an aptitude test battery was administered to sampled teachers. On the basis of scores obtained by the teachers, this research study exposed that ESTs have a more natural tendency of teaching as compared to SSTs as revealed by scores on the test.

Similarly, female ESTs have a high level of teaching aptitude and female SSTs have a lower level of teaching aptitude. ESTs have greater teaching aptitude than the SSTs but there is no significant difference between the teaching aptitudes of ESTs and SSTs. Similarly, male ESTs have lesser teaching aptitude than male SSTs and there is a significant difference between the teaching aptitudes of ESTs and SSTs. Female ESTs have greater teaching aptitude than female SSTs and there is no significant difference between the teaching aptitudes of female ESTs and female SSTs.

It was concluded that ESTs have more teaching aptitude as compared to SSTs as the score on the test is reflecting this conclusion. The result is in line with study results by Tasleema and Hamid (2012) whose study result also confirmed that there is no significant difference between the teaching aptitudes of ESTs and SSTs. Male SSTs and male ESTs have no significant difference in teaching aptitudes. Similarly, female ESTs and female SSTs have no significant difference in teaching aptitudes. The result is aligned with the study results of Sharma & Bedi (2016).

Recommendations

On the basis of the study results; the study recommends that:

1. Appointing authorities should measure teaching aptitude while recruiting teachers.
2. The promotion of teachers should be linked with their high level of teaching aptitude which should be measured from time to time.
3. SSTs and ESTs should be trained to become effective teachers and to perform as efficient and competent teachers if their teaching aptitude is found to be low.
4. In future, such a study can be conducted on a large population and sample in which the population and sample may be drawn from the whole of the Punjab province of Pakistan.
5. The aptitude of a teacher at the college and university level should be measured.

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