

# QUALITY OF LIFE AND PROFESSIONAL EFFICACY OF SCHOOL TEACHERS IN WEST BENGAL, INDIA



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## ABSTRACT

Quality of life and Professional efficacy of teachers are significant factors that facilitate the entire educational scenario. The excellent quality of life and high level of professional efficacy of teachers can immensely help the sound functioning of the educational system. However, different and numerous variables may impact these two significant factors. Thus, the study investigates these two factors and examines their relationship with demographic variables such as the location of schools and subject streams. Using a descriptive survey method from 300 school teachers, the study employs a stratified random sampling technique with a scale (QOLS) developed by Sarika Sharma and Nakhat Nasreen and a self-made scale (PES). The QOLS was revalidated using an updated sample to identify its applicability in the context of West Bengal. Cronbach's Alpha for the QOL was found to be 0.789, and the results of the Splits-Half (Odd-Even) show 0.678 ( $p$ -value  $0.00 < 0.01$ ) positive correlations at the 0.01 level. Cronbach's Alpha reliability for the self-made tool (PES) was 0.938. At the 0.01 level, the PES's Splits-Half produces a result of positive correlations of 0.855 ( $p$ -value  $0.00 < 0.01$ ). The result reveals the average level of professional efficacy of teachers. A significant difference between teachers' subject streams and professional efficacy is found. Additionally, the result demonstrates a significant association between location and levels of quality of life and between subject streams and professional efficacy. The study also shows a positive correlation between professional efficacy and subject streams. The study's findings suggest necessary measures for improving teachers' professional efficacy.

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## INTRODUCTION

Teaching is defined as assisting an individual in learning and is considered the most imperative profession in the universe (Leoci et al., 2023). The two most significant aspects of the teaching profession that significantly impact the educational scenario are the teachers' Quality of life and professional efficacy. Teoli and Bhardwaj, 2023 state- 'Quality of life' is the 'well-being' of an individual. For any individual, QOL expresses that a collection of wants, when fulfilled, makes an individual happy and satisfied. The strengths and competence of any educational framework are heavily reliant on the efforts of its teachers and their capacities. (Raju & Vardhini, 2022). A good quality of life for teachers can improve work performance, whereas working under adverse circumstances reduces work quality (Erturk, 2022). The 'Integrated theory of Quality of Life' (QOL), according to Ventegodt, 2003 identify Quality of Life (QOL) as a good life with high quality. The conception of a good life can be perceived from subjective to objective. The theory identifies subjective aspects such as well-being, satisfaction with life, happiness, and meaning in life, as well as objective aspects such as realizing life's potential fulfillment of needs and individuals' ability to adapt to values and cultural norms. Bandura's social-cognitive theory of behavioral change (1977) inspired the concept of self-efficacy. Self-efficacy is an assessment one makes of what one is capable of doing with those abilities. Professional Efficacy is a teacher's ability, belief, and confidence in their profession. The belief that one holds about one's capabilities. The theory emphasizes the role of observational learning, social experience, and reciprocal determinants in the growth of self-efficacy (Woolfolk & Kapur, 2019). The 'Self-Determinant Theory' (SDT) focuses on the importance of autonomy and opportunities for growth that can enhance professional efficacy. Among all the qualities of teachers, teachers' efficacy is considered the most influential quality that contributes to students' success (Guskey, 2021; Hasan & Surjamokhey, 2022). There needs to be more practice for teachers to enhance their well-being and efficacy, which can severely impact the student's performance and the smooth functioning

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of educational settings. Understanding how teachers' general well-being affects their professional performance and vice versa is essential to integrating the concepts of Quality of Life (QOL) and Professional Efficacy for school teachers. Suppose the teachers are satisfied and happy and able to fulfill their needs and adapt to societal values and cultural norms. In that case, this can significantly increase their efficacy in their profession. Overall, good qualities of life have a positive and significant impact on teachers' overall performance and capabilities, which will efficiently enhance the total performance of the school environment. Focusing on all these aspects, a rigorous study needs to be undertaken. The study aims to assess the two significant factors of school teachers, i.e., Quality of life and professional efficacy. Many studies have been conducted separately on these variables. Still, all of the surveys are separate from these two variables (Quality of life and professional efficacy of school teachers) in the context of West Bengal. However, more research needs to be done on teachers' Quality of life and professional efficacy at all levels. Thus, the study aims to fill in the knowledge gap. The gaps that are discussed in the study are to be identified. An empirical study is undertaken to diminish the gap that may benefit the teachers and essential stakeholders such as students, teachers, parents, and the authorities. Additionally, whether the demographic variables (location and subject streams) significantly impact these two variables has also been analyzed.

The remaining paper structure includes section 2, which reviews the literature on the study variable quality of life and professional efficacy. Section 3 elaborates on the study's methodology. Results and Discussion are presented in section 4, and the study's conclusion is given in section 5.

### LITERATURE REVIEW

The existing research work conducted in the area of Quality of life and professional efficacy is detailed in this section. Mahadevaswamy and Praveena (2023) conducted a study concerning categorical variables such as gender and type of school. A descriptive survey method was employed. Samples of 114 secondary school teachers were selected using simple random sampling. The findings revealed no significant difference between gender and type of school regarding Quality of life. Sharma et al. (2023) conducted a comparative study between government and private school teachers regarding their Quality of life. A massive difference was observed between teachers of private and government schools based on their Quality of life. Most teachers from private schools fall under the high range of Quality of life rather than the average and low level. On the contrary, most government school teachers fall under the average Quality of life rather than high and low levels.

Paschal and Srivastava (2021) investigated the difference in self-efficacy among secondary school teachers regarding their gender, type of institution, and year of teaching experience. The researchers adopted a survey method to carry out the study. A sample of 258 secondary school teachers preferred the Purposive and stratified sampling technique. The study's findings revealed significant differences in the self-efficacy of secondary school teachers regarding their gender and type of institution. Based on teacher effectiveness, a significant difference was observed between teachers teaching in private and government schools, but no significant difference was observed between male and female teachers. A significant relationship was found between the self-efficacy and teacher effectiveness of the participants. Barni et al. (2019) conducted a study on "Teachers' Self-Efficacy: The Role of Personal Values and Motivations for Teaching". The study examined the relationship between teachers' values and self-efficacy. The focus of the survey was Italy. The study sample consists of 227 teachers. Self- A constructed questionnaire was administered to the participants. The study investigated the positive relationship between teachers' values and teachers' self-efficacy about the level and type of motivation. Differences were observed between openness to change and self-efficacy and between self-transcendence and self-efficacy. Teachers' value and efficiency also depend on their motivation.

Lalompo et al. (2019) investigated teachers' Quality of work based on their performance. The investigators followed a path analysis model with 33 high school teachers as a sample. SPSS software was used to analyze the collected data. The findings indicated that teachers' Quality of life plays a vital role in accelerating teachers' performance. Further, the variables are taken, i.e., principal managerial competence and teachers' emotional intelligence, which also greatly influence teachers' Quality of life. Dabiran et al. (2018) examined the Quality of life of teachers working at Tehran High School (Iran). A positive association was observed between marital status and physical functioning and between vitality and total physical health. Overall, the study revealed teachers' low Quality of life compared to the standard population. Akram et al. (2017) conducted a comparative analysis to compare school work quality and teachers' Quality of life in Turkey and Pakistan. Turkish teachers were found to have higher mean scores in administrative support, work facilities, and developmental opportunities compared to Pakistan's teachers. On the contrary, Pakistani teachers have higher mean scores on adequate work conditions and fair income than teachers in Turkey. Generally, the study revealed Pahigherani teachers' high Quality of life and Compton teachers.

Kumar et al. (2017) observed no significant difference between male and female school teachers of higher secondary level towards self-efficacy. Male teachers have a higher level of self-efficacy than female teachers. The study's findings revealed no significant difference among higher secondary teachers of Jammu and Kashmir towards self-efficacy regarding subjects, educational qualifications, and teaching experience. Menon and Sobha (2017) investigated how secondary teachers perceive an average level of efficacy. The study discovered no significant difference in the mean scores of teachers' efficiency in their management and type of teaching experience.

Shahzad and Naureen (2017) investigated the impact of teacher self-efficacy on secondary school students' academic achievement. It was revealed that teachers' self-efficacy positively impacts students' academic achievement. Hunger et al. (2016) studied teachers' quality of life by surveying the design of seven early- stages. The study discovered that research participants positively perceive their well-being (Quality of life). A significant relationship was also observed between self-conduct and quality of life. Kaur and Paramjot (2017) conducted a study to inspect the relationship between teacher efficacy and teaching competency among school teachers (secondary level) regarding their gender and locality. No

significant difference was seen between male and female secondary school teachers regarding their teacher efficacy and teaching competency. At the same time, considerable difference was observed between secondary teachers belonging to the location (rural and urban) of the Gurdaspur district of Punjab regarding their teacher efficacy and teaching competency. No significant relation was observed between teacher efficacy and teaching competency of the district's secondary school teachers.

In summary of the reviews mentioned, research has been done on the quality of life of teachers; however, more research is needed to focus on the professional efficacy of school teachers. The mentioned studies have undertaken demographic variables such as gender, type of school, teaching experience, educational qualification, and subject, revealing different results based on these demographic variables. These two variables, which the researcher in this study has examined, have yet to be combined in previous investigations. As a result, this study is unique and was carried out in uncharted territory. The following hypotheses have been developed based on selected demographic variables. The hypotheses have been formulated for each dimension of the self-made tool of professional efficacy.

The following are the hypotheses of the study.

*H1: There is no significant difference in the mean scores of quality of life of school teachers with regards to their location of school*

*H2: There is no significant difference in the mean scores of professional efficacy of school teachers about their location at school*

*H2a: There is no significant difference in school teachers' mean efficacy scores toward the teaching-learning process regarding their location.*

*H2b: There is no significant difference in the mean efficacy scores toward school teachers' professional development regarding their location.*

*H2c: No significant difference exists in school teachers' mean efficacy scores toward 21<sup>st</sup>-century skills regarding their location.*

*H2d: No significant difference exists in school teachers' mean efficacy scores towards acquaintance to NEP 2020 regarding their location.*

*H3: There is no significant difference in the mean scores of quality of life of school teachers regarding their subject streams (arts, commerce, and science).*

*H4: There is no significant difference in the mean scores of professional efficacy of school teachers regarding their subject streams.*

*H4a: There is no significant difference in the mean scores of efficacy towards the teaching-learning process of school teachers regarding their subject streams.*

*H4b: No significant difference exists in the mean efficacy scores toward school teachers' professional development regarding their subject streams.*

*H4c: No significant difference exists in school teachers' mean efficacy scores towards 21<sup>st</sup>-century skills regarding their subject streams.*

*H4d: No significant difference exists in school teachers' mean efficacy scores towards acquaintance to NEP 2020 regarding their subject streams.*

*H5: There is no significant association between the levels of quality of life and the type of location of school teachers (rural and urban)*

*H6: There is no significant association between the levels of quality of life and subject streams of school teachers (arts, commerce, and science)*

*H7: There is no significant association between the levels of Professional efficacy and the location of school teachers*

*H8: There is no significant association between the levels of professional efficacy and subject streams of teachers*

*H9: There is no significant association between quality of life and professional efficacy levels.*

*H10: There is no significant interrelationship between the quality of life and the professional efficacy of school teachers.*

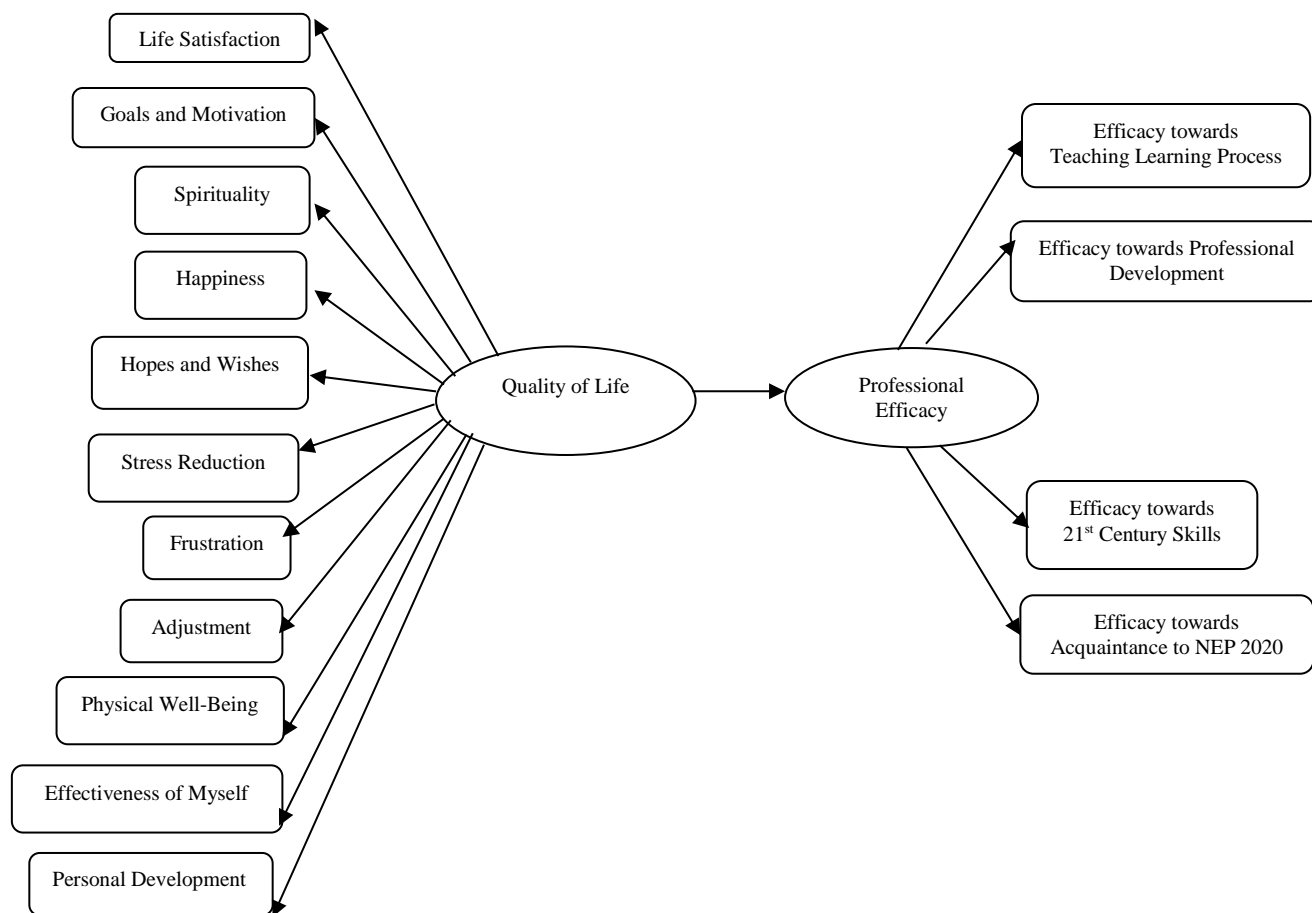


Figure 1. Conceptual Model of Quality of Life and Professional Efficacy

### MATERIALS AND METHODS

A descriptive survey method was carried out for the present study. Descriptive studies or methods entail more than just data gathering; they also include measurement, classification, analysis, comparison, and interpretation (Sandra, 2020). Quality of life is an independent variable, and professional efficacy is a dependent variable. The data was collected and analyzed quantitatively. Therefore, a quantitative design was adopted for the present study. The population of the current study consists of school teachers (both secondary and higher secondary) from two northern districts of West Bengal, India. 300 teachers of concerned districts were chosen as a representative number of samples adopting stratified random sampling. To compile the study's data, Quality of Life (QOLS-SSNN) was constructed and standardized by S. Sharma and N. Nasreen with 3- a 3-point Likert scale (always, seldom, never). The investigator revalidated the tool on a fresh sample (100). At first, content and face validity were established, and the Cronbach's Alpha reliability of QOL was established to be 0.789, which is considered acceptable and reliable. The Splits-Half (Odd-Even) gives a result of 0.678 (p-value 0.00<0.01) positive correlations at 0.01 level. Therefore, the tool (QOLS) was considered applicable to the West Bengal context.

As per the existing literature, another tool, the Professional Efficacy Scale (PES), was constructed with 5- a point Likert scale (strongly agree, agree, undecided, disagree, strongly disagree) and tested with the pilot study of 124 research participants for item selection, after the selection of the final items of PES (in a total of 53 items, only three items get excluded). Again, Cronbach's Alpha reliability of PES was found to be 0.938, which was excellent and reliable. The Splits-Half of PES gives a result of 0.855 (p-value 0.00<0.01) positive correlations at 0.01 level, which means the scale is significantly reliable to measure the professional efficacy of school teachers of concerned districts of West Bengal. To gather data from the research participants, the investigators first selected the secondary and higher secondary schools from two districts (Darjeeling and Cooch Behar) of West Bengal randomly, and from those selected schools, the sample was taken adopting stratified random sampling. Considering the demographic variables, i.e., location and subject streams of teachers, the investigator personally visited the chosen schools and explained the scale and purpose of the study. The consent of participants is given to the investigators. Since the targeted sample size was 300, the collected data of 300 research participants were quantitatively analyzed employing different statistical techniques like frequency and percentage, mean, independent sample t-test, chi-square, one-way ANOVA, and Pearson Correlation.

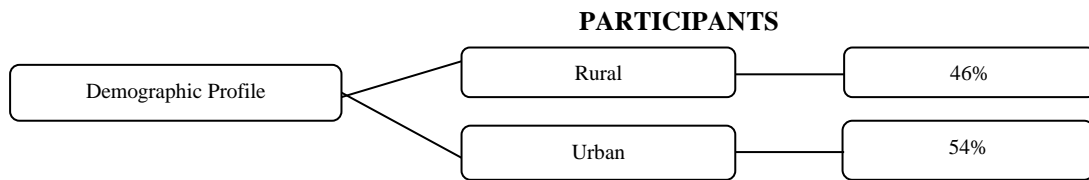


Figure 2. Demographic profile of the research participants as per location

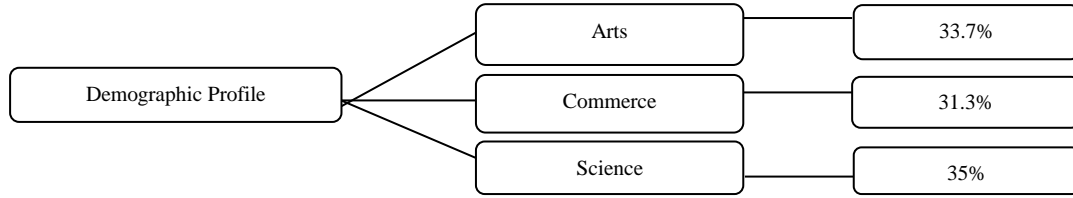


Figure 3. Demographic profile of the research participants as per subject stream

**RESULTS AND DISCUSSIONS**

Table 1. Levels of School Teachers' Quality of Life and Professional Efficacy

QOL			PES		
Levels	Frequency	Percentage	Levels	Frequency	Percentage
High	189	63%	High	58	19.3%
Average	66	22%	Average	153	50.8%
Low	45	15%	low	90	29.9%

From the above table, it can be stated that 63% of the secondary and higher secondary school teachers have a high level of Quality of life, 22% of teachers have an average level of Quality of life, and 15% of the school teachers have a low level of Quality of life. Additionally, 19.3% of the teachers fall under the high professional efficacy. 50.8% of participants perceive the average level of professional efficacy, and 29.9% of the teachers fall under a low level of professional efficacy. The finding reveals teachers' high quality of life and school teachers' average level of professional efficacy. In their studies, Akram et al. (2017), Faisal-E-Alam (2024) and Sharma et al. (2023) also revealed a high quality of life among teachers. Menon and Sobha (2017) also found that secondary teachers perceive an average level of efficacy.

Table 2. Levels of Professional Efficacy of School Teachers in Terms of 4 Dimensions

Dimension	Level of PES	f	Percentage
Efficacy towards teaching-learning process (1)	High	63	21%
	Average	157	52.3%
	Low	80	26.7%
Efficacy towards Professional Development (2)	High	73	24.3%
	Average	152	50.7%
	Low	75	25%
Efficacy towards 21 <sup>st</sup> Century Skills (3)	High	68	22.7%
	Average	149	49.7%
	Low	83	27.7%
Efficacy towards Acquaintance to NEP 2020 (4)	High	64	21.3%
	Average	169	56.3%
	Low	67	22.1%

The above table states that most of the research participants (school teachers) in the entire dimensions of professional efficacy fall under average level, i.e., 52.3% in dimension 1, 50.7% in dimension 2, 49.7% in dimension 3, and 56.3% in dimension 4. Few participants are directed towards high and low levels of professional efficacy in the given 1, 2, 3, and 4 dimensions.

Table 3. Means, SD, and t-value of School Teachers regarding Quality of life and Professional Efficacy about their Location of School

Variables	Location	N	Mean	SD	t-value	Decision
QOL	Rural	138	109.05	7.59	0.708@	(p>0.05)
	Urban	162	108.43	7.67	(P=0.48)	NS
PES	Rural	138	191.86	23.26	0.447@	(p>0.05)
	Urban	162	196.41	23.56	(p=0.65)	NS

Not Significant at 0.05 level

It is observable from the above table that the t-value of the Quality of Life of school teachers regarding their location of school is 0.708 ( $p=0.48$ ), which is greater than the threshold value at 0.05 level. The P-value is also more than 0.05. Therefore, there is no significant difference in the mean scores of quality of life of significance for West Bengal regarding their location. The null hypothesis  $H1$  is accepted regarding the professional efficacy of school teachers regarding their location. The school is 0.447. So, there is no significant difference in the mean scores of professional efficacy of school teachers of West Bengal regarding their school location as the p-value (0.65) is more than the threshold value at 0.05 significance level. There is insufficient evidence to reject the null hypothesis  $H2$ , so the null hypothesis  $H2$  is accepted.

Table 4. Means, SD, and t-value of School Teachers towards 4 Dimensions of Professional Efficacy about their Location

Dimensions	Location	N	Mean	SD	t-value	Decision
<b>Efficacy towards</b>	Rural	139	62.70	6.92	0.012@	( $p>0.05$ )
<b>Teaching Learning Process (1)</b>	Urban	161	62.69	6.28	( $P=0.151$ )	NS
<b>Efficacy towards</b>	Rural	139	36.60	6.15	2.078**	( $p<0.05$ )
<b>Professional Development (2)</b>	Urban	161	38.03	5.71	( $P=0.038$ )	Sig
<b>Efficacy towards 21<sup>st</sup></b>	Rural	139	54.74	7.82	0.051@	( $p>0.05$ )
<b>Century Skills (3)</b>	Urban	161	54.74	7.80	( $P=0.704$ )	NS
<b>Efficacy towards</b>	Rural	139	39.43	6.53	0.077@	( $p>0.05$ )
<b>Acquaintance to NEP 2020 (4)</b>	<b>Urban</b>	<b>161</b>	<b>39.49</b>	<b>6.55</b>	<b>(<math>p=0.716</math>)</b>	<b>NS</b>

\*\*Significant at 0.05 level

It is evident from the above table that the critical/obtained t-values of dimensions 1, 3, and 4 of PES are lesser than the threshold value, i.e., 1.96 at 0.05 levels. All p-values of all 1 ( $p=0.151$ ), 3 ( $p=0.704$ ), and 4 ( $p=0.716$ ) dimensions of PES are more than 0.05. Hence, no significant difference exists in the mean scores of school teachers regarding efficacy in the teaching-learning process, 21st-century skills, and acquaintance with (NEP, 2020) regarding their location. The null hypotheses  $H2a$  and  $H2c$   $H2d$  are not rejected. At the same time, the critical/obtained t-values of dimension ' efficacy towards professional development' are more significant than the threshold value, i.e., 1.96 at 0.05 level. The p-value of dimension 2 is also less than 0.05 ( $p=0.038$ ). Therefore, a significant difference exists in the mean scores of efficacy school teachers towards professional development. Thus, the null hypothesis  $H2b$  is rejected. As a result, the school's location significantly impacts the Efficacy of West Bengal teachers towards their professional development.

Table 5. Summary of One-way ANOVA: Quality of life and Professional Efficacy with three categories (Subject Streams)

QOL	Mean	F-value	PES	Mean	F-value
<b>Between Groups</b>	341.133	2.967 ( $p=0.053$ )	Between Groups	9043.099	8.604** ( $p=0.000$ )
<b>Within Groups</b>	17073.347		Within Groups	156080.888	
<b>Total</b>	<b>17414.480</b>		<b>Total</b>	<b>165123.987</b>	

\*\*Significant at 0.05 level

The above table presents school teachers' quality of life and professional efficacy based on their subject streams (Arts et al.). The calculated F-value is 2.967 ( $p=0.053$ ) for the quality of life, which is not significant ( $p>0.05$ ) at 0.05 level, which shows that the mean scores of quality of life of school teachers about their subject streams do not differ significantly. Thus, the null hypothesis ( $H3$ ) is accepted. On the contrary, the calculated F-value, which is 8.604 ( $p=0.000$ ) for the professional efficacy of school teachers in their subject streams, is significant ( $p<0.05$ ) at the 0.05 level. This means that the mean scores of professional efficacy of school teachers regarding their subject streams differ significantly. Therefore, it is evident that the null hypothesis  $H4$  is rejected. Differences are there between the teachers of different subject streams. To determine which category of the subject stream had a significantly higher mean score for Professional Efficacy, the data were further analyzed with the help of post-hoc analysis.

Table 6. Post Hoc Analysis for PES about Subject Streams

Mean Scores Arts	Commerce		Science		
<b>187.60</b>	200.56		194.25		
Streams (I) (J)	<b>Mean Difference</b>	<b>Sig</b>	<b>Streams (I) (J)</b>	<b>Mean Difference</b>	<b>Sig</b>
<b>Arts Commerce</b>	13.25318	.000**	Commerce Arts	13.25318	<b>.000**</b>
<b>Science</b>	6.65136	.108	Science	6.60182	<b>.107</b>
Streams (I) (J)	<b>Mean Difference</b>		<b>Sig</b>		
<b>Science Arts</b>	6.65136	6.60182	.108	.107	
<b>Commerce</b>					

\*The mean difference is significant at a 0.05 level

It is evident from the above table that the teachers of arts and commerce streams differ significantly ( $p<0.05$ ) with a mean difference of 13.25. In contrast, the arts and science teachers, with a mean difference of 6.65, do not differ significantly ( $p>0.05$ ) towards professional efficacy based on their subject streams. In addition, teachers with commerce and arts backgrounds differ significantly ( $p<0.05$ ), with a mean difference of 13.25. In contrast, teachers with commerce and science streams, with a mean difference 6.60, do not differ significantly ( $p>0.05$ ). No significant difference was found

between teachers with science and arts backgrounds, with a mean difference of 6.65, and teachers of science and commerce streams with a mean difference of 6.60. From the analysis of the above table, teachers of commerce streams are better than teachers of arts and science streams as the mean scores of teachers in commerce stream are comparatively higher than those of arts and science streams.

Table 7. Summary of One-way ANOVA: 4 Dimensions of Professional Efficacy with three categories (Subject Streams)

Efficacy towards Teaching Learning Process (1)	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	538.023	2			
Within Groups	12394.977	297	269.011	6.446	.002**
Total	12933.000	299	41.734		
Efficacy towards Professional Development (2)	Sum of Squares	df	Mean Square	F	Sig
Between Groups	283.200	2			
Within Groups	10328.987	297	141.600	4.072	.018**
Total	10612.187	299	34.778		
Efficacy towards 21 <sup>st</sup> Century Skills	Sum of Squares	df	Mean Square	F	Sig
Between Groups	787.115	2			
Within Groups	17430.922	297	393.558	6.706	.001**
Total	18218.037	299	58.690		
Efficacy towards Acquaintance to NEP 2020(4)	Sum of Squares	df	Mean Square	F	Sig
Between Groups	781.250	2			
Within Groups	11971.480	297	390.625	9.691	.000**
Total	12752.730	299	40.308		

\*The mean difference is significant at a 0.05 level

From the above table, the calculated F-values of all 4 dimensions of the professional Efficacy of school teachers in their subject streams are significant. All p values are also less than 0.05. It indicates that the subject stream of teachers of West Bengal significantly impacts teachers' efficacy towards the teaching-learning process, professional development, 21<sup>st</sup>-century skills, and acquaintance with (NEP, 2020). As there is sufficient evidence to reject null hypotheses H4a, H4b, H4c, and H4d, the null hypothesis (H4a), (H4b), (H4c), and (H4d) are rejected. To determine which category of the subject stream had significantly higher mean scores for dimensions of Professional Efficacy, the data were further analyzed with the help of post hoc analysis.

Table 8. Post Hoc Analysis of 4 Dimensions (Efficacy towards Teaching-Learning Process, Professional Development, 21<sup>st</sup> Century Skills and Acquaintance to (NEP, 2020) of PES about Subject Streams

Efficacy towards Teaching Learning Process (1)			
Mean scores			
Arts		Commerce	Science
61.3663		38.3396	37.7284
(I) Subjects	(J) Subjects	Mean Difference	Sig.
Arts	Commerce	3.09593*	.002**
Science		.77345	.683
Commerce	Arts	3.09593*	.002**
Science		2.32248*	.032**
Science	Arts	.77345	.683
Commerce		2.32248*	.032**
Efficacy towards Professional Development (2)			
Mean Scores			
Arts		Commerce	Science
36.0594		38.3396	37.6989
(I) Subjects	(J) Subjects	Mean Difference	Sig
Arts	Commerce	2.28022*	.016**
Science		1.63952	.131
Commerce	Arts	2.28022*	.016**
Science		.64070	.725
Science	Arts	1.63952	.131
Commerce		64070	.725
Efficacy towards 21 <sup>st</sup> Century Skills (3)			
Mean Scores			
Arts		Commerce	Science
52.9208		56.7736	54.3441
(I) Subjects	(J) Subjects	Mean Difference	Sig.
Arts	Commerce	3.85279*	.001**
Science		1.42329	.400
Commerce	Arts	3.85279*	.001**
Science		2.42950	.068
Science	Arts	1.42329	.400
Commerce		2.42950	.068
Efficacy towards Acquaintance to NEP 2020 (4)			
Mean Scores			

Arts 37.2574		Commerce 40.9906	Science 40.1398
(I) Subjects	(J) Subjects	Mean Difference	Sig.
Arts	Commerce	3.73314*	.000**
Science	Commerce	2.88236*	.005**
Commerce	Arts	3.73314*	.000**
Science	Arts	.85078	.613
Science	Commerce	2.88236*	.005**
Commerce	Science	.85078	.613

\*. The mean difference is significant at the 0.05 level.

Table 8 shows a post hoc analysis of 4 dimensions of PES. Teachers of arts and commerce streams differ significantly ( $p < 0.05$ ) in terms of efficacy towards the teaching-learning process. In contrast, no significant differences were seen ( $p > 0.05$ ) in the mean scores of teachers of arts and science streams. A significant difference ( $p < 0.05$ ) was observed in the mean scores of teachers of commerce and arts and commerce and science streams towards the teaching-learning process. Science and arts teachers do not differ significantly ( $p > 0.05$ ). On the contrary, teachers of science and commerce differ significantly ( $p < 0.05$ ) in the teaching-learning process. The teachers of arts streams are better than those of commerce and science streams in dimension 1. In dimension 2, i.e., Efficacy towards professional development, it is seen that teachers of arts and commerce differ significantly ( $p < 0.05$ ), whereas teachers of arts and science do not differ significantly ( $p > 0.05$ ). A significant difference was seen in the mean scores of teachers belonging to commerce and arts streams ( $p < 0.05$ ), whereas no significant difference was observed in the mean scores of teachers of commerce and science streams ( $p > 0.05$ ). Again, no significant differences were found between science and arts teachers and science and commerce streams ( $p > 0.05$ ). The analysis also reveals that teachers of commerce streams are better than teachers of arts and science streams in dimension 2, as the mean scores of teachers of commerce streams are comparatively higher than teachers of arts and science streams. Dimension 3, i.e., Efficacy towards 21<sup>st</sup>-century skills, shows a significant difference ( $p < 0.05$ ) in the mean scores of teachers belonging to arts and commerce streams. In contrast, no significant differences were shown ( $p > 0.05$ ) in the mean scores of teachers belonging to arts and science streams. Teachers belonging to commerce and arts differ significantly ( $p < 0.05$ ). In contrast, teachers belonging to commerce and science, science and arts, and science and commerce do not differ significantly ( $p < 0.05$ ) towards 21<sup>st</sup>-century skills. Teachers of commerce streams are better than arts and science teachers in dimension 3. In Dimension 4, i.e. (Efficacy towards Acquaintance to NEP 2020), a significant difference ( $p < 0.05$ ) was shown in the mean scores of teachers belonging to arts and commerce, arts and science and commerce and arts. Teachers of commerce and science do not differ significantly ( $p > 0.05$ ), whereas a significant difference was shown ( $p < 0.05$ ) in the mean scores of teachers belonging to the science and arts streams. In addition, no significant difference was observed ( $p > 0.05$ ) in the mean scores of teachers belonging to science and commerce. The analysis also shows that teachers of commerce streams are better than teachers of arts and science streams in dimension 4.

Table 9. Results Pertaining Association between Levels of Quality of Life and Professional Efficacy and Categories of Undertaken Variables (Location and Streams)

QOL Location	Rural	Chi-Square	PES Location	Rural	Chi-Square
	54.33% (Level 1)	**24.079 (p=0.001)		21.6% (Level 1)	<b>1.380 (p=0.502)</b>
	31% (Level 2)	(p<0.05)		47.5% (Level 2)	<b>(p&gt;0.05)</b>
	14.66% (Level 3)			30.9% (Level 3)	
	<b>Urban</b>			<b>Urban</b>	
	60% (Level 1)			17.4% (Level 1)	
	24.66% (Level 2)			53.4% (Level 2)	
	15.33% (Level 3)			29.2% (Level 3)	
Streams	<b>Arts</b>		<b>Streams</b>	<b>Arts</b>	
	58.66% (Level 1)			8.9% (Level 1)	
	25.66% (Level 2)			53.5% (Level 2)	
	15.66% (Level 3)			37.6% (Level 3)	
	<b>Commerce</b>	12.459 (p=0.052)		<b>Commerce</b>	<b>**12.870 (p=0.012)</b>
	55% (Level 1)	(p>0.05)		27.4% (Level 1)	<b>(p&lt;0.05)</b>
	26.66% (Level 2)			48.1% (Level 2)	
	18.33% (Level 3)			24.5% (Level 3)	
	<b>Science</b>			<b>Science</b>	
	61% (Level 1)			21.5% (Level 1)	
	23% (Level 2)			50.5% (Level 2)	
	<b>15.33% (Level 3)</b>			<b>28% (Level 3)</b>	

\*. The mean difference is significant at the 0.05 level.

From the above table, it is stated that the chi-square value of location and quality of life of school teachers is 24.079 ( $p = 0.001$ ), which is significant at 0.05 level of significance ( $p < 0.05$ ). Thus, there is a significant association between the quality of life and the location of school teachers. In addition, the chi-square value of levels of quality of life and subject streams of teachers is found to be 12.495 ( $p = 0.052$ ) at a 0.05 significance level ( $p > 0.05$ ). Therefore, no significant association exists between quality of life levels and school teachers' subject streams. Quality of life is dependent on the location of schools and independent of the subject streams of school teachers. It is evident that the null hypothesis ( $H_5$ ) is



rejected, and the null hypothesis (*H6*) is not rejected. Again, the above table identifies that the Chi-Square value of location and level of professional efficacy is 1.380 ( $p=0.052$ ), which is not significant at 0.05 level ( $p>0.05$ ). Thus, no significant association was found between professional efficacy levels and school teachers' location. As the p-value is more significant than 0.05 ( $p>0.05$ ), there is insufficient evidence to reject the null hypothesis *H6*. Thus, the null hypothesis *H6* is accepted. The chi-square value of subject streams and level of professional efficacy is found to be 12.870 ( $p=0.012$ ), which is significant ( $p<0.05$ ). Therefore, it is investigated that there is a significant association between subject streams and school teachers' professional efficacy levels. Professional Efficacy is independent of the location of the school and dependent on subject streams. As the p-value is less than 0.05 ( $p<0.05$ ), there is sufficient evidence to reject the null hypothesis *H8*. Thus, the null hypothesis *H8* is rejected.

Table 10. Results Pertaining Association between Quality of Life and Professional Efficacy

QOL	PES	Chi-Square
63% (Level 1)	19.3% (Level 1)	**25.646 ( $p=0.001$ )
22% (Level2)	50.8% (Level2)	( $p<0.05$ )
15% (Level3)	29.9% (Level3)	

\*The mean difference is significant at the 0.05 level

The analysis of the above table shows the chi-square value of the above-mentioned categorical variables is 25.646 ( $p=0.001$ ), which is significant at 0.05 level of significance ( $p<0.05$ ). Therefore, a significant association was shown between quality of life and professional efficacy. As the p-value is less than 0.05, it is evident that the null hypothesis *H9* is rejected. The Quality of life and professional efficacy are dependent on each other.

Table 11. Coefficient Correlation between Quality of Life and Professional Efficacy of School Teachers

Quality of Life	Pearson Correlation	Quality of Life	Professional Efficacy
	Sig. (2-tailed)	1	.158**
	N	300	300
Professional Efficacy	Pearson Correlation	.158**	1
	Sig. (2-tailed)	.006	
	N	300	300

\*\* Correlation is significant at the 0.01 level (2-tailed).

The above table identifies the coefficient correlation between Quality of Life and Professional Efficacy, which is positive and statistically significant ( $p<0.05$ ) at 0.01 level. Therefore, it is revealed that the Quality of life and professional efficacy of school teachers are positively correlated. If teachers have a positive quality of life, their professional efficacy will also be positive. Both quality of life and professional efficacy are interdependent.

### CONCLUSIONS

The study was undertaken to assess school teachers' Quality of life and professional efficacy and to study its relationship with demographic variables (location of school and subject streams). The study results show that secondary and higher secondary school teachers of the northern district of West Bengal have an incredibly high quality of life and average levels of professional efficacy. A significant difference was observed between teachers of arts and commerce streams toward professional efficacy. Teachers with commerce streams are better than arts and science in their professional efficacy. The study also reveals a significant association between the location of schools and quality of life and between subject streams and levels of professional efficacy of school teachers in northern West Bengal districts. A significant association was also found between the categorical variables of Quality of life and professional efficacy. Finally, the study reveals a significant correlation between Quality of life and professional efficacy.

Thus, the study concludes that integrating teachers' quality of life and professional efficacy with undertaken demographic variables has different impactful findings. The study's findings suggest that examining the different aspects of teachers' professional efficacy is necessary. A significant concern is a need for more proficiency in several areas related to professional effectiveness. Specific policies, practices, and training programs must be implemented at every stage of teacher education to raise school teachers' efficacy levels. So many teaching areas still need clear standards of practice, especially in technological aspects. If appropriately implemented, regular practices and efficient teachers' training programs in all spheres, workshops, and conferences to enhance teaching skills and knowledge can improve their professional efficacy, leading to enhanced teaching quality, student learning outcomes, and overall school success. It is also imperative to prioritize the quality of life of teachers, as it can positively impact professional performance, well-being, and the education system as a whole. The study also has some limitations. In the present study, numerous variables such as gender, teaching experience, age factors, and type of school were not considered. Hence, other researchers are recommended to investigate the relationship between teachers' quality of life, professional efficacy, and these variables. The other researchers are recommended to carry out the same study, adopting different research designs and methods to see whether the findings vary.

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