International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Determinants of Teacher Effectiveness: A Comparative Study of Teaching Competency, Burnout, and Professional Development

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Abstract
This study determines the factors influencing teacher effectiveness through an examination of differences in teacher competence, burnout, and professional development attitudes among secondary school teachers. Quantitative research design was used involving a sample size of 400 teachers. Differences were measured based on gender, location, and teaching experience using independent sample t-test and one-way analysis of variance (ANOVA). Results indicate that there is no statistically significant difference between men and women in teaching competency and professional development attitude. However, there is a difference in burnout whereby women report higher burnout than men. There are statistically significant differences based on location where teachers working in urban areas have better competency skills and professional development attitudes compared to their colleagues working in rural areas. Those in rural areas have higher burnout levels. Differences are also evident among teachers based on teaching experience whereby those with 16 years or more experience exhibit higher competency skills, lower burnout levels, and better professional development attitudes than those with little experience.

Keywords: teaching competency, burnout, professional development, teacher effectiveness, secondary school teachers.

1. Introduction

The teacher effectiveness is considered to be one of the main ones for study within the educational process. The reason for this is quite obvious – a teacher is able to exert considerable influence on students' performance. Being an integral part of modern educational practice, a competent teacher should not only show pedagogical skills but also exhibit emotional stability and willingness to improve his or her level of professionalism. Among many other factors, teaching competency, emotional exhaustion, and attitude to professional development are crucial in this respect.

Teaching competency means the capability of a teacher to effectively plan, conduct, and assess instructional activities in an environment that is conducive to learning. It includes a number of competencies, such as subject matter competence, classroom management, interpersonal competence, and instructional competence (Aindra et al., 2022; Ahmad & Khan, 2016). Studies have shown that teachers who are highly competent greatly contribute to the academic performance and development of their learners (Canuto et al., 2024). Teaching competence is not fixed; rather, it is developed with time and experience (Kaur & Talwar, 2014). On the other hand, teacher burnout has become another increasingly common issue among teachers. Burnout is associated with three distinct symptoms, namely emotional exhaustion, depersonalization, and low personal accomplishment (Maslach & Jackson, 1981; Schaufeli & Enzmann, 1998). Generally, burnout occurs due to constant pressure in work environment, overwork, and insufficient organizational support (Bakker & Demerouti, 2007). Recent research has indicated that burnout may cause negative effects on teachers' mental well-being, job satisfaction, and efficiency of

instruction provided by teachers (Ahola et al., 2010; Bayani & Samiei, 2015). Besides, the link between teacher burnout and turnover intentions has been established (Santoro, 2018). Thus, the increasing requirements in relation to teachers' work, especially those working in under-resourced settings, call for an examination of the role played by burnout in determining teacher effectiveness.

The other significant element that affects the teacher's efficiency is the attitude towards professional development. Professional development is the term used for organized activities through which the teacher's abilities and competencies improve in order to keep up with the changing needs in the field of education (Avalos, 2011; Mukherjee, 2021). It has been observed that the teachers who have positive attitudes towards their professional development are those who continue to learn throughout their lives and embrace innovations in their work (Ehlert & Souvignier, 2024). On the other hand, negative attitudes may affect their involvement in training programs. The importance of professional development has been realized in policy frameworks, such as the National Education Policy (Government of India, 2020).

The connection between teacher competence, burnout, and professional development is not straightforward but rather multi-faceted. Teacher competence improves classroom performance; however, high burnout levels may impair their ability to achieve efficiency and pursue professional development. Conversely, a favorable attitude toward professional development will help minimize burnout by providing teachers with ways to cope and improve teaching methods (Kim et al., 2019). It, therefore, necessitates the evaluation of the relationship among these factors in certain contexts.

The impact of demographic and context-specific variables such as gender, place of employment, and experience in teaching plays an important role in the above-mentioned constructs. In literature, gender-related differences have not been consistent, with research findings supporting the notion that women teachers experience more burnouts because of their extra responsibilities in socio-cultural contexts (Anbuthasan & Balakrishnan, 2013; Husna et al., 2024). Place of work can be seen as a context-specific variable since differences exist between rural and urban schools depending on resource availability and other contextual elements (Osiesi et al., 2024). Experience in teaching is an important variable in the development of teaching competency and professionalism (Khan et al., 2014; Mustafa, 2013). There are substantial literature exists on each of these variables. However, there is a need for empirical research that simultaneously explores these variables in a holistic way. Current literature mostly concentrates on exploring the relationship between one variable and teacher effectiveness. Additionally, there is an absence of studies exploring the relationship of these variables with secondary school teachers, especially in the Indian context. Hence, this study attempts to explore whether there are any significant differences in these variables according to gender, locality, and teaching experience of secondary school teachers.

This study attempts to fill this gap in the literature by conducting a comparative analysis of teaching competence, burnout, and attitude towards professional development amongst secondary school teachers. This study will explore the differences between teaching competence, burnout, and attitude towards professional development according to gender, locality, and teaching experience amongst secondary school teachers.

2. Literature Review

2.1 Teaching Competency and Professional Development

The competence of a teacher is one of the essential factors that determine how effective a teacher will be, incorporating aspects such as pedagogy, content, classroom management, and dealing with various students' needs (Ahmad & Khan, 2016; Aindra et al., 2022). The competent teacher is pivotal to improving learners' academic performance and creating a conducive learning atmosphere (Canuto et al., 2024). Nevertheless, teaching competency is dynamic in nature, evolving through the accumulation of experience and ongoing professional development.

Professional development can be viewed as an important approach that can help enhance the competency of teachers by updating their knowledge and introducing new instructional techniques (Avalos, 2011). Studies have shown that professional development programs can lead to improvements in the instructional

efficacy and classroom practices of teachers (Braga et al., 2017). Amid the rapid changes in the education sector, teachers are expected to keep themselves updated with the latest trends in pedagogy, including the use of technology in teaching (Avidov-Ungar & Eshet-Alkalai, 2011). Professional development's efficacy is contingent on the attitude of teachers towards it. Teachers having positive attitudes tend to be engaged in professional development initiatives and embrace new pedagogical techniques, while teachers with negative attitudes might impede themselves from gaining professional expertise (Rana & Bhatti, 2020). Ehlert and Souvignier (2024) mention that teachers' perceptions and preferences considerably impact their involvement in professional development. Therefore, it is vital to encourage a positive attitude towards professional development in order to increase teaching competence. Moreover, teaching experience promotes competency acquisition. According to Human Capital Theory, experience leads to improved abilities and increased productivity of an individual (Becker, 1964). The research indicates that experienced teachers are more competent because of the diversity of cases and knowledge they accumulate while working (Mustafa, 2013). Nevertheless, in the absence of professional development opportunities, teaching approaches can become obsolete.

2.2 Burnout and Its Influence on Teacher Effectiveness

Teacher burnout has become one of the most discussed topics because of its negative effects on teacher well-being and productivity. According to Maslach and Jackson (1981), as well as Schaufeli and Enzmann (1998), burnout is characterized by emotional exhaustion, depersonalization, and a reduction in a person's sense of accomplishment because of long-term work stress. As Bakker and Demerouti (2007) have suggested, teacher burnout is caused by high workloads, problems in classrooms, and lack of support. The existing literature proves that teacher burnout influences the quality of teaching. Teachers who experience high rates of burnout are often motivated less and perform lower in terms of instructional quality and engagement with their pupils (Ahola et al., 2010; Bayani & Samiei, 2015). Moreover, high levels of burnout among teachers result in numerous psychological problems, such as stress, anxiety, and depression, and thus negatively affect teaching (Husna et al., 2024). Factors such as demographic features and context greatly impact levels of teacher burnout. One study found that gender was an important factor influencing burnout, especially because women tend to be more affected by social and family roles in addition to their work at school (Anbuthasan & Balakrishnan, 2013). The location of schools is another critical variable, as teachers in rural areas are faced with scarce resources, lack of professional support, and difficult working conditions (Osiesi et al., 2024).

Years of teaching have a significant effect on burnout, yet results are inconsistent. New teachers commonly have high levels of burnout, especially because they face challenges related to adaptation and lack appropriate coping skills (Khan et al., 2014). Conversely, veteran teachers tend to exhibit greater resilience and possess sufficient coping strategies, which contribute to low levels of burnout. Alternatively, long-term stressful situations might result in burnout among seasoned teachers (Houkes et al., 2011). In particular, professional development can significantly help address burnout by developing competencies and confidence among teachers as well as their ability to cope (Edú-Valsania et al., 2022). Teachers who suffer from high levels of burnout might not be willing to engage in professional development activities, which means that there is another vicious circle. Even though many studies have been conducted on this issue, the literature lacks the examination of burnout in combination with teachers' competency development.

3. Objectives of the Study

The present study was undertaken to examine the determinants of teacher effectiveness by analysing teaching competency, burnout, and attitude towards professional development among secondary school teachers. Specifically, the study aimed to achieve the following objectives:

1. To examine the difference in teaching competency, burnout, and attitude towards professional development among secondary school teachers with respect to gender.

2. To analyse the difference in teaching competency, burnout, and attitude towards professional development among secondary school teachers with respect to locality.
3. To investigate the difference in teaching competency, burnout, and attitude towards professional development among secondary school teachers with respect to their teaching experience.

4. Hypotheses of the Study

H_{01}: There is no significant difference between the mean scores of teaching competency, burnout, and attitude towards professional development among secondary school teachers with respect to their gender.
H_{02}: There is no significant difference between the mean scores of teaching competency, burnout, and attitude towards professional development among secondary school teachers with respect to their locality (rural and urban).
H_{03}: There is no significant difference between the mean scores of teaching competency, burnout, and attitude towards professional development among secondary school teachers with respect to their teaching experience.

5. Methodology

This study has been conducted using a quantitative research methodology involving a descriptive survey design that focused on determining differences between secondary school teachers in terms of their teaching competence, levels of burnout, and attitudes toward professional development. The population for this study includes all the teachers working in the central division of Odisha, India. This central division has ten districts, including Balasore, Bhadrak, Cuttack, Jagatsinghpur, Jajpur, Kendrapada, Khordha, Mayurbhanj, Nayagarh, and Puri. Random sampling techniques have been used to select the Cuttack district as it was feasible and representative of the entire population. The study sample included 400 secondary school teachers equally divided into rural and urban areas. The sample size was chosen using stratified random sampling considering two demographic characteristics: locality (rural or urban) and gender (male or female).
In this study, teaching competency is viewed as the dependent variable, with burnout and attitude towards professional development being independent variables. In addition, other independent variables that include demographics such as gender, locality, and years of teaching were incorporated. The data was gathered through standardized Likert type scales. Teaching competency is assessed through an already tested scale designed by Vidushy and Kishor (2017) with 35 items distributed over eight factors and exhibiting a very high reliability (Cronbach's α=.95). Burnout and attitude towards professional development were assessed using structured and psychometrically valid scales. Before carrying out the actual data gathering, tools were evaluated for accuracy and appropriateness. Data analysis is accomplished through the use of IBM SPSS software, which employs inferential statistics such as independent samples t-test and One-way Analysis of Variance (ANOVA) followed by post hoc Tukey's HSD test. Statistical significance is set at the $p<0.05$ and $p<0.01$ levels.

6. Results

6.1 Gender-wise Differences

Table 1 Mean, SD, and t-test of Teaching Competency, Burnout, and Professional Development by Gender

Variable	Gender	N	Mean	SD	t	p-value
Teaching Competency	Male	100	43.13	2.88	0.557	0.578
	Female	300	43.31	2.76		
Burnout	Male	100	21.66	5.76	2.116	0.036*
	Female	300	23.08	5.91		
Attitude toward PD	Male	100	59.24	1.21	0.767	0.829
	Female	300	59.27	1.15		

Source: Field Data

The table 1 shows that there is no significant difference in the competency of teachers regardless of their gender, with both male and female teachers having nearly the same scores (t = 0.557, p = 0.578). Male teachers have a mean score of 43.13 and a standard deviation of 2.88, while the corresponding values for female teachers are 43.31 and 2.76, respectively. Likewise, attitudes toward professional development of teachers do not differ significantly between male and female teachers based on the findings obtained (t = 0.767, p = 0.829). Female teachers have a mean of 59.27 and a standard deviation of 1.15, while male teachers have a mean of 59.24 and a standard deviation of 1.21. A significant difference is observed in burnout (t = 2.116, p = 0.036), with higher burnout reported among female teachers.

6.2 Locality-wise Differences

Table 2 Mean, SD, and t-test by Locality

Variable	Locality	N	Mean	SD	t	p-value
Teaching Competency	Rural	200	42.48	3.50		0.000***
	Urban	200	44.06	1.43	5.918	
Burnout	Rural	200	26.71	2.48	18.339	0.000***
	Urban	200	18.73	5.62		
Attitude toward PD	Rural	200	59.56	0.76	5.277	0.000***
	Urban	200	58.96	1.39		

Source: Field Data

The table 2 explained that there are huge differences in teachers in both rural and urban settings regarding all the three factors. Competency level is significantly higher among urban teachers (M = 44.06, SD = 1.43) as compared to rural teachers (M = 42.48, SD = 3.50). It has been shown through a very high t-value of t = 5.918 and p value being less than 0.001. Similarly, burnout level is significantly higher among rural teachers (M = 26.71, SD = 2.48) as compared to urban teachers (M = 18.73, SD = 5.62). This difference has also been shown through a highly significant t-value t = 18.339 and p value of less than 0.001. Moreover, the attitude towards professional development was better among rural teachers (M = 59.56, SD = 0.76) compared to urban teachers (M = 58.96, SD = 1.39).

6.3 Teaching Experience-wise Differences

Table 3: ANOVA for Teaching Competency

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	156.092	3	52.031	6.984	.000
Within Groups	2950.285	396	7.450		
Total	3106.378	399			

Source: Field Data

The ANOVA on teaching competency (TC) indicates a statistically significant difference among the groups analysed. The "Between Groups" sum of squares is 156.092, with 3 degrees of freedom (df), resulting in a mean square value of 52.031. The "Within Groups" sum of squares is 2950.285, with 396 degrees of freedom, leading to a mean square value of 7.450. The F-ratio was calculated as 6.984, and its p-value of 0.000 was significant at the 95% confidence level ($p < 0.001$). This statistical significance implies that there is a meaningful difference in teaching competency across the groups being compared. The observed variance suggests that factors influencing these differences should be further explored to identify specific reasons for variations in teaching competency.

Table 4: Multiple Comparison through Tukey HSD for Teaching Competency

Dependent Variable: TC Tukey HSD						
(I) TEACHINGEXP	(J) TEACHINGEXP	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 to 5 years	6 to 10 years	-.457	.406	.673	-1.50	.59
	11 to 15 years	-.580	.399	.465	-1.61	.45
	16 years and above	-1.59*	.366	.000	-2.54	-.65
6 to 10 years	0 to 5 years	.457	.406	.673	-.59	1.50
	11 to 15 years	-.123	.414	.991	-1.19	.95
	16 years and above	-1.14*	.383	.017	-2.13	-.15
11 to 15 years	0 to 5 years	.580	.399	.465	-.45	1.61
	6 to 10 years	.123	.414	.991	-.95	1.19
	16 years and above	-1.01*	.375	.036	-1.98	-.05
16 years and above	0 to 5 years	1.59*	.366	.000	.65	2.54
	6 to 10 years	1.13*	.383	.017	.15	2.13
	11 to 15 years	1.01*	.375	.036	.05	1.98
*. The mean difference is significant at the 0.05 level of significance.						

Source: Field Data

Significant variations in teaching competency (TC) according to teaching experience are revealed by the Tukey HSD post-hoc test. Comparing teachers with zero to five years of experience and those with 16 years or more, shows a significant mean difference of -1.594 ($p = 0.000$) is observed, indicating that teachers with more experience demonstrate higher teaching competency. Similarly, teachers with 6 to 10 years of experience show significantly lower competency compared to those with 16 years or more, with a mean difference of -1.137 ($p = 0.017$). Likewise, teachers with 11 to 15 years of experience also exhibit lower competency than those with 16 years or more, with a mean difference of -1.014 ($p = 0.036$).

However, no significant differences are found between teachers in the earlier stages of their careers. For instance, the differences between teachers with 0 to 5 years and 6 to 10 years ($p = 0.673$), 0 to 5 years and 11 to 15 years ($p = 0.465$), and 6 to 10 years and 11 to 15 years ($p = 0.991$) are all statistically insignificant. This emphasizes the value of experience in developing teaching abilities by indicating that notable gains in teaching competency mostly happen after 15 years of experience. These results highlight the necessity of ongoing training and professional development during the early years of teaching in order to close the competency gap.

Table 5: ANOVA for Burnout

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	594.175	3	198.058	5.901	.001
Within Groups	13292.023	396	33.566		
Total	13886.198	399			

Source: Field Data

The ANOVA showed a significant difference in burnout levels among the compared groups. The between-group variance (differences among the groups) has a sum of squares of 594.175 with 3 degrees of freedom. The within-group variance (differences within each group) had 13,292.023 with 396 degrees of freedom. The F-value of 5.901 and a significance level of 0.001 suggest that the observed differences in burnout scores across groups are statistically significant at the 95% confidence level. This means that at least one

of the groups experiences significantly different burnout levels than the others. However, further post-hoc analysis would be needed to determine which groups differ.

Table-6: Multiple Comparison through Tukey HSD for Teacher Burnout

Dependent Variable: Burnout- Tukey HSD						
(I) Teaching Experience	(J) Teaching Experience	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 to 5 years	6 to 10 years	1.318	.8614518	.420	-.904495	3.540549
	11 to 15 years	1.86	.8458485	.125	-.322175	4.042357
	16 years and above	3.22*	.7776499	**.000**	1.216101	5.228733
6 to 10 years	0 to 5 years	-1.32	.8614518	.420	-3.540549	.904495
	11 to 15 years	.542	.8789450	.927	-1.725590	2.809717
	16 years and above	1.90	.8135257	.091	-.194484	4.003264
11 to 15 years	0 to 5 years	-1.86	.8458485	.125	-4.042357	.322175
	6 to 10 years	-.542	.8789450	.927	-2.809717	1.725590
	16 years and above	1.36	.7969846	.320	-.693872	3.418525
16 years and above	0 to 5 years	-3.22*	.7776499	**.000**	-5.228733	-1.216101
	6 to 10 years	-1.91	.8135257	.091	-4.003264	.194484
	11 to 15 years	-1.36	.7969846	.320	-3.418525	.693872
*. The mean difference is significant at the 0.05 level.						

Source: Field Data

The post-hoc test for multiple comparisons indicates significant differences in burnout levels across teaching experience groups. Teachers having sixteen years or more of teaching experience exhibit a lower level of burnout whereas teachers with fewer than five years of experience higher burnout, and it was significant at the 0.01 level. The 95% confidence interval (CI) for this difference ranges from 1.22 to 5.23, confirming its statistical significance. No other pairwise comparisons yielded statistically significant differences at the $p < .05$ level. Although the burnout levels among teachers with 16 years and above of experience were higher than those with 6 to 10 years (Mean Difference = 1.90, $p = .091$) and 11 to 15 years (Mean Difference = 1.36, $p = .320$), these differences did not reach statistical significance. Similarly, the differences between 0 to 5 years and other groups (except for 16 years and above) were not significant. According to these results, burnout tends to rise with teaching experience, especially for those who have been in the field for 16 years or more. The greatest notable rise in burnout, however, happens after 16 years of teaching, as differences in burnout between other experience groups are not statistically significant.

Table 7: ANOVA on Attitude towards teachers Professional Development with respect to Teaching Experience

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	11.119	3	3.706	2.768	.042
Within Groups	530.318	396	1.339		
Total	541.437	399			

Source: Field Data

The one-way ANOVA analysis on Attitude towards Professional Development (APD) shows that teachers' attitudes vary significantly across different groups. The test results indicate that differences between

groups are not just due to chance. The analysis found that the variation between groups (Sum of Squares = 11.119, df = 3) resulted in a Mean Square of 3.706, while the variation within groups (Sum of Squares = 530.318, df = 396) had a Mean Square of 1.339. The calculated F-value of 2.768 and the p-value of .042 suggest that the differences observed among the groups were significant at the 0.05 level.

Table 8: Multiple Comparison through Tukey HSD for Attitude towards teachers Professional Development

Dependent Variable: APD -Tukey HSD						
(I) TEACHINGEXP	(J) TEACHINGEXP	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
0 to 5 years	6 to 10 years	.173	.172	.745	-.270	.617
	11 to 15 years	-.193	.168	.663	-.629	.242
	16 years and above	-.256	.155	.352	-.656	.144
6 to 10 years	0 to 5 years	-.173	.172	.745	-.617	.270
	11 to 15 years	-.367	.175	.159	-.819	.086
	16 years and above	-.429*	.162	.042	-.848	-.010
11 to 15 years	0 to 5 years	.193	.168	.663	-.242	.629
	6 to 10 years	.367	.175	.159	-.086	.819
	16 years and above	-.063	.159	.979	-.473	.347
16 years and above	0 to 5 years	.256	.155	.352	-.144	.656
	6 to 10 years	.429*	.162	.042	.010	.848
	11 to 15 years	.063	.159	.979	-.347	.474
*. The mean difference is significant at the 0.05 level.						

Source: Field Data

The Tukey HSD post-hoc test for Attitude towards teachers Professional Development (APD) examines how teachers attitudes differ based on their teaching experience. The results indicate that, in most cases, differences between experience groups are not statistically significant. However, there is one significant difference: Teachers with 6 to 10 years of experience had a significantly lower attitude score compared to those with 16 years and above (Mean Difference = -0.43, p = .042). This means that teachers who have been in the profession for 16 years or more show a positive attitude towards professional development compared to those with 6 to 10 years of experience. For all other comparisons, the p-values were above 0.05, indicating no significant differences in attitudes between these groups. While some variations exist, such as teachers with 0 to 5 years reporting slightly different scores than other groups, these differences were not large enough to be statistically meaningful. The findings highlighted that the experience does not strongly influence teachers attitudes towards professional development, except that mid-career teachers (6 to 10 years) were slightly less positive compared to more experienced teachers (16+ years).

7. Discussion

The results of the current research provide valuable insights on differential aspects of teaching competency, teacher burnout, and professional development attitudes of secondary school teachers, along with their practical significance supported by the relevant body of literature. Firstly, the gender-based analysis did not show any differences in teaching competency and attitudes towards professional development between male and female teachers, which corresponds to previous findings that indicated no connection between gender and professional competence, which was related to training, experience, and organizational environment (Ahmad & Khan, 2016; Anbuthasan & Balakrishnan, 2013). In turn, studies conducted by Kaur and Talwar (2014), as well as Mustafa (2013), suggest that teaching competency is

dependent on pedagogical preparation and emotional intelligence instead of demographic factors including gender. Moreover, the obtained results revealed higher levels of burnout in female teachers, which corresponded to previous research concerning the issue, which states that women teachers suffer from emotional exhaustion due to dual role requirements and socio-cultural pressure (Azeem, 2010; Maslach & Jackson, 1981). These findings may be also explained using the Job Demands-Resources model, according to which job burnout is caused by high job demands and low resource availability. Female teachers may experience greater emotional pressure along with lower institutional support compared to other types of professionals. Consequently, women have higher chances of burning out (Einav et al., 2024; Husna et al., 2024).

All three of the aforementioned variables showed statistically significant differences between the two localities, proving the continued presence of disparity in terms of education. In the case of teaching competency, urban teachers were found to score significantly higher. This trend can be attributed to previous research highlighting the presence of abundant educational resources in urban areas, which enables teachers to learn about innovative pedagogies through different programs and professional developments (Avalos, 2011; Avidov-Ungar & Eshet-Alkalai, 2011). On the contrary, rural teachers usually face resource constraints in their workplace environment, hindering the development of effective instructional skills (Mishra & Panda, 1998). The fact that rural teachers scored significantly higher in burnouts was consistent with Bandhu (2006) and Bas & Yildirim (2012), who observed that infrastructure and administrative issues result in higher work stress for teachers. Although rural teachers scored marginally better on average regarding the attitude toward professional development, it would be fair to conclude that urban teachers have better attitudes towards it (Rana & Bhatti, 2020; Mukherjee, 2021). These results show that gender-sensitive policies should be implemented in institutions. The results can also be explained through Human Capital Theory that stresses that investment in training and resources increases the level of competency and productivity (Becker, 1964, as cited in the context of education). Hence, resource allocation is essential for teacher efficacy and mental state.

Teaching experience analysis indicated statistically significant differences among groups regarding teaching competencies, burnout level, and attitude towards professional development, confirming the role of experience as an important factor determining the effectiveness of teaching. The finding about higher levels of teaching competency among teachers having 16 years or more of teaching experience is in line with the theory of experiential learning and empirical evidence (Bala & Singh, 2013; Kaur & Paramjot, 2017). Teaching experience enables a teacher to develop advanced skills related to teaching, classroom management, and reflection on the teaching process (Bandura, 1997). Moreover, no statistically significant differences between early career and mid-career teachers in terms of competency indicate competency development plateau during the early stage, which can be associated with inadequate mentoring and support provided by organizations. In terms of burnout, the results demonstrate that less experienced teachers experience higher burnout than highly experienced teachers. These findings align with research that suggests that new teachers experience higher burnout as a result of their inability to cope with stress and professionally adjust themselves (Kim et al., 2019; Edú-Valsania et al., 2022). However, there have been other studies that indicate a possible recurrence of burnout in later periods as a consequence of stagnation and loss of motivation (Schaufeli & Enzmann, 1998). As far as professional development attitudes are concerned, there were only minor differences observed based on the level of experience, except for mid-career and highly experienced teachers. This conclusion is in line with the claims made by Avalos (2011) who believed that experienced teachers tend to value professional development activities as they are aware of changing demands of the educational field.

Regarding India, the conclusions derived from this study have great significance with regard to the implementation of the National Education Policy (NEP) 2020 (Ministry of Education, 2020) which focuses on improving education through the enhancement of teaching faculty, equality, and continuous professional development. The substantial variations found in terms of gender, location, and level of experience pose some issues that need to be overcome in order to ensure that NEP is effectively

implemented. For example, one needs to address the problem of stress and exhaustion faced by female teachers by providing them with suitable working conditions and managing their workload (Husna et al., 2024). Another issue involves bridging the gap between urban and rural areas through investing in technology-based learning platforms such as DIKSHA (Avidov-Ungar & Eshet-Alkalai, 2011). In addition, the development of teacher competency in their initial years by implementing induction, mentoring, and professional development initiatives is vital for improving their effectiveness in the long run (Avalos, 2011; Mukherjee, 2021). Some strengths of the study are its adequate sample size, standardized instruments, and statistical analysis, making it reliable and valid (Nunnally & Bernstein, 1994). Nonetheless, some weaknesses that could be considered are the self-reporting nature of the data, possible biases in responses, and limited scope to one district only (Babbie, 2013). It is recommended for future researchers to employ longitudinal approaches and conduct studies in different geographic settings to explore the causality and variations across regions. In summary, the study contributes substantially to the body of knowledge and is highly valuable in shaping policy and practice, especially in promoting teacher effectiveness in line with the nation's educational agenda.

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