

The Effect of School Climate on Teaching Satisfaction: The Role of Teacher Engagement

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Abstract

When teachers like working in the environment of a school, they are more likely to be satisfied with their professional lives. The relevance of school climate in sustaining productive learning settings for students and secure, healthy working conditions for faculty has been repeatedly seen in researches. This research looks at how teachers' levels of engagement may serve as a mediator between their perceptions of the school climate and their levels of job satisfaction. A total of 476 secondary school educators from 49 public institutions took part in this survey. The study has found positive and statistically significant impact of school climate on the view of teachers about their work and job satisfaction with a strong positive relationship also seen between teacher engagement and teacher satisfaction. In addition, the relationship between teachers' perceptions of the school climate and their job satisfaction is considerably mediated by their level of engagement with the classroom.

Keywords: school climate, teacher engagement, teaching satisfaction, secondary school, mediation.

Introduction

Teachers have a pivotal role in shaping the educational experiences of their students and thereby determining their success in today's fast-changing environment (Zhang et al., 2021). According to studies (e.g., Au et al., 2016), teaching is one of the most stressful jobs. Professionals and researchers must immediately address the particular difficulties and stress experienced by instructors. The school's environment has a significant impact on teaching, staff productivity, and student achievement (Sancar, 2009), and previous studies have linked teacher stress to a negative school climate (Skogstad, et al., 2014).

Teacher satisfaction has been shown to increase when educators like their work setting (Cohen et al., 2009) and their impressions of the school climate may affect their sense of professional identity and ability

to build professional capital in the classroom. This suggests a need to study these inter-relations between teachers' perceived school climate and their satisfaction in the local context and see how teacher engagement plays the role of a moderator in that relationship.

School climate

School climate refers to the overall atmosphere and environment within a school and encompasses the social, emotional, and physical aspects that shape the experiences of students, teachers, and staff. A positive school climate fosters a sense of safety, belonging, and support, promoting academic achievement, emotional well-being, and positive behavior. Factors such as school leadership, teacher-student relationships, peer interactions, and physical surroundings all contribute to shaping of the school climate, which in turn influences student

engagement, motivation, and overall school success.

The concept of 'school climate' is quite challenging to comprehend and often gets mixed up with the term 'school culture'. The two terms have been used interchangeably in recent years (Aldridge & Fraser, 2016, Van Houtte, 2005). School climate and school culture are related but are distinct. School culture refers to the underlying beliefs, values, traditions, and norms that shape the behavior and interactions within the school community. School climate refers to the overall atmosphere and environment within the school. It encompasses factors like safety, relationships between students and teachers, peer interactions, disciplinary policies, and physical surroundings. It is more about the current conditions and experiences within the school environments. It is generally agreed that the term "school climate" encompasses the following: (a) the state of the physical environment of schools (such as their buildings, facilities, and equipment); (b) the nature of individuals who are in the schools (such as qualifications and backgrounds of students and teachers); and (c) the interpersonal dynamics within schools (such as those between teachers-teachers, students-students and teachers-students) (Van Houtte, 2005). Teachers are more likely to stay in a school with a positive atmosphere (Cohen et al., 2009) and their perceptions of professional identities and accumulation of professional capital in teaching might be impacted by their impressions of the school climate.

Teacher engagement

According to Schaufeli, Salanova, González-Romá, and Bakker (2002), "engagement" describes an individual's mental state when they have a favorable and fulfilling outlook on their work. There are three parts to this structure: enthusiasm, commitment, and concentration. So, when we talk about "teacher engagement", we are talking about how invested educators are in the classroom. Another way to think about

teacher involvement is through the actual time spent in the classroom by the teacher (Shuck et al., 2011).

Teaching satisfaction

Satisfaction in classroom teaching results from a good match between what instructors want to gain and what they experience in their work (Ho & Au, 2006). Positive and negative feelings about the job make up the overall job satisfaction of the employee (Dunn & Harris, 1998). According to Bhatti and Qureshi (2007), job happiness has a direct impact on productivity in all fields. As a result, happy educators foster better student growth (Luthans, 2002).

In this investigation, job satisfaction was considered to be a component of teacher well-being and was measured by teachers' perceptions of their satisfaction in teaching. Satisfaction in classroom teaching is a measure of both the emotional and intellectual aspects of teaching since it reflects the teacher's assessment of the fit between his or her preferences and the demands of the work

Relationship among the study variables

Teacher engagement and school climate are deeply intertwined. A positive school climate can enhance teacher engagement by providing a supportive and collaborative environment that encourages teachers to fully invest in their work. When teachers feel valued, respected, and supported by their colleagues and administrators, they are more likely to be engaged in their teaching and committed to the success of their students. Conversely, a negative or toxic school climate can erode teacher engagement, leading to feelings of burnout, frustration, and disengagement.

Teaching satisfaction refers to the degree of fulfillment and contentment that teachers experience in their profession. It encompasses various factors, including job autonomy, recognition, opportunities for professional growth, and the ability to make a positive impact on the lives of the students. Engaged

teachers in a positive school climate are more likely to experience high levels of teaching satisfaction, feel supported in their roles with opportunities for professional development and growth, and derive fulfillment from the success of their students.

In summary, teacher engagement, school climate, and teaching satisfaction are interconnected components of a thriving educational ecosystem. A positive school climate can nurture teacher engagement, leading to increased teaching satisfaction and ultimately benefiting academic achievement and well-being of students. Addressing issues related to teacher engagement and satisfaction can contribute to the cultivation of a more positive school climate, creating a cycle of improvement and success.

The present study

The study focused on examining the relationship among the three criterion variables: teachers' perceived school climate, teacher engagement, and their satisfaction with teaching. The present study attempted to answer the following questions: i) whether the perceptions of teachers about school climate influence teacher engagement and their satisfaction in teaching, ii) whether teacher engagement leads to teaching satisfaction, and whether it mediates the

link between school climate and teaching satisfaction.

Objectives of the study

This study in government secondary schools of West Bengal focused on the examination of inter-relation among the three variables, namely, school climate, teacher engagement, and teacher satisfaction in teaching. The research objectives were to study: 1. How does school climate contribute to predicting teacher engagement? 2. How does school climate contribute to teacher satisfaction? 3. How does teacher engagement contribute to predicting satisfaction in teaching? and 4. The mediation effect of teacher engagement on the link between school climate and teaching satisfaction. Based on these objectives the following hypotheses were formulated:

H₀1: There is no significant contribution of school climate in predicting teacher engagement.

H₀2: There is no significant contribution of school climate in predicting teacher satisfaction.

H₀3: There is no significant contribution of teacher engagement in predicting the satisfaction in teaching.

H₀4: There is no significant mediation effect of teacher engagement on the relationship between school climate and teaching satisfaction.

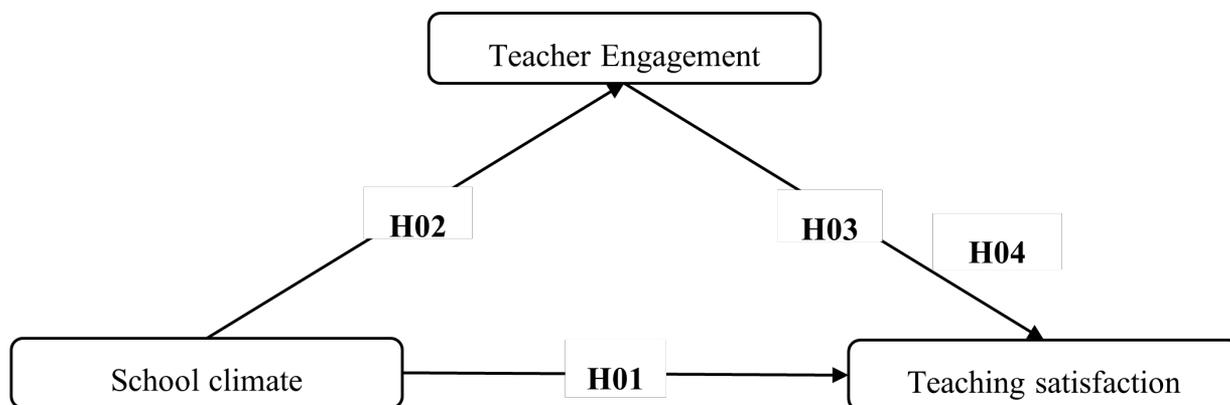


Figure 1: A hypothetical model for the inter-relations among the study variables

Methodology

Methods

A cross-sectional survey method was used for the study and the inter-relations among study variables tested using primary (quantitative) data.

Participants of the study

The secondary school instructors of Bengali-medium secondary schools under the jurisdiction of the West Bengal Board of Secondary Education (WBBSE) were the focus of this study. Multistage sampling procedures were used to select the sample. In the first stage, seven out of twenty-three

districts of West Bengal were chosen randomly using the fish-bowl method. At the second stage seven schools were randomly selected from each of the seven districts (Malda, Purba Burdwan, Nadia, Birbhum, Hooghly, Murshidabad, and Cooch Behar). The roster of institutions was taken from the government's website at <https://wbbse.wb.gov.in>. All the 476 teachers of these 49 secondary-schools participated in the study. Among them, 221 (46.43 %) teachers were female and 255 (53.57 %) were male teachers (Table 1). Among the sample 162 (34.03 %) teachers had the experience of teaching below 5 years, 175 (36.76 %) teachers had between 5-10 years, and 139 (29.20 %) teachers had experience of more than 10 years.

Table 1

Respondents' details	Sample with specifications (476 participants)	
	N	%
Gender		
Male	255	53.6
Female	221	46.4
District-wise distribution of the respondents		
Purba Burdwan	67	14.1
Nadia	71	14.9
Birbhum	65	13.7
Hooghly	72	15.1
Murshidabad	68	14.3
Cooch Behar	66	13.9
Malda	67	14.1
Teaching experience		
Below 5 years	162	34
Between 5 to 10 years	175	36.8
More than 10 years	139	29.2

Instruments

The Multidimensional School Climate Questionnaire (MSCQ)

The MSCQ (Teacher version) (Molinari & Grazia, 2022) was used for this research to assess school climate. The instrument

consists of 44 statements. The teacher version of the MSCQ consists of two broad sections ("Classroom Practices" and "School Atmosphere") having 22 items in each section. Five different sub-dimensions make up the 'Classroom Practices' section: Rules (7 items), Student support (3 items), Student

involvement (4 items), Positive teaching (5 items), and Encouragement (3 items). On the other hand, student relations (5 items), student-teacher relations (4 items), educational climate (5 items), sense of belonging (5 items), and interpersonal justice (3 items) are the five sub-dimensions that make up the 'School Atmosphere' section. On a 5-point Likert scale, responses ranging from 1 ("Strongly disagree") to 5 ("Strongly agree") were elicited. Perceptions were the aggregated MSCQ score. The items included in this instrument are as follows:

Section 1. Classroom practices

Rules

1. Students know the consequences of breaking the rules.
2. Most people know the school rules.
3. At school, some time is spent explaining the rules clearly to students.
4. It is easy to obtain information about the school rules.
5. The rules are clear and easy to understand.
6. Teachers enforce the rules.
7. Teachers intervene when a student doesn't keep to the rules.

Student support

8. When they have problems, students seek the help of adults in the school.
9. If students have personal problems, they can easily get help from adults in the school.
10. If students have academic problems, they can easily get help from teachers

Student involvement

11. Students are asked their opinion on the school's functioning.
12. When it is important, teachers ask students' opinions before making decisions for them.
13. There are moments or situations when students can express their opinions on the school.
14. Students participate in defining rules.

Positive teaching

15. Most teachers appear to draw pleasure from teaching.
16. Most teachers appear to love their job.
17. Teachers explain what students are about to learn.
18. Teachers explain the importance of what students study.
19. Teachers use methods that make their subject interesting

Encouragement

20. Teachers tell students that they can do it.
21. Teachers encourage students to do their best.
22. Teachers compliment students when they work hard to learn

Section 2. School atmosphere

Student relations

1. Students help each other.
2. In general, students get along with one another.
3. Students treat one another respectfully.
4. Students can count on each other.
5. In general, relations among students are friendly.

Student-teacher relations

6. Students and teachers feel good together.
7. In general, students and teachers get along with each other.
8. Students feel close to most of their teachers, and they trust them.
9. In general, relations between students and teachers are friendly.

Educational Climate

10. At my school, students can learn and get a good education.
11. At my school, students can feel that students' success is the priority for teachers.
12. At my school, students can feel that studying is important.

13. At my school, we are expected to do our best.
14. In general, what students learn is interesting.

Sense of belonging

15. I would rather be in a different school.
16. At my school, I feel at ease.
17. I am proud to be a teacher of this school.
18. This school is important for me.
19. I love my school.

Interpersonal justice

20. Punishment is fair.
21. Students are treated with justice.
22. The rules are fair.

Work Engagement Scale (WES)

The WES developed by Schaufeli and Bakkar (2004) was utilized to assessing the criterion variable (teacher engagement) to evaluate teachers' dedication to their jobs. There were 17 statements included in the scale. The instrument was a 5-point Likert scale on which 1 indicated strong disagreement and 5 indicated strong agreement. The measure considered the following three dimensions: vigor, absorption, and dedication of teachers. Cronbach's alpha, a measure of internal consistency reliability, was 0.82 for this scale in the investigation. The items of this instrument were:

Vigor

1. At my work, I feel a burst with energy.
2. At my job, I feel strong and vigorous.
3. When I wake up in the morning, I feel like going to work.
4. I can continue working for very long periods.
5. At my job, I am very resilient, mentally.
6. At my work I always persevere, even when things do not go well

Dedication

7. I find the work that I do full of meaning and purpose.
8. I am enthusiastic about my job.

9. My job inspires me.
10. I am proud of the work that I do.
11. To me, my job is challenging

Absorption

12. Time flies when I'm working.
13. When I am working, I forget everything else around me.
14. I feel happy when I am working intensely.
15. I am immersed in my work.
16. I get carried away when I'm working.
17. It is difficult to detach myself from my job.

3.3.3 Teaching Satisfaction Scale (TSS)

The satisfaction of the teachers in their profession was assessed using TSS, a uni-dimensional scale consisting of 5 items to be rated on a scale from strongly disagree (1) to strongly agree (5). developed by Ho (2006). Ho (2006) reported the global reliability of the original scale as 0.77 (Cronbach's alpha) and the two-week test-retest reliability as 0.76. However, reliability analysis demonstrated Cronbach's internal consistency reliability coefficient of 0.81 for the teaching satisfaction scale. The scale items are as follows:

1. In most ways, being a teacher is close to my ideal.
2. My conditions of being a teacher are excellent.
3. I am satisfied with being a teacher.
4. I have gotten the important things I want to be a teacher.
5. If I could choose my career over, I would change almost nothing.

Data collection procedures

The data collection was conducted following certain formal and ethical protocols. Firstly, the heads of the institutions were approached to inform about the present study and were also requested to cooperate during data collection. The teachers were also informed about the purpose of the present study. Teachers, who agreed to respond voluntarily, were provided with three questionnaires,

namely, MSCQ, Work engagement scale, and Teaching satisfaction scale. Before filling out the questionnaires, the teachers were requested to read all the instructions carefully provided in each research tool. Besides, they were also requested to provide honest responses.

Data analysis

The entire data analysis was performed using IBM SPSS version 26.0. In this study, data analysis was conducted with the help of linear regression analysis and mediation analysis. To test the first three null hypotheses (H01-H03) i.e. 'There is no significant contribution of school climate in predicting satisfaction in teaching of teachers', 'There is no significant contribution of school climate in predicting teacher engagement', and 'There is no significant contribution of teacher engagement in predicting teaching satisfaction, a series of linear regression analysis was performed. To test the hypothesis (H04), mediation analysis, which is a statistical technique to explore the underlying mechanisms or pathways through which one variable (i.e., school climate) influences another (i.e., teaching

satisfaction), was performed. The test checks if the effect of the independent variable (i.e., school climate) on the dependent variable (i.e., teaching satisfaction) is significantly reduced, eliminated, or enhanced when the mediator (i.e., teacher engagement) is included in the analysis. This helps researchers understand the underlying processes or mechanisms by which the independent variable affects the dependent variable. Thus, mediation analysis allows researchers to better understand the complex interplay between variables and to identify potential intervention targets or points of leverage for influencing the outcome variable (i.e., teaching satisfaction).

Results and discussions

Preliminary analysis

In the preliminary analysis, the descriptive statistics (mean scores of the variables, standard deviation, skewness, kurtosis, and 95 % confidence intervals) for school climate, teacher engagement, and satisfaction in teaching were calculated. The results are presented in Table 2.

Table 2: Summary Statistics of Scores of the study variables (N= 426)

Variables	Mean Score	Std. Deviation	Skewness	Kurtosis	95% CIs of Mean	
					LL	UL
School climate	172.34	6.34	0.45	-0.79	163.99	180.69
Teacher engagement	52.39	4.57	-0.63	0.73	45.62	59.16
Teaching satisfaction	17.48	3.81	0.89	0.85	14.81	20.15

Main analysis

The individual contribution of school climate in predicting satisfaction in the teaching of teachers

For testing the first null hypothesis (H01), a linear regression analysis was carried out (Table 3). The regression coefficient for school climate is 4.10 which is positive

and statistically significant at 0.05 level. It indicates that school climate by itself contributes significantly to the prediction of satisfaction of teachers

Table 3: Percentage of the contribution of school climate in predicting teaching satisfaction of teachers

	B	SE	t-value	%contribution
Constant	17.66	1.57	11.23***	
School climate	4.10	1.24	3.31*	47.11

B= unstandardized regression coefficient, ***significant at 0.001 level, *significant at 0.05 level

Shows that the school climate is a potential predictor of satisfaction in the teaching of teachers. Based on the results, the following regression equation for predicting satisfaction in teaching based on their perceived school climate may be developed:

$$Y = 4.10X + 17.66$$

[where, Y= teaching satisfaction, X= school climate]

6.2.2 The contribution of school climate in predicting teacher engagement

For testing the second null hypothesis (H_02) i.e. 'There is no significant contribution of school climate in predicting teacher engagement', a linear regression analysis was conducted (Table 4)

Table 4**Per cent contribution of school climate in predicting teacher engagement**

	B	SE	t-value	%contribution
Constant	14.19	1.92	7.38**	
School climate	2.58	0.79	3.28**	44.32

The standardized regression coefficient for school climate at + 2.58 is statistically significant at 0.01 level indicating that school climate contributes positively and significantly to the prediction of teacher engagement. The positive regression coefficient reflects that a higher perceived school climate increases level of engagement in teaching. The contribution of school climate in predicting teacher engagement being 44.32 per cent, it is claimed that school climate is a potential predictor of teacher engagement. From the results, the following regression equation for predicting teacher

engagement based on teachers' perceived school climate may be developed:

$$Y = 2.58X + 14.19$$

[where, Y= teacher engagement, X= school climate]

6.2.3 The individual contribution of teacher engagement in predicting satisfaction in teaching of teachers

For testing the third null hypothesis (H_03) i.e. 'There is no significant contribution of teacher engagement in predicting satisfaction in the teaching of teachers', a linear regression analysis was performed (Table 5).

Table 5: Per cent individual contribution of teacher engagement in predicting satisfaction in teaching of teachers'

	B	SE	t-value	%contribution
Constant	11.67	3.55	3.29**	
Teacher Engagement	2.08	0.59	3.55**	39.57

6.2.4 The mediation effect of teacher engagement on the association between school climate and satisfaction in teaching of teachers

For the fourth null hypothesis (H04), a mediation analysis was performed. The path model (Figure 1) was tested in the mediation analysis. The results are in Figure 2:

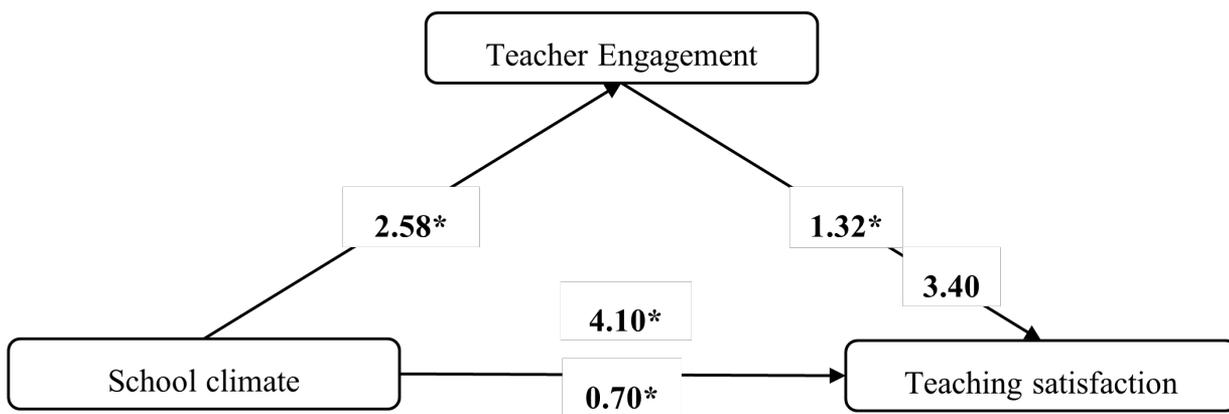


Figure 2: The mediation model of school climate and teaching satisfaction of teachers taking teacher engagement as a mediator

The effect of school climate on teacher satisfaction was assessed in the absence of the moderator (Table 6). Table 6 indicates that school climate had a significant positive effect on the teaching of teachers. The analysis yielded B = 4.10, SE = 1.24, t = 3.31, p<0.05 with the R-square value of 0.47.

Secondly, the direct effects of school climate on teacher engagement and of teacher engagement on their teaching satisfaction were assessed (Table 6). It is clear that school climate has a significant positive influence on teacher engagement. The analysis B = 2.58, SE = 0.79, t = 3.28, p<0.05 with the R-square value of 0.44 shows teacher engagement has a significant positive influence on teaching satisfaction. The analysis also yielded B = 1.32, SE = 0.61, t = 2.17, p<0.05. Therefore, school climate had a significantly positive direct effect on teacher engagement, while teacher engagement had a significantly

positive direct effect on their teaching satisfaction.

Finally, the indirect regression path (SC→TE→TS) i.e., the indirect effect of school climate on teaching satisfaction in the presence of the mediator (teacher engagement) was tested (Table 6). From Table 6, B= 3.40, SE= 1.50, p<0.05 it is evident that school climate had a significant and positive influence on teaching satisfaction in the presence of teacher engagement analysis rejecting H04. Further, the percentage of mediation effect (indirect effect) over the total effect was found to be 82.93%. However, the effect of school climate in the presence of the mediator (i.e., teacher engagement) was reduced but remained significant (B= 0.70, SE= 0.35, t= 2.01, p<0.05). Hence, teacher engagement partially mediates the association between school climate and teaching satisfaction.

Table 6: Results of Mediation Analysis

Regression Path	B	SE	T	95% CIs	
				LL	UL
Path estimates					
Total effect: SC→TS (in the absence of TE)	4.10	1.24	3.31*	3.22	4.98

Moderator effect model: SC→TE	2.58	0.79	3.28*	1.82	3.34
Dependent variable model: TE→TS	1.32	0.61	2.17*	0.61	2.03
Mediation estimates					
Direct effect: SC→TS (in the presence of TE)	0.70	0.35	2.01*	0.32	1.08
Indirect effect: SC→TE→TS	3.40	1.50	2.27*	2.09	4.71

18. Note. SC= school climate, TE= teacher engagement, TS= teaching satisfaction

Discussions

The present research studies the relationship between school climate, teacher engagement, and teaching satisfaction. By examining the mediating role of teacher engagement, the present study offers insights into the underlying mechanisms through which school climate influences teaching satisfaction, thus providing practical implications for improving educational quality (Wang & Holcombe, 2010). The findings of this research can contribute to the development of effective strategies and interventions aimed at improving school climate and teacher satisfaction, ultimately fostering a more conducive teaching and learning environment.

Significance of the study

Previous research has often focused on the direct impact of school climate on teaching satisfaction, overlooking the underlying processes and mechanisms involved especially, the intermediary role of teacher engagement. The present study fills this gap offering a more nuanced understanding of the relationship. There is ample previous research on the importance of school climate and teacher engagement but there is a dearth of studies that explicitly examine their interconnectedness in the context of teaching satisfaction (Wang & Holcombe, 2010). This research addresses this gap.

Integration of the findings into Educational Policy, Practice, and Teacher Education

Policymakers can utilise the findings of this research to develop policies aimed

at cultivating positive school climates conducive to teacher engagement and satisfaction (Skaalvik & Skaalvik, 2014). This may involve initiatives to enhance school leadership and teacher autonomy, foster collaborative culture and provide support for teacher professional development. For example, introduce policies that involve creating structured opportunities for teachers to collaborate on lesson planning, sharing best practices, and engaging in professional learning communities. Schools could establish regular team meetings where teachers can brainstorm ideas, discuss challenges, and collaborate on projects, ultimately fostering a sense of camaraderie and collective responsibility. Policy may suggest flexible curriculum frameworks that allow teachers to tailor their instructional approaches to meet the diverse needs of their students. System can allocate resources toward providing comprehensive professional development opportunities for teachers, including for workshops, conferences, and courses that focus on pedagogical techniques, subject matter knowledge, and social-emotional learning.

Administrators could reduce administrative burdens, giving teachers more time and freedom to innovate and experiment with new teaching strategies.

School administrators can implement practical strategies informed by this research to create nurturing environments where teachers feel valued and supported (Skaalvik & Skaalvik, 2014). For instance, school administrators could implement regular surveys or feedback sessions to gather input from teachers about their experiences, challenges, and suggestions for improvement.

For instance, they might conduct an annual anonymous survey that covers various aspects of the school environment, teaching resources, professional development opportunities, and administrative support. This feedback can then inform decision-making processes and help administrators address concerns proactively. Administrators can establish recognition programs to acknowledge and celebrate exemplary teaching practices. For example, they might introduce a “Teacher of the Month” award where outstanding educators are publicly recognized for their contributions to the school community. Additionally, administrators could provide tangible rewards such as monetary bonuses, extra professional development opportunities, or special privileges within the school. Further, they can foster a culture of shared decision-making by involving teachers in important school-related decisions. For instance, they might create committees or task forces comprised of teachers, administrators, parents, and community members to discuss and make recommendations on issues such as curriculum development, school policies, or budget allocation. By actively involving teachers in decision-making processes, administrators will demonstrate respect for the expertise of teachers and commitment to collaboration.

Teacher education programs can integrate the findings of this research into their curriculum to prepare future educators to recognize the significance of school climate and teacher engagement. For example, teacher education programs can include modules on understanding and assessing school climate. Policymakers might offer practical training on assessing and analyzing various aspects of the school environment, such as teacher-student relationships, school culture, and safety. Students of educational colleges

could learn to identify strengths and areas for improvement within different educational settings. Additionally, teacher education programs might offer field experiences during internships for pupil-teachers to observe and participate in classrooms with highly engaged teachers, gaining first hand insight into effective teaching practices. Recognizing the importance of teacher well-being, teacher education programs can incorporate modules on self-care practices and strategies for maintaining a healthy work-life balance. For example, they might offer coursework on stress management, mindfulness techniques, and strategies for setting boundaries and managing workload. Additionally, teacher education programs might encourage trainee teachers to reflect on their values, priorities, and self-care routines, empowering them to prioritize their well-being throughout their careers.

Conclusions and recommendations

The study concludes that the direct effects of school climate on teacher engagement and teaching satisfaction are positive and statistically significant. Teacher engagement also has a significant positive effect on teaching satisfaction. Further, teacher engagement significantly mediates the association between perceived school climate and teaching satisfaction. Hence, teachers who perceive that school climate is healthy and encouraging become involved and interested in teaching and this leaves them feeling satisfied in their job. Thus, teacher engagement becomes the most important factor for enhancing teaching satisfaction. This study recommends future researchers study on different contextual factors and predictors of teacher engagement need to be taken up.

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