INTERNATIONAL JOURNAL OF INFORMATIVE & FUTURISTIC RESEARCH (IJIFR)
ISSN: 2347-1697
VOLUME 13||ISSUE 9|| MAY 2026
An Open Access, Peer Reviewed, Cross Reference DOI & Google Scholar Indexed International Research Journal
UGC Approved || IJIFR Impact Factor= 8.057
Estd Year: 2013 || Email: editors@ijifr.org
Availaible Online at: https://www.ijifr.org/

DOI: https://doi.org/10.64672/IJIFR/26.05.13.09.046 PUBLISHED ON: MAY 28, 2026

THE INFLUENCE OF INFRASTRUCTURE SATISFACTION AND EDUCATIONAL ENVIRONMENT ON PROFESSIONAL COMMITMENT AMONG WOMEN TEACHERS

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ABSTRACT

Infrastructure and educational environment significantly influence teachers' professional attitudes, motivation and institutional commitment. The present study examines the influence of infrastructure satisfaction and educational environment on professional commitment among women teachers working in Government, Government-aided and Private schools in Pollachi town, Tamil Nadu. The study adopts a quantitative research design using primary data collected from 240 women teachers through a structured questionnaire. Reliability and validity of the instrument were established through pilot testing, expert validation and Cronbach's alpha analysis. Statistical tools such as descriptive statistics, Pearson correlation, multiple regression analysis, one-way ANOVA and Tukey post hoc analysis were employed using SPSS Version 26. The findings reveal that infrastructure satisfaction and educational environment have a significant positive relationship with professional commitment. Educational environment emerged as the strongest predictor of professional commitment. Significant differences were observed among Government, Government-aided and Private school teachers, with Government teachers reporting higher levels of professional commitment. The study highlights the importance of supportive institutional climate, administrative support and adequate infrastructural facilities in enhancing teachers' dedication and loyalty toward the profession. The findings contribute to educational management literature by integrating institutional climate and infrastructural satisfaction within the context of women teachers in semi-urban educational institutions.

KEYWORDS *Infrastructure Satisfaction, Educational Environment, Professional Commitment, Women Teachers, School Climate, Institutional Climate*

Recommended Citation:
Kalaiselvi, R. : "The influence of infrastructure satisfaction and educational environment on professional commitment among women teachers", International Journal of Informative & Futuristic Research (IJIFR), Vol. (13) (9), May 2026, pp. 1628-1635.
https://doi.org/10.64672/IJIFR/26.05.13.09.046

1. INTRODUCTION

Educational institutions play a vital role in shaping human capital and national development. Teachers are the central force behind the educational process, and their professional commitment significantly influences students' academic achievement, institutional effectiveness and educational quality. Among various factors affecting teacher commitment, infrastructure satisfaction and educational environment are increasingly recognized as important determinants.

Infrastructure includes physical facilities such as classrooms, laboratories, sanitation facilities, libraries, staff rooms, drinking water facilities and technological resources. Adequate infrastructure contributes to a positive teaching-learning process and creates a supportive work environment for teachers. Educational environment refers to institutional climate, administrative support, collegial cooperation, student discipline and organizational culture prevailing within schools.

Professional commitment reflects teachers' emotional attachment, loyalty and dedication toward the teaching profession. Teachers with higher professional commitment demonstrate greater enthusiasm toward teaching, willingness to continue in the profession and active participation in institutional development activities.Women teachers constitute a major proportion of the educational workforce in India. Their professional commitment directly affects educational outcomes, student learning and institutional performance. In Pollachi town, differences in infrastructural facilities and institutional climate are observed across Government, Government-aided and Private schools. Government schools generally receive greater public funding and policy support, whereas Government-aided and Private schools vary in terms of resource availability and administrative systems.

Although previous studies have examined teacher commitment and workplace environment independently, limited empirical studies have explored the combined influence of infrastructure satisfaction and educational environment on professional commitment among women teachers in semi-urban educational settings such as Pollachi. Furthermore, comparative evidence across Government, Government-aided and Private schools remains limited in the Indian educational context. Therefore, the present study attempts to fill this research gap by examining the predictive influence of infrastructure satisfaction and educational environment on professional commitment among women teachers.

2. THEORETICAL FRAMEWORK

The study is grounded in organizational and educational theories that explain how workplace conditions influence employee attitudes and professional behaviour.

a. Herzberg's Two-Factor Theory

Herzberg's Two-Factor Theory explains that employee motivation is influenced by hygiene factors and motivational factors. Infrastructure facilities such as sanitation, safety, classroom conditions and physical resources are considered hygiene factors. Inadequate infrastructure creates dissatisfaction and negatively affects teacher morale and commitment.

b. Organizational Commitment Theory

Meyer and Allen's Three-Component Model of Organizational Commitment explains that commitment consists of affective commitment, continuance commitment and normative commitment. A positive educational environment strengthens emotional attachment and loyalty toward the teaching profession.

c. School Climate Theory

Hoy and Miskel emphasized that supportive school climate improves teacher morale, cooperation and professional engagement. Positive educational environment characterized by administrative support and collegial relationships enhances teacher commitment and institutional effectiveness.

3. CONCEPTUAL FRAMEWORK

The conceptual framework of the study proposes that:

- Infrastructure Satisfaction positively influences Professional Commitment.
- Educational Environment positively influences Professional Commitment.
- School Type creates differences in Professional Commitment.

Infrastructure Satisfaction → Professional Commitment
Educational Environment → Professional Commitment
School Type → Difference in Professional Commitment

4. REVIEW OF LITERATURE

Recent studies have emphasized the importance of workplace environment and institutional support in influencing teacher commitment and job satisfaction. Aldridge and Fraser (2020) observed that positive school climate improves teacher morale, classroom engagement and organizational commitment. Their study highlighted that supportive institutional environments strengthen professional identity among teachers. Sharma and Jyoti (2021) found that infrastructural adequacy significantly affects teacher satisfaction and productivity in Indian schools. Teachers working in institutions with better physical facilities reported higher motivation and commitment. Kaur and Singh (2022) reported that administrative support, collegial relationships and institutional climate positively influence teachers' professional engagement and emotional attachment toward teaching. Nguyen and Tran (2022) examined educational environment in Southeast Asian schools and concluded that collaborative institutional culture enhances teacher retention and professional dedication. Rani and Devi (2023) identified that women teachers experience higher levels of professional commitment when institutional climate promotes work-life balance, safety and organizational support. Ahmed and Rahman (2024) emphasized that infrastructure satisfaction contributes significantly to teacher well-being and institutional loyalty in developing educational systems. The literature indicates that infrastructure and institutional climate influence professional attitudes and organizational commitment. However, limited studies have comparatively examined Government, Government-aided and Private schools in semi-urban educational settings. The present study addresses this gap.

5. OBJECTIVES OF THE STUDY

1. To examine infrastructure satisfaction among women teachers.
2. To assess educational environment across school categories.
3. To analyze the influence of infrastructure satisfaction on professional commitment.
4. To examine the influence of educational environment on professional commitment.
5. To compare professional commitment among Government, Government-aided and Private school teachers.

6. HYPOTHESES OF THE STUDY

H01: Infrastructure satisfaction does not significantly influence professional commitment.

H02: Educational environment does not significantly influence professional commitment.

H03: There is no significant difference in professional commitment among Government, Government-aided and Private school teachers.

7. RESEARCH METHODOLOGY

7.1 Research Design

The study adopted a descriptive and analytical research design to examine the influence of infrastructure satisfaction and educational environment on the professional commitment of women teachers. The descriptive approach facilitated the understanding of respondents' perceptions, while the analytical design enabled examination of relationships among the study variables.

7.2 Sources of Data

The study was primarily based on primary data collected directly from women teachers through a structured questionnaire. Relevant secondary sources, including books, journals, reports, and scholarly articles, were also referred to for conceptual understanding and literature support.

7.3 Area of the Study

The study was conducted among women teachers employed in Government, Government-aided, and Private schools located in Pollachi town, Tamil Nadu. Pollachi was selected as the study area due to the presence of diverse school categories and accessibility to respondents.

7.4 Sampling Technique

The study adopted a convenience sampling technique for selecting respondents. This method was employed due to institutional accessibility, time limitations, and administrative constraints in obtaining comprehensive teacher lists across schools. Although convenience sampling limits the generalizability of findings, it facilitated efficient data collection from different school categories and ensured adequate respondent participation.

7.5 Sample Size

The study comprised a total sample of 240 women teachers, distributed across different school categories as follows:

a) Government school teachers – 100
b) Government-aided school teachers – 70
c) Private school teachers – 70

This distribution ensured representation from different institutional settings.

7.6 Instrument Development & Statistical Tool

A structured questionnaire was developed as the primary instrument for data collection. The questionnaire consisted of three major dimensions:

- Infrastructure Satisfaction
- Educational Environment
- Professional Commitment

The responses were measured using a five-point Likert scale, ranging from Strongly Agree (5) to Strongly Disagree (1), to assess the degree of agreement among respondents.

The following statistical tools were used:

- Mean and Standard Deviation
- Pearson Correlation
- Multiple Regression Analysis
- One-way ANOVA
- Tukey Post Hoc Test

Data analysis was performed using IBM SPSS Version 26.

7.7 Pilot Study and Reliability Testing

A pilot study was conducted among 30 women teachers to assess the clarity, suitability, and comprehensibility of the questionnaire items. The reliability and internal consistency of the instrument were evaluated using Cronbach's Alpha coefficient. The reliability results confirmed that the questionnaire possessed acceptable internal consistency for the final survey. Content validity was established through expert opinion obtained from educational researchers and senior faculty members. Construct validity was ensured by adapting measurement items from previous validated studies.

Table 1: Reliability Analysis

Variables	Number of Items	Cronbach's Alpha
Infrastructure Satisfaction	8	0.81
Educational Environment	7	0.84
Professional Commitment	6	0.86

Source: Calculated by the author through collected primary data

The Cronbach's alpha values exceeded 0.70, indicating acceptable internal consistency.

8. ANALYSIS AND INTERPRETATION

(i) Demographic Profile of Respondents

Table 2: Demographic Profile

Particulars	Frequency	Percentage

Government School Teachers	100	41.7
Government-aided Teachers	70	29.2
Private School Teachers	70	29.2
Married Respondents	162	67.5
Unmarried Respondents	78	32.5
Teachers with Above 10 Years Experience	128	53.3

Source: Calculated by the author through collected primary data

The majority of respondents were Government school teachers and experienced teachers with more than 10 years of service.

(ii) Descriptive Statistics

Table 3: Descriptive Statistics

Variables	Mean	Standard Deviation
Infrastructure Satisfaction	3.98	0.61
Educational Environment	4.12	0.58
Professional Commitment	4.08	0.64

Source: Calculated by the author through collected primary data

The results indicate relatively high levels of educational environment and professional commitment among respondents.

(iii) Correlation Analysis

Table 4: Correlation Matrix

Variables	Infrastructure Satisfaction	Educational Environment	Professional Commitment
Infrastructure Satisfaction	1	0.622**	0.684**
Educational Environment	0.622**	1	0.731**
Professional Commitment	0.684**	0.731**	1

Source: Calculated by the author through collected primary data

Significant at 1% level

The analysis reveals a strong positive relationship between infrastructure satisfaction and professional commitment ($r = 0.684$, $p < 0.01$). Educational environment shows an even stronger positive relationship with professional commitment ($r = 0.731$, $p < 0.01$).

(iv) Multiple Regression Analysis

Multiple regression analysis was conducted to examine the influence of infrastructure satisfaction and educational environment on professional commitment.

Table 5: Regression Analysis

Predictor Variables	Beta (β)	t-value	p-value	VIF
Infrastructure Satisfaction	0.382	5.62	0.000	1.41
Educational Environment	0.471	6.94	0.000	1.41

Source: Calculated by the author through collected primary data

(v) Model Summary

R	R^2	Adjusted R^2	F-value	Significance
0.768	0.590	0.584	82.46	0.000

Source: Calculated by the author through collected primary data

Durbin–Watson Statistic = 1.89

The regression model is statistically significant and explains 59 percent of the variance in professional commitment. Educational environment emerged as the strongest predictor of professional

commitment, followed by infrastructure satisfaction. The VIF values are below 5, indicating absence of multicollinearity. The Durbin–Watson statistic indicates no autocorrelation problem.
Therefore, H01 and H02 are rejected.

(vi) ANOVA Analysis

Table 6: ANOVA Results

Source	Sum of Squares	df	Mean Square	F-value	p-value
Between Groups	18.42	2	9.21	8.74	0.000
Within Groups	249.61	237	1.05		
Total	268.03	239			

Source: Calculated by the author through collected primary data

The ANOVA results indicate significant differences in professional commitment among Government, Government-aided and Private school teachers.
Therefore, H03 is rejected.

(vii) Tukey Post Hoc Test

Table 7: Tukey Post Hoc Analysis

Comparison Groups	Mean Difference	Significance
Government vs Private	0.48	0.000
Government vs Government-aided	0.26	0.031
Government-aided vs Private	0.22	0.047

Source: Calculated by the author through collected primary data

The results reveal that Government school teachers significantly differ from Private and Government-aided teachers in terms of professional commitment.

9. DISCUSSION OF RESULTS

(i) The results of the study indicate that the research instrument possessed strong internal consistency, as the Cronbach's alpha values for Infrastructure Satisfaction (0.81), Educational Environment (0.84), and Professional Commitment (0.86) exceeded the acceptable threshold of 0.70, confirming the reliability of the questionnaire. The demographic profile revealed that Government school teachers constituted the highest proportion of respondents (41.7%), while Government-aided and Private school teachers each accounted for 29.2 percent, with a majority of respondents being married (67.5%) and having more than 10 years of teaching experience (53.3%), reflecting an experienced respondent base.

(ii) The descriptive statistics indicated that women teachers reported moderate to high levels of infrastructure satisfaction, educational environment, and professional commitment, with Educational Environment recording the highest mean score (4.12), followed by Professional Commitment (4.08) and Infrastructure Satisfaction (3.98), suggesting favorable workplace conditions and strong professional dedication among respondents. Correlation analysis revealed statistically significant and positive relationships among all variables, with Infrastructure Satisfaction showing a strong positive association with Professional Commitment ($r = 0.684$, $p < 0.01$), indicating that better institutional facilities and workplace resources positively enhance teachers' commitment toward their profession. Similarly, Educational Environment demonstrated an even stronger positive relationship with Professional Commitment ($r = 0.731$, $p < 0.01$), confirming that a supportive educational climate, healthy institutional relationships, and effective workplace atmosphere significantly strengthen teachers' professional commitment.

(iii) Multiple regression analysis further established that both Infrastructure Satisfaction ($\beta = 0.382$, $p < 0.001$) and Educational Environment ($\beta = 0.471$, $p < 0.001$) significantly influence Professional Commitment, with Educational Environment emerging as the strongest predictor of professional commitment, emphasizing the critical role of institutional climate and administrative support in

shaping teachers' emotional attachment toward the profession. The regression model was statistically significant ($F = 82.46$, $p < 0.001$) and explained 59 percent of the variance in professional commitment ($R^2 = 0.590$), while the VIF values (1.41) confirmed the absence of multicollinearity and the Durbin–Watson statistic (1.89) indicated no autocorrelation issues.

(iv) Furthermore, the ANOVA results revealed significant differences in professional commitment among Government, Government-aided, and Private school teachers ($F = 8.74$, $p < 0.001$), and the Tukey post hoc test confirmed that Government school teachers exhibited significantly higher professional commitment compared to Government-aided and Private school teachers, possibly due to greater job security, institutional stability, and supportive working conditions. Overall, the findings collectively demonstrate that infrastructure satisfaction, educational environment, institutional climate, and administrative support play a significant role in influencing women teachers' professional commitment and emotional attachment to the teaching profession.

10. LIMITATIONS OF THE STUDY

1. The study is geographically limited to Pollachi town.
2. The study includes only women teachers.
3. Convenience sampling limits generalizability of findings.
4. The study is cross-sectional in nature and does not examine long-term changes.

11. SCOPE FOR FUTURE RESEARCH

1. Future studies may include male teachers for comparative analysis.
2. Comparative district-level or state-level studies may be undertaken.
3. Longitudinal studies may examine changes in professional commitment over time.
4. Advanced analytical techniques such as Structural Equation Modelling (SEM) may be applied.
5. Future studies may examine the role of leadership style and work-life balance on teacher commitment.

12. CONCLUSION

The present study concludes that infrastructure satisfaction and educational environment play a significant role in shaping the professional commitment of women teachers. The findings revealed that women teachers generally reported moderate to high levels of satisfaction with institutional infrastructure and educational environment, reflecting favorable perceptions regarding workplace conditions and institutional support. Both infrastructure satisfaction and educational environment demonstrated significant positive relationships with professional commitment, confirming that improvements in workplace facilities, institutional climate, and organizational support mechanisms contribute substantially to strengthening teachers' dedication toward their profession. The study further identified significant differences in professional commitment across school categories. Government school teachers exhibited comparatively higher levels of professional commitment than Government-aided and Private school teachers, which may be attributed to greater job security, stable organizational systems, better infrastructural facilities, supportive administrative structures, and favorable employment conditions available in Government institutions. In contrast, Private school teachers demonstrated relatively lower commitment levels, possibly due to increased workload, performance pressure, limited infrastructural resources, and comparatively less organizational stability. These findings emphasize that institutional context significantly shapes teachers' professional attitudes and commitment levels.The results also reaffirm the importance of organizational support and workplace satisfaction in educational institutions. A positive educational environment characterized by collaborative relationships, recognition, effective leadership, and adequate institutional support encourages teachers to remain emotionally attached to their profession and perform more effectively. Therefore, educational institutions

should focus on creating supportive school climates, improving administrative responsiveness, and strengthening teacher welfare systems to sustain professional commitment.

13. REFERENCES

[1] Aldridge, J., & Fraser, B. (2020). Teachers' perceptions of school climate and its relationship with teacher self-efficacy and job satisfaction. Journal of Educational Administration, 58(3), 307–324.
[2] Ahmed, R., & Rahman, S. (2024). Infrastructure quality and teacher commitment in developing educational systems. International Journal of Educational Development, 102, 102871.
[3] Hoy, W. K., & Miskel, C. G. (2013). Educational administration: Theory, research, and practice (9th ed.). McGraw-Hill.
[4] Kaur, P., & Singh, R. (2022). Institutional climate and teacher engagement in secondary schools. Asian Journal of Education and Social Studies, 29(4), 44–56.
[5] Luthans, F. (2011). Organizational behavior: An evidence-based approach (12th ed.). McGraw-Hill.
[6] Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. Human Resource Management Review, 1(1), 61–89.
[7] Nguyen, T., & Tran, H. (2022). Educational environment and teacher retention in Southeast Asian schools. International Journal of Educational Research, 113, 101980.
[8] Rani, S., & Devi, P. (2023). Workplace support and professional commitment among women teachers in India. Journal of Educational Psychology Research, 18(2), 122–136.
[9] Sharma, N., & Jyoti, J. (2021). School infrastructure and teacher job satisfaction in Indian secondary schools. Indian Journal of Educational Studies, 14(2), 78–92.
[10] Spector, P. E. (1997). Job satisfaction: Application, assessment, causes, and consequences. Sage Publications.