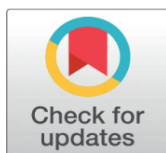


A STUDY ON STRESS AND TEACHING COMPETENCE OF SECONDARY SCHOOL TEACHERS IN AMROHA DISTRICT, U.P.

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ABSTRACT

This study investigates the relationship between stress levels and teaching competence among secondary school teachers in Amroha District, Uttar Pradesh. The research aims to identify the factors contributing to teacher stress and its impact on their teaching effectiveness. A mixed-methods approach is employed, combining quantitative surveys and qualitative interviews with a sample of teachers. Quantitative data will be analyzed using statistical methods to examine correlations between stress indicators and perceived competence levels. The study anticipates contributing to educational psychology literature by highlighting the nuanced dynamics of teacher stress and competence in a specific regional context. Practical implications for teacher training and support programs are discussed to enhance well-being and instructional quality in secondary education settings.

Keywords: Investigates, Teaching Competence, Secondary Education Settings

1. INTRODUCTION

In secondary education, the role of teachers is pivotal, influencing not only academic outcomes but also the overall development of students. However, the profession of teaching is accompanied by significant challenges, prominently among them being stress. Stress among secondary school teachers can arise from various sources, including workload, student behavior, administrative pressures, and societal expectations. This stress can have profound implications, affecting teacher well-being and, consequently, their teaching competence. Teaching competence encompasses the knowledge, skills, and attitudes required to effectively facilitate learning and foster student development. It is crucial for teachers to maintain high levels of competence to meet the diverse needs of students and achieve educational goals. However, chronic stress can undermine teaching competence by impairing decision-making, interpersonal interactions, and instructional quality.

Stress and teaching competence is essential for improving educational practices and supporting teacher well-being. This study explores the intersection of stress and teaching competence among secondary school teachers, aiming to uncover strategies that promote resilience, enhance teaching effectiveness, and ultimately contribute to a positive educational environment. Through examining these factors, this research seeks to provide insights into how schools and

educational policymakers can better support teachers in managing stress, enhancing their professional development, and fostering a conducive learning environment for students.

2. NEED OF THE STUDY

The need for this study on stress and teaching competence among secondary school teachers is underscored by its potential impact on both educators and students. Understanding the effects of stress on teaching competence is crucial as it directly influences educational outcomes and teacher well-being. By exploring this relationship, the study aims to identify effective strategies for mitigating stress and enhancing teaching effectiveness. Such insights are essential for informing educational policies and practices that support teachers in maintaining optimal performance and fostering a positive learning environment.

3. RESEARCH METHODOLOGY

The research methodology for the study titled employs a structured approach that combines both quantitative and qualitative research methods. This methodological framework allows for a comprehensive exploration of the research questions and objectives.

The quantitative aspect of the research involves the use of structured questionnaires as the primary data collection method. These questionnaires are designed to quantify key variables, including stress levels, and self-assessed teaching competence among secondary school teachers in Amroha District. The structured questionnaires provide a standardized means of gathering data from a representative sample of 200 teachers, facilitating statistical analysis to examine relationships and patterns.

In parallel, the research incorporates a qualitative component through in-depth interviews with a selected subset of teachers. These interviews employ open-ended questions, enabling teachers to share their personal experiences, coping mechanisms, and perspectives concerning stress, and teaching competence. Qualitative data collection aims to capture the depth and context of teachers' narratives, providing valuable insights into their subjective experiences.

The sampling strategy relies on a simple random sampling technique to select the sample of 200 secondary school teachers. This approach ensures that each teacher within Amroha District has an equal opportunity to participate in the study, enhancing the representativeness of the sample. Additionally, the sample is evenly divided between government and private school teachers to ensure diversity.

Data analysis encompasses both quantitative and qualitative techniques. Quantitative data collected through structured questionnaires will be analyzed using descriptive and inferential statistics. Descriptive statistics will summarize the data, while inferential statistics, such as t-tests, ANOVA, and correlation analysis, will explore relationships between variables.

Qualitative data from in-depth interviews will undergo thematic analysis, involving the identification of recurring themes and patterns within the qualitative responses. This qualitative analysis aims to uncover the nuanced experiences and perspectives of teachers, providing depth and context to the research findings.

4. RESULTS AND DISCUSSION

Hypothesis (Independent Samples Test)

Null Hypothesis (H₀): There is no significant difference between male and female teachers in teacher stress, teacher adjustment, and teaching competence.

Alternative Hypothesis (H₁): There is a significant difference between male and female teachers in teacher stress, teacher adjustment, and teaching competence.

Table 1 Independent Samples Test (Hypothesis 2)

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	P-Value	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
TS	Equal variances assumed	.518	.472	-.653	198	.514	-.02750	.04210	-.11053	.05553
	Equal variances not assumed			-.653	197.038	.514	-.02750	.04210	-.11053	.05553
TA	Equal variances assumed	2.284	.132	1.390	198	.166	.01243	.00894	-.00520	.03006
	Equal variances not assumed			1.390	191.128	.166	.01243	.00894	-.00521	.03006
TC	Equal variances assumed	3.740	.055	6.777	198	.000	1.02867	.15180	.72932	1.32801
	Equal variances not assumed			6.777	195.664	.000	1.02867	.15180	.72930	1.32804

Analysis: a. There is no significant difference between male and female teachers in teacher stress. b. There is no significant difference between male and female teachers in teacher adjustment. c. There is significant difference between male and female teachers in teaching competence.

Hypothesis 2 investigated differences between male and female teachers in teacher stress (TS), teacher adjustment (TA), and teaching competence (TC) using Independent Samples Tests. For teacher stress and adjustment, tests showed no significant differences between genders, supported by p-values of 0.514 and 0.166, respectively, and Levene's Tests indicating equal variances ($p = 0.472$ for TS, $p = 0.132$ for TA). Significant gender differences were found in teaching competence ($p = 0.000$), despite Levene's Test suggesting unequal variances ($p = 0.055$). These results suggest that while male and female teachers experience similar levels of stress and adjustment, differences in teaching competence may exist, providing valuable insights into gender-based variations among educators.

Hypothesis (Independent Samples Test)

Null Hypothesis (H0): There is no significant difference between government and private school teachers in teacher stress, teacher adjustments, and teacher competence.

Alternative Hypothesis (H1): There is a significant difference between government and private school teachers in teacher stress, teacher adjustments, and teacher competence.

Table 2 Independent Samples Test (Hypothesis 3)

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	df	P-Value	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper

TS	Equal variances assumed	.612	.435	.689	198	.492	.02900	.04210	-.05402	.11202
	Equal variances not assumed			.689	194.838	.492	.02900	.04210	-.05403	.11203
TA	Equal variances assumed	.456	.500	.748	198	.455	.00671	.00897	-.01098	.02441
	Equal variances not assumed			.748	196.054	.455	.00671	.00897	-.01098	.02441
TC	Equal variances assumed	.848	.358	2.446	198	.015	.40600	.16599	.07866	.73334
	Equal variances not assumed			2.446	197.230	.015	.40600	.16599	.07865	.73335

Analysis: a. There is no significant difference between government and private school teachers in teacher stress. b. There is no significant difference between government and private school teachers in teacher adjustments. c. There is significant difference between government and private school teachers in teacher competence.

Hypothesis 3 aimed to compare government and private school teachers in terms of teacher stress (TS), teacher adjustment (TA), and teaching competence (TC) using Independent Samples Tests. The tests revealed no significant differences in teacher stress ($p = 0.492$) or teacher adjustment ($p = 0.455$), supported by Levene's Tests indicating equal variances ($p = 0.435$ for TS, $p = 0.500$ for TA). However, a significant difference was found in teaching competence ($p = 0.015$), despite Levene's Test suggesting unequal variances ($p = 0.358$). These findings suggest that while government and private school teachers experience similar levels of stress and adjustment, differences in teaching competence may exist, providing valuable insights into the distinct educational contexts of these two types of schools.

Hypothesis (Correlation Test)

Null Hypothesis (H0): There is no significant relationship between adjustment and stress of secondary school teachers.

Alternative Hypothesis (H1): There is a significant relationship between adjustment and stress of secondary school teachers.

Table 3 Correlation Analysis between TS and TA (Hypothesis 4)

		TS	TA
TS	Pearson Correlation	1	-.653
	P-Value		.006
	N	200	200
TA	Pearson Correlation	-.653	1
	P-Value	.006	
	N	200	200

Analysis: There is a significant negative relationship between adjustment and stress of secondary school teachers.

Hypothesis 4 explored the relationship between adjustment (TA) and stress (TS) among secondary school teachers using correlation analysis. The Pearson correlation coefficient indicated a significant negative correlation of -0.653 between adjustment and stress, with a p-value of 0.006 , indicating statistical significance. This result rejects the null hypothesis (H0) of no significant relationship and supports the alternative hypothesis (H1) suggesting a significant inverse relationship between adjustment and stress. The findings suggest that higher levels of adjustment are associated

with lower levels of stress among secondary school teachers. This understanding is crucial for informing strategies aimed at enhancing teacher well-being and effectiveness in educational settings.

5. ANALYSIS OF PLS-SEM

The path coefficients in Table 4 show the relationships between Teacher Adjustment (TA), Teacher Stress (TS), and Teaching Competency (TC). A path coefficient of 0.745 indicates a strong positive correlation between Teacher Adjustment (TA) and Teaching Competency (TC), with a significant p-value of 0.000, implying that higher levels of teacher adjustment are linked to increased teaching competency. Conversely, the path coefficient of -0.671 between Teacher Stress (TS) and Teaching Competency (TC) suggests a strong negative correlation, supported by a significant p-value of 0.000. This indicates that as teacher stress levels rise, teaching competency tends to decrease. These findings underscore the critical influence of teacher adjustment and stress on teaching competency, providing insights into factors that affect educator effectiveness and well-being in secondary school settings.

Table 4 Path coefficients

	Path coefficients	P-Value
TA -> TC	0.745	0.000
TS -> TC	-0.671	0.000

Figure 2 portrays the structural model illustrating the relationships among Teacher Adjustment (TA), Teacher Stress (TS), and Teaching Competency (TC). The model underscores the significant positive impact of teacher and teaching competency, reflected in a path coefficient of 0.745 with a p-value of 0.000, indicating statistical significance. Conversely, the negative influence of teacher stress on teaching competency is evident with a path coefficient of -0.671 and a p-value of 0.000. These findings highlight the intricate dynamics of teacher well-being and professional competence, offering insights that can inform interventions aimed at enhancing teacher effectiveness in educational contexts. The robustness of these relationships, supported by the structural analysis, underscores their reliability and importance in understanding factors that shape educator performance and resilience.

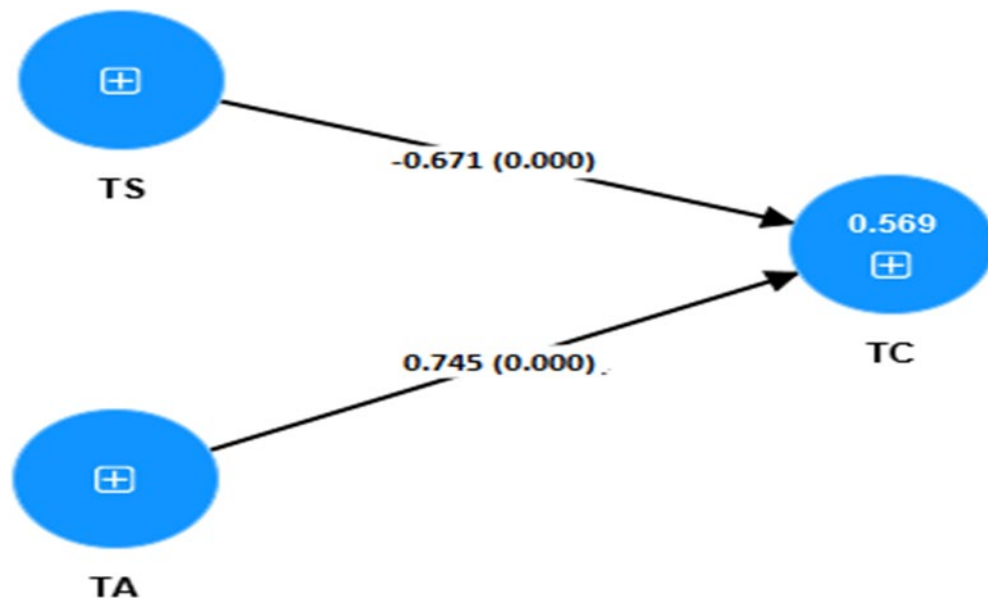


Figure 2 Structural Model

[Teacher Adjustment (TA), Teacher Stress (TS), and Teaching Competency (TC)]

Table 2 introduces the concept of total effects, combining both direct and indirect influences. The positive total effect (0.614) of Teacher Adjustment (TA) on Teaching Competency (TC) reaffirms its positive impact. Conversely, the negative

total effect (-0.712) of Teacher Stress (TS) on Teaching Competency (TC) emphasizes the overall detrimental effect of stress on teaching competency.

Table 5 Total Effects

	Total effects
TA -> TC	0.614
TS -> TC	-0.712

Table 5 presents a comprehensive correlation analysis examining the relationships among Teacher Stress (TS), Teacher Adjustment (TA), and Teaching Competency (TC). The findings reveal significant negative correlations between TS and both TA (-0.653) and TC (-0.578), with associated p-values of 0.006 and 0.000, respectively, indicating that higher levels of stress are linked to lower and teaching competency among teachers. Conversely, TA shows a negative correlation with TS (-0.653) and a positive correlation with TC (0.654), supported by p-values of 0.006 and 0.001, respectively, suggesting that higher levels of adjustment are associated with reduced stress and enhanced teaching competency. The correlations for TC indicate a negative relationship with TS (-0.578) and a positive relationship with TA (0.654), both statistically significant ($p < 0.001$), emphasizing the dual impact of stress and adjustment on teaching competency. These insights underscore the complex dynamics influencing teacher well-being and professional effectiveness, providing empirical support for strategies aimed at promoting educator resilience and performance in educational settings.

Table 6 Correlation Analysis between TS, TA and TC

		TS	TA	TC
Teacher Stress	Pearson Correlation	1	-.653	-.578
	P-Value		.006	.000
	N	200	200	200
Teacher Adjustment	Pearson Correlation	-.653	1	.654
	P-Value	.006		.001
	N	200	200	200
Teaching Competency	Pearson Correlation	-.578	.654	1
	P-Value	.000	.001	
	N	200	200	200

Table 7 displays the covariance analysis among Teacher Adjustment (TA), Teaching Competency (TC), and Teacher Stress (TS), offering insights into their co-variation in direction and strength. The covariance values indicate a positive association between TA and TC (0.671), suggesting that higher levels of teacher adjustment are accompanied by increased teaching competency. Conversely, the negative covariance between TA and TS (-0.258) reflects that higher adjustment levels correspond to lower levels of teacher stress. For TC, the covariance with TA (0.671) reiterates the positive relationship observed, while the stronger negative covariance with TS (-0.752) underscores the substantial impact of stress on teaching competency. Similarly, TS shows a negative covariance with both TA (-0.258) and TC (-0.752), highlighting the adverse effects of stress on both adjustment and teaching competency. These covariance findings provide a quantitative lens into the complex dynamics influencing teacher well-being and professional effectiveness within educational environments.

Table 7 Covariance among Variables

	TA	TC	TS
TA	1	0.671	-0.258

TC	0.671	1	-0.752
TS	-0.258	-0.752	1

Table 7 presents the R-Square values for Teaching Competency (TC). R-Square is a measure of the proportion of the variance in the dependent variable (TC, in this case) that is explained by the independent variables in the model.

Table 7 presents R-Square values that assess the explanatory power of the model concerning Teaching Competency (TC). The R-Square value of 0.569 indicates that approximately 56.9% of the variability in teaching competency can be attributed to the independent variables included in the model, suggesting a moderate-to-substantial level of explanatory capability. The adjusted R-Square, slightly lower at 0.564, accounts for the model's performance considering the number of predictors, penalizing the inclusion of irrelevant variables. These findings highlight the significant contribution of the selected factors in explaining variations in teaching competency, emphasizing their relevance in understanding and predicting educator effectiveness within the study's framework.

Table 8 R-Square

	R-square	R-square adjusted
TC	0.569	0.564

Table 8 displays f-square values that measure the effect size of predictors in the model, specifically from Teacher Adjustment (TA) and Teacher Stress (TS) to Teaching Competency (TC). The f-square value of 0.70 for TA indicates that Teacher Adjustment explains 70% of the variance in Teaching Competency, highlighting its significant role in influencing TC. Similarly, the f-square value of 0.87 for TS suggests that Teacher Stress accounts for approximately 87% of the variance in TC, underscoring its substantial impact on teaching competency. These findings underscore the critical contributions of both TA and TS in explaining variations in TC, providing quantitative insights into their relative effects within the structural model.

Table 9 f-square

	f-square
TA -> TC	0.70
TS -> TC	0.87

The table represents the transition probabilities between different states in a system. "TA" transitions to "TC" with a probability of 0.70, meaning there's a 70% chance that state "TA" will change to state "TC." Similarly, "TS" transitions to "TC" with a higher probability of 0.87, indicating an 87% chance of this transition. These probabilities suggest how likely the system is to move from one state to another, with "TC" being a common destination for both "TA" and "TS."

6. CONCLUSION

The study on stress and teaching competence among secondary school teachers in Amroha District, U.P., highlights the profound impact of stress on educators' ability to effectively nurture student learning and development. The findings underscore the pervasive challenges teachers face, including heavy workloads, student behavior management, and administrative pressures, all of which can significantly diminish teaching competence and overall well-being. To address these issues, there is a critical need for comprehensive support systems and targeted interventions aimed at alleviating stress and enhancing professional resilience. By prioritizing teacher support through initiatives such as stress management programs and tailored professional development opportunities, educational institutions can foster an environment conducive to sustainable teaching excellence. Ultimately, investing in teacher well-being not only improves educational outcomes but also reaffirms the crucial role teachers play in shaping the educational landscape and preparing students for future success in Amroha District and beyond.

CONFLICT OF INTERESTS

None.

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None.

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