



The Impact of Stress on Teaching Performance: An Investigation among Secondary School Teachers

Hardeep Singh*, Dr. Neeru Rathee**

(Research Scholar, Department of Education, Maharshi Dayanand University Rohtak)*

(Associate Professor, Department of Education, Maharshi Dayanand University, Rohtak)**

(Received: 16 March 2025

Revised: 20 April 2025

Accepted: 01 May 2025)

KEYWORDS

Occupational
Stress and
Teacher
Effectiveness

ABSTRACT:

This study investigates the relationship between occupational stress and teacher effectiveness among secondary school teachers. Teaching at the secondary level is a complex and demanding profession, requiring educators to not only deliver academic content but also support the intellectual, emotional, and social development of adolescents. Given the growing concerns about teachers' mental health and well-being, this research is timely, as occupational stress is increasingly recognized as a prevalent issue in the teaching profession. Occupational stress occurs when job demands exceed a worker's capabilities, resources, or needs, triggering physical and emotional responses. Secondary school teachers face stressors like heavy workloads, administrative tasks, student misbehavior, lack of support, time pressure, and performance expectations. Prolonged exposure to these stressors can significantly impair teachers' classroom performance. Teacher effectiveness is crucial to educational institutions' success, encompassing instruction delivery, student engagement, classroom management, and positive influence on student learning outcomes. Effective teachers are knowledgeable and possess strong communication, motivational, and interpersonal skills. However, high occupational stress can hinder teachers' motivation, decision-making, and classroom management, ultimately affecting their effectiveness. This study explores how occupational stress impacts secondary school teachers' effectiveness, aiming to inform policy-making, teacher training, and institutional support. By understanding this relationship, the study seeks to contribute to a more sustainable teaching environment that enhances teacher well-being and educational quality.

➤ Introduction

Teaching is a highly demanding profession, especially at the secondary level, where educators deliver academic content and shape adolescents' intellectual, emotional, and social development. Recently, attention has focused on teachers' mental health and well-being due to the prevalence of occupational stress in the profession. Occupational stress occurs when job demands mismatch a worker's capabilities, resources, or needs, triggering physical and emotional responses. Secondary school teachers face stressors like heavy workloads, administrative tasks, student misbehavior, lack of support, time pressure, and performance expectations.

Prolonged exposure to these stressors can impair teachers' classroom performance. Teacher effectiveness is crucial to educational institutions' success, encompassing instruction delivery, student engagement, classroom management, and positive impact on student learning outcomes. Effective teachers are knowledgeable and possess strong communication, motivational, and interpersonal skills. However, high occupational stress can hinder teachers' motivation, decision-making, and classroom management, ultimately affecting their effectiveness. Understanding the relationship between occupational stress and teacher effectiveness is crucial for enhancing teacher well-being and performance. This



study examines how occupational stress impacts secondary school teachers' effectiveness, aiming to inform policy-making, teacher training, and institutional support. By exploring this relationship, the study seeks to contribute to a more sustainable teaching environment that promotes teacher well-being and educational quality.

➤ Need and Justification of the Study

Secondary school teachers face increasing pressure to meet academic standards, adapt to curriculum changes, manage diverse classrooms, and handle administrative duties, contributing to occupational stress due to limited resources and support. Unaddressed occupational stress can lead to burnout, absenteeism, job dissatisfaction, and decreased performance, directly impacting teacher effectiveness and student learning outcomes. Teacher effectiveness is a crucial determinant of educational success, as effective teachers foster a positive learning environment and improve student achievement. However, stressed and demotivated teachers may struggle to maintain engagement, patience, and creativity, essential for effective teaching. This raises a critical question: How does occupational stress affect teacher effectiveness? Despite the importance of this issue, comprehensive research is lacking, especially in secondary education in developing regions where stressors are intensified by infrastructural limitations and policy constraints. Existing studies often focus on stress or teacher performance without examining the direct link between stress levels and effectiveness. This study aims to fill this research gap by exploring the relationship between occupational stress and teacher effectiveness among secondary school teachers. The findings can help educational planners, administrators, and policymakers identify key stress factors, develop targeted interventions, enhance teacher support systems, and improve teaching quality and student outcomes. By addressing teacher well-being and performance, this study contributes to academic discourse and offers practical implications for building a healthier, more effective teaching workforce.

Objectives

1. To investigate the main effect of occupational stress on teacher effectiveness among secondary school teachers.

2. To examine the main effect of gender on teacher effectiveness among secondary school teachers.
3. To explore the interaction effect of occupational stress and gender on teacher effectiveness among secondary school teachers.

Hypotheses

1. There is no significant main effect of occupational stress on teacher effectiveness among secondary school teachers.
2. There is no significant main effect of gender on teacher effectiveness among secondary school teachers.
3. There is no significant interaction effect of occupational stress and gender on teacher effectiveness among secondary school teachers.

➤ Variables of The Study

1) Dependent Variables:

- Teacher Effectiveness

2) Independent Variables:

- Occupational stress

➤ Tools Used

- Teaching Effectiveness (Prof. (Dr.) Madhu Gupta, Ms. Gunjan Verma)
- Occupational stress (Dr. A.K. Srivastava & Dr. A.P. Singh)

Suraiya and Shakir (2020) conducted a study of 352 secondary school teachers in Bihar and found a significant negative correlation between occupational stress and teacher effectiveness. Conversely, they observed a positive correlation between occupational stress and teacher morale. Their findings underscore the critical need to manage stress and enhance morale to improve teaching performance.

Agyapong et al. (2022) conducted a global scoping review that found high rates of stress (up to 87.1%), burnout, anxiety, and depression among teachers. These mental health issues were associated with various personal and professional factors, impacting teacher performance and highlighting the need for school-based interventions.



Design of the Study

❖ Descriptive Co relational Design

This study employs a descriptive correlational research design to investigate the relationship between teacher effectiveness and occupational stress among secondary school teachers in India. This design is well-suited for exploring real-world educational settings without manipulating variables, thereby maintaining ethical integrity and ecological validity. By examining the complex interplay between personal attributes and workplace stressors, this study aims to provide a nuanced understanding of the factors influencing teacher performance and well-being. The findings will inform strategies and interventions that support teacher development, foster a resilient teaching workforce, and ultimately enhance educational outcomes.

❖ Correlation between Teacher Effectiveness and Occupational Stress

This study investigates the potential negative correlation between occupational stress and teacher effectiveness among secondary school teachers. It hypothesizes that high occupational stress, resulting from teaching profession demands, reduces teacher effectiveness. Existing research supports this view, showing chronic stress leads to emotional exhaustion, diminished motivation, impaired concentration, and poor decision-making, ultimately affecting instructional quality, classroom management, and student engagement.

To examine this relationship, the study will apply statistical methods to analyze data from Indian secondary school teachers, identifying key stressors and their impact on teacher effectiveness. The research will also explore mediating factors like coping strategies and institutional support systems that may mitigate stress effects. The findings aim to inform practical interventions, such as stress management programs and supportive policies, to enhance teacher well-being and classroom effectiveness.

➤ Variables in this Study

Independent Variable (IV)

Occupational Stress: The level of job-related stress experienced by secondary school teachers due to factors like workload, student behavior, administrative pressure, time constraints, and lack of support.

Dependent Variable (DV)

Teacher Effectiveness: A teacher's performance in the classroom, including instructional quality, classroom management, student engagement, communication skills, and overall impact on student learning.

Mediating or Moderating Variables

- **Coping Mechanisms:** Strategies used by teachers to handle stress, such as time management, social support, or relaxation techniques, which may influence the impact of stress on effectiveness.
- **Support Systems:** Institutional or peer support from school leadership or colleagues can help buffer the negative effects of stress, promoting teacher well-being and resilience.
- **Personal Characteristics:** Traits like enthusiasm, sense of humor, or resilience that may mediate or moderate the relationship between occupational stress and teacher effectiveness.
- **Population and Sample**

This study on teacher effectiveness and occupational stress among secondary school teachers in Rohtak, Haryana, selected a sample of 800 teachers using a multi-stage random sampling technique. The process involved randomly selecting Rohtak district from Haryana's six divisions, followed by random selection of schools and teachers within those schools. Stratification by gender and location (urban/rural) ensured the sample's demographic diversity reflected the teaching population. With a sample size of 800, slightly smaller than initially planned, this descriptive correlational design provides a reliable basis for analyzing the relationship between occupational stress and teacher effectiveness among secondary school teachers in Rohtak.

➤ Statistical Analysis

Data analysis will employ both descriptive and inferential statistics to address research questions and test hypotheses.



Descriptive Statistics

Descriptive statistics will summarize and visualize data on teacher effectiveness, enthusiasm, sense of humor, and occupational stress, including:

- Mean, median, mode, standard deviation, range, and frequency distributions (tables and histograms)

Inferential Statistics

Inferential statistics will include:

F	Df ₁	Df ₂	Sig.
2.418	3	429	.066

- Pearson correlation analysis to assess the strength and direction of relationships among variables
- Multiple regression analysis to evaluate the predictive influence of enthusiasm, humor, and stress on teacher effectiveness, controlling for demographic variables (age, gender, experience, subject, school type, and location)

Statistical Software

SPSS statistical software will be used for all analyses, ensuring accurate and comprehensive data handling. Significance levels, beta coefficients, and R-squared values will guide interpretation.

4.3 Effect of Occupational Stress and Gender on Teacher Effectiveness among Secondary School Teachers

In this section, main and interaction effects of occupational stress and gender on teacher effectiveness have been studied. This section has been divided into four sub-sections :

4.3.1 The first sub-section deals with the homogeneity of variance by using Levene's Test.

4.3.2 The second sub-section deals with ANOVA for 2x2 factorial design for teacher effectiveness with respect to occupational stress and gender.

4.3.3 In third sub-section, the main effects of occupational stress and gender on teacher effectiveness have been studied.

4.3.4 In fourth sub-section, an attempt has been made to study the double interaction effects of occupational stress and gender on teacher effectiveness of secondary school teachers.

4.3.1 Levene's Test for Homogeneity of Variance

To ensure the validity of the Two-Way (2x2) ANOVA results, Levene's test for homogeneity of variance was conducted. This test is necessary because ANOVA is sensitive to heterogeneity of variance, and Levene's test helps verify whether the assumption of equal variances is met.

Table 4.11

Levene's Test For Homogeneity of Variance

Table 4.11 presents the results of Levene's test, indicating an F-value of 2.418 with degrees of freedom 3 and 429 ($p = 0.066$). Since the p-value exceeds the significance level, the null hypothesis ($H_0: \sigma^2A = \sigma^2B = \sigma^2C = \sigma^2D$) is accepted, suggesting that the variances across the four groups are homogeneous. Therefore, it can be assumed that the groups have equal variances.

4.3.2 ANOVA For 2x2 Factorial Design For Teacher Effectiveness of Secondary School Teachers with respect to Occupational Stress and Gender

A 2x2 factorial design with a randomized group design was employed to investigate the main and interaction effects of occupational stress and gender on teacher effectiveness among secondary school teachers. The independent variables were:

- Occupational stress (D), categorized as:
 - High Occupational Stress (D1)
 - Low Occupational Stress (D2)
- Gender (B), categorized as:
 - Female (B1)
 - Male (B2)

Data were analyzed using Analysis of Variance (ANOVA) to examine the primary and interaction effects of these variables on teacher effectiveness.

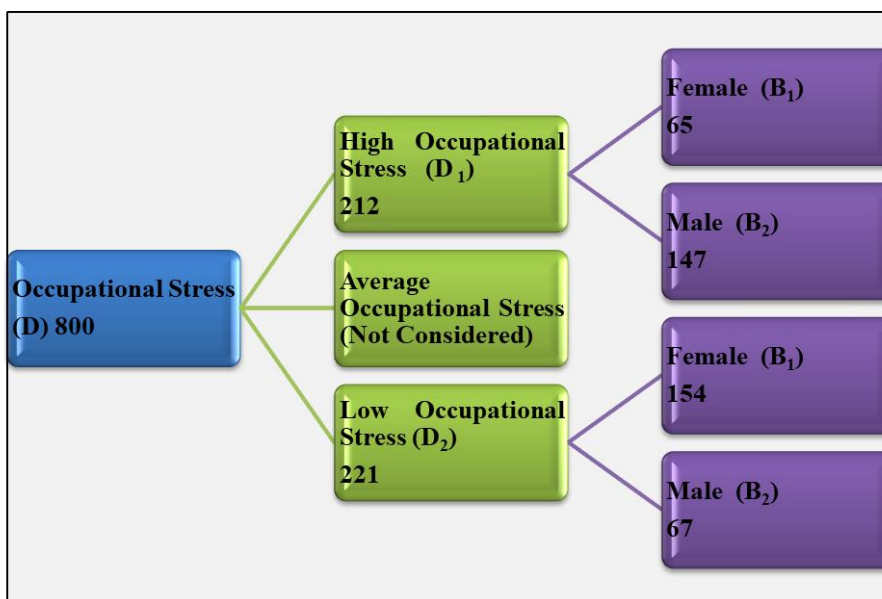


Figure 4.9: Schematic Layout of 2x2 Factorial Design

Table 4.12

Descriptive statistics (means and SDs) for teacher effectiveness among secondary school teachers, categorized by occupational stress and gender

Occupational Stress	Gender (B)	N	Mean	SD
High Occupational Stress (D ₁)	Female (B ₁)	65	145.52	72.939
	Male (B ₂)	147	144.18	66.766
Low Occupational Stress (D ₂)	Female (B ₁)	154	223.37	63.916
	Male (B ₂)	67	218.51	68.237

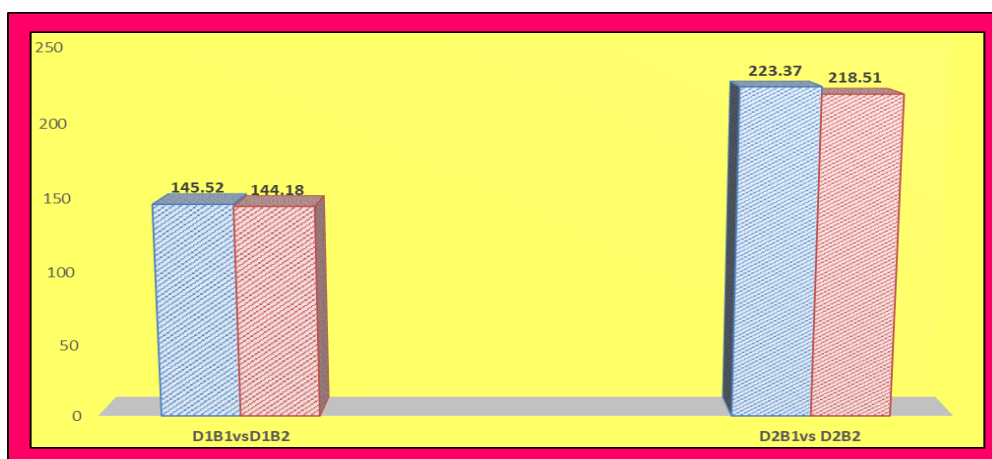


Fig. 4.10 Teacher effectiveness means scores by occupational stress level and gender among secondary school teachers.



Table 4.13

Results of the 2x2 factorial ANOVA analyses on teacher effectiveness, exploring the impact of occupational stress and gender

Sources of variance	df	Sum of Squares (SS)	Mean sum of squares (MSS)	F-ratios
Main Effect				
D (Occupational Stress)	1	531071.890	531071.890	118.435**
B (Gender)	1	884.051	884.051	0.197(NS)
Double Interaction Effect				
D x B Interaction	1	283.572	283.572	94.063**
Between Cells	3	647836.811	215945.604
With in cells	429	1923662.266	4484.061
Total	432	2571499.076

** Significant at 0.01 level

NS- Not Significant

4.3.3 The impact of occupational stress and gender on teacher effectiveness was analyzed.

Occupational Stress (D)

The F-ratio (118.435) for the primary impacts of occupational stress on secondary school teachers is significant at the 0.01 level, as can be shown in table 4.13. This suggests that occupational stress significantly affects teacher effectiveness. Therefore, the null hypothesis H_{07} , "There exist no significant effect of occupational stress on teacher effectiveness of secondary school teachers" is rejected.

Table 4.14

t-values for teaching effectiveness mean scores by organizational climate

Occupational Stress	N	Mean	SD	t-value
High	212	144.59	68.546	12.02**
Low	221	221.90	65.138	

** Significant at 0.01 level

A comparison of secondary school teachers' efficiency based on occupational stress is shown in Table 4.14. It reveals that at the 0.01 level, the mean scores for instructors with high occupational stress and those with low occupational stress are significant. It is possible to draw the conclusion that secondary school teachers who

report feeling less stressed at work (144.59) are far more effective than those who report feeling more stressed (221.90).

Figure 4.11 illustrates the mean scores of the main effect of occupational stress on teacher effectiveness.

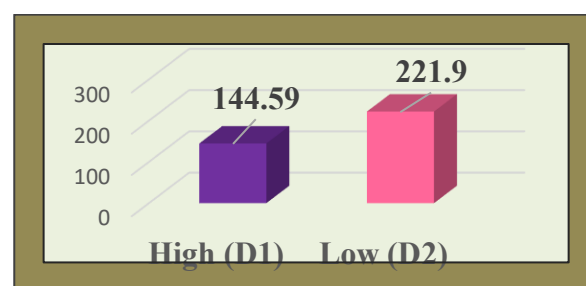


Fig. 4.11 Mean scores for Main Effect of Occupational stress on Teacher Effectiveness of Secondary School Teachers

Gender (B)

It is apparent from the table 4.13 the F-ratio (0.197) is not significant for main effect of gender on teacher effectiveness. This indicates that teacher performance is significantly impacted by gender on its own. The null hypothesis H_{08} , stating that gender has no significant effect on teacher effectiveness among secondary school teachers, is rejected.



4.3.4 Double Interaction Effects of Occupational Stress and Gender on Teacher Effectiveness of Secondary School Teachers

Occupational Stress x Gender (B)

Table 4.13 reveals a significant F-ratio (94.063) for the interaction between gender and occupational stress,

indicating a significant interaction effect on teacher effectiveness. Consequently, null hypothesis H09 is rejected. This suggests that occupational stress and gender interact significantly to influence teacher effectiveness.

Table 4.15

t-value for Mean Scores of Teacher Effectiveness for Different groups of Occupational Stress (D) x Gender(B)

Sr. No.	Groups	N		Mean		SD		't'-value
1	D ₁ B ₁ vs.D ₁ B ₂	65	147	145.52	144.18	72.939	66.76	0.12 (NS)
2	D ₂ B ₁ vs.D ₂ B ₂	154	67	223.37	218.51	63.91	68.23	0.49 (NS)
3	D ₁ B ₁ vs.D ₂ B ₁	65	154	145.52	223.37	72.939	63.91	7.50**
4	D ₁ B ₁ vs.D ₂ B ₂	65	67	145.52	218.51	72.939	68.23	5.94**
5	D ₁ B ₂ vs.D ₂ B ₁	147	154	144.18	223.37	66.76	63.91	7.93**
6	D ₁ B ₂ vs.D ₂ B ₂	147	67	144.18	218.51	66.76	68.23	7.44**

** Significant at 0.01 level * Significant at 0.05 level NS- Not Significant

D₁: High Occupational Stress

B₁: Female

D₂: Low Occupational Stress

B₂: Male

Comparison of Mean Scores

- The analysis revealed the following significant and non-significant differences:
- No significant difference was found between male and female teachers with high occupational stress (D₁B₂ and D₁B₁) in terms of teacher effectiveness.
- Female teachers with high occupational stress (145.52) had lower mean scores than those with low occupational stress (t-value = 7.50, significant).
- Male teachers with low occupational stress (218.51) had higher teacher effectiveness than female teachers with high occupational stress (t-value = 5.94, significant).
- Female teachers with low occupational stress (223.37) had higher mean scores than male teachers with high occupational stress.

- Male teachers with low occupational stress had higher mean scores than those with high occupational stress (t-value significant).
- The results suggest that occupational stress significantly impacts teacher effectiveness, with low-stress groups generally performing better than high-stress groups.

➤ Findings of the study

- Occupational stress significantly impairs teacher effectiveness (F = 118.435, p < 0.01), with high-stress teachers being less effective than their low-stress counterparts. High occupational stress leads to burnout, decreased job satisfaction, and reduced classroom engagement, often stemming from excessive workload, administrative pressures, student behavioral challenges, and lack of institutional support.



- Teachers under high stress struggle to maintain enthusiasm, adapt to diverse student needs, and implement innovative teaching strategies. Chronic stress impairs cognitive functioning, decision-making, and emotional well-being, hindering teaching performance.
- Notably, gender doesn't significantly impact teacher effectiveness in relation to occupational stress, suggesting both male and female teachers experience negative effects equally. However, interaction effects reveal that male teachers with low stress tend to be more effective than female teachers with high stress, possibly due to additional social and professional expectations.
- To mitigate stress, schools should implement strategies like promoting a positive work environment, providing counseling services, and fostering peer support networks. Encouraging work-life balance through workload management and institutional recognition can enhance teacher effectiveness.
- Future research should investigate specific stress sources in different educational settings and tailor stress management techniques to teachers' career stages. Longitudinal studies could explore stress's long-term effects on teacher performance, retention, and well-being, informing evidence-based interventions.

➤ Conclusion

This study's findings demonstrate that occupational stress significantly impairs teacher effectiveness among secondary school teachers. High-stress teachers are considerably less effective than their low-stress counterparts due to stress-related factors like heavy workload, administrative demands, student behavior issues, and lack of institutional support. Although gender doesn't significantly moderate the relationship, interaction effects suggest female teachers under high stress may be disproportionately affected due to additional responsibilities.

These results highlight the need for comprehensive stress-reduction strategies supporting all educators. Interventions like flexible scheduling, mental health support, professional counseling, and peer support systems can alleviate stress and enhance teacher

performance. Future research should focus on identifying context-specific stressors and developing tailored support systems for teachers at different career stages. By addressing occupational stress, educational institutions can promote teacher well-being, retention, and improved student outcomes.

References

1. Agyapong, V. I. O., Hrabok, M., & Mehta, S. (2022). *Occupational stress and mental health in educators: A global scoping review*. *Frontiers in Psychiatry*, 13, 847789. <https://doi.org/10.3389/fpsyt.2022.847789>
2. Antoniou, A.-S., Polychroni, F., & Walters, B. (2000). Sources of stress and professional burnout of teachers of special educational needs in Greece. *International Special Education Congress*.
3. Azeem, S. M. (2010). Personality hardiness, job involvement and job burnout among teachers. *International Journal of Educational Management*, 24(6), 506–518.
4. Bowers, T. (2001). Teacher morale: Job satisfaction and motivation. *Education Journal*, 59(2), 34–40.
5. Boyle, G. J., Borg, M. G., Falzon, J. M., & Baglioni Jr, A. J. (1995). A structural model of the dimensions of teacher stress. *British Journal of Educational Psychology*, 65(1), 49–67.
6. Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, 104(4), 1189–1204.
7. Cooley, E., & Yovanoff, P. (1996). Supporting professionals-at-risk: Evaluating interventions to reduce burnout and improve retention of special educators. *Exceptional Children*, 62(4), 336–355.
8. Day, C., & Gu, Q. (2009). *Teacher emotions: Well-being and effectiveness*. Cambridge University Press.
9. Farber, B. A. (1991). *Crisis in education: Stress and burnout in the American teacher*. Jossey-Bass.
10. Friedman, I. A. (2000). Burnout in teachers: Shattered dreams of impeccable professional



- performance. *Journal of Clinical Psychology*, 56(5), 595–606.
11. Greenberg, M. T., Brown, J. L., & Abenavoli, R. M. (2016). *Teacher stress and health: Effects on teachers, students, and schools*. Edna Bennett Pierce Prevention Research Center, Pennsylvania State University.
 12. Griva, K., & Joeques, K. (2003). UK teachers under stress: Can we predict wellness on the basis of characteristics of the teaching job? *Psychology & Health*, 18(4), 457–471.
 13. Harmsen, R., Helms-Lorenz, M., Maulana, R., & van Veen, K. (2018). The relationship between beginning teachers' stress causes, stress responses, teaching behaviour and attrition. *Teachers and Teaching*, 24(6), 626–643.
 14. Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79(1), 491–525.
 15. Kyriacou, C. (2001). Teacher stress: Directions for future research. *Educational Review*, 53(1), 27–35.
 16. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
 17. Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual* (3rd ed.). Consulting Psychologists Press.
 18. Montgomery, C., & Rupp, A. A. (2005). A meta-analysis for exploring the diverse causes and effects of stress in teachers. *Canadian Journal of Education Administration and Policy*, 43, 1–34.
 19. Pearson, L. C., & Moomaw, W. (2005). The relationship between teacher autonomy and stress, work satisfaction, empowerment, and professionalism. *Educational Research Quarterly*, 29(1), 38–54.
 20. Prilleltensky, I., Neff, M., & Bessell, A. (2016). Teacher stress: What it is, why it's important, and how to reduce it. *Educational Psychologist*, 51(2), 89–105.
 21. Reddy, G. L., & Anuradha, R. V. (2013). Occupational stress of higher secondary teachers working in Vellore district. *International Journal of Educational Planning & Administration*, 3(1), 9–24.
 22. Richards, J. (2012). Teacher stress and coping strategies: A national snapshot. *The Educational Forum*, 76(3), 299–316.
 23. Russell, D. W., Altmaier, E., & Van Velzen, D. (1987). Job-related stress, social support, and burnout among classroom teachers. *Journal of Applied Psychology*, 72(2), 269–274.
 24. Schonfeld, I. S. (2001). Stress in 1st-year women teachers: The context of social support and coping. *Genetic, Social, and General Psychology Monographs*, 127(2), 133–168.
 25. Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, 26(4), 1059–1069.
 26. Suraiya, S., & Shakir, M. (2020). Occupational stress, morale, and effectiveness among secondary school teachers. *International Journal of Research and Analytical Reviews*, 7(2), 233–239.
 27. Tait, M. (2008). Resilience as a contributor to novice teacher success, commitment, and retention. *Teacher Education Quarterly*, 35(4), 57–75.
 28. Travers, C. J., & Cooper, C. L. (1996). *Teachers under pressure: Stress in the teaching profession*. Routledge.
 29. Van Droogenbroeck, F., & Spruyt, B. (2015). To stop or not to stop: An empirical assessment of the determinants of early retirement among active and retired senior teachers. *Research on Aging*, 37(5), 525–551.
 30. Yin, H., & Lee, J. C.-K. (2012). Be passionate, but be rational as well: Emotional rules for Chinese teachers' work. *Teaching and Teacher Education*, 28(1), 56–65.