

Beyond General Efficacy: Examining Facet-Specific Effects on Occupational Stress in Teacher Education Contexts

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Abstract

The teaching profession is associated with numerous cognitive, emotional, and organisational challenges, which lead to the development of high levels of occupational stress. It has been argued that such stress is especially common in self-funded higher education institutions, among their teacher educators. In this regard, the purpose of the current study is to investigate how different aspects of teachers' self-efficacy can serve as predictors of occupational stress. More specifically, this study uses the descriptive survey technique in the context of a correlational design and surveys 305 participants – self-funded college teachers. Data collection involved the use of widely recognised measurement scales: the Teacher Stress Inventory (TSI) and Teachers' Sense of Efficacy Scale (TSES). Multiple regression results show that all three studied dimensions of self-efficacy – student engagement, classroom management, and instructional strategies – were able to predict occupational stress in the target population, albeit in different degrees of strength. Instructional strategies proved to be the most powerful predictor, whereas classroom management was second, and student engagement was third. The model was shown to have extremely high explanatory power.

Keywords: Self-efficacy, Occupational stress, Teacher educators, Instructional strategies, Classroom management

1. Introduction

It is widely recognised that teaching is a profession that involves continuous cognitive, affective, and socio-demographic demands. Within modern-day schooling systems, teachers are required to deal with diverse student populations, incorporate technological advancements, meet their administrative obligations, and cater to the socio-emotional requirements of their students. The aforementioned pressures typically increase their occupational stress, which is an important determinant of teachers' health status, efficacy in teaching, and retention (Harmsen et al., 2018; Skaalvik & Skaalvik, 2020). In teacher education settings, and particularly in privately funded ones, such a phenomenon might be amplified by factors like insecurity at work, scarcity of resources, accountability for performance, and increased responsibilities.

Occupational stress is considered to be a physiological and psychological reaction to the discrepancy between job-related requirements and the available coping mechanisms (Kyriacou, 2001). Occupational stressors in the teaching profession involve heavy workload, time pressure, role conflicts, difficulties in class management, and insufficient institutional support (Collie et al., 2020; von der Embse et al., 2019).

Long-term exposure leads to burnout, emotional exhaustion, job dissatisfaction, and poor teaching effectiveness (**Madigan & Kim, 2021; Pressley, 2021**).

In the search for explanations of individual differences in stress reactions, a focus has been on self-efficacy, which is an aspect of social cognitive theory associated with people's beliefs regarding their ability to organise and implement actions necessary to achieve certain goals (**Bandura, 1997**). In education, teacher self-efficacy concerns teachers' beliefs in their abilities to foster learning processes, manage classes, and implement proper instruction. Self-efficacy is known to promote psychological well-being and resilience (**Fathi et al., 2021; Zee & Koomen, 2016**).

Recent views on the concept of teacher self-efficacy suggest its multi-dimensional nature. According to the multidimensional model proposed by **Tschannen-Moran and Woolfolk Hoy (2001)**, there are three dimensions of teacher self-efficacy: student engagement, instructional strategy, and classroom management. Each of the mentioned aspects of self-efficacy affects particular outcomes. For example, efficacy in terms of classroom management helps teachers avoid the negative effects of stress associated with the behaviour of students (**Klassen et al., 2018; Lazarides et al., 2020**).

The association between self-efficacy and occupational stress is bidirectional in nature. While high self-efficacy is associated with low occupational stress and burnout (**Skaalvik & Skaalvik, 2018; Zee & Koomen, 2016**), occupational stress over time can erode efficacy beliefs and thus create a vicious cycle (**Schwarzer & Hallum, 2008**). The role of self-efficacy extends further, mediating the relationships between contextual factors (school culture, administrative support, etc.) and psychological well-being (**Collie et al., 2020; Fathi et al., 2021**).

Despite the wealth of literature, one significant gap in the field is the use of self-report instruments measuring only global levels of self-efficacy, potentially overlooking specific facet effects (**Lazarides et al., 2020; Klassen et al., 2018**). This issue becomes especially pertinent in the realm of teacher education, where various domains of teacher roles call for unique skills.

Teaching professionals who are employed by self-financing institutions of secondary teacher education constitute a rather under researched subpopulation. Teacher educators in this context have multiple responsibilities such as instructing, mentoring, supervising practicum, conducting academic research, and performing administrative duties.

This study seeks to address this gap in knowledge by examining the facet effects of self-efficacy on occupational stress of secondary teacher educators in self-financing colleges.

1.1. Perspective

Teacher education in the modern era focuses on psychological factors in coping with occupational stress. Self-efficacy in Social Cognitive Theory is an important factor that affects the effectiveness, coping, and well-being of individuals. Self-efficacy, as defined by **Bandura (1997)**, refers to the belief in an individual's ability to handle particular situations. Whereas previous studies focused on self-efficacy as a global concept, recent studies recommend a facet-based approach (**Klassen & Tze, 2014**).

The multidimensional framework considers instructional strategies, classroom management, and student engagement. Each of these dimensions affects stress in different ways based on varying contextual factors. For instance, classroom management efficacy is related to students' misbehaviour, while instructional efficacy corresponds to performance pressure (**Collie et al., 2012**). Studies confirm that higher self-efficacy correlates with lower levels of stress and burnout, effective coping

strategies, greater job satisfaction, and resilience (Skaalvik & Skaalvik, 2017). On the other hand, stress triggers like workload, role ambiguity, and lack of social support affect efficacy adversely.

The relevance of a facet-specific approach becomes critical in self-financed B.Ed. colleges where resources are scarce, and teachers have to play many different roles. The activation of some efficacy facets (such as administrative or coordination-related efficacy) could affect stress levels. For this reason, extending self-efficacy to context-specific facets is crucial.

Recent findings show that self-efficacy serves as both a mediator and a moderator in many psychological variables. Self-efficacy mediates the relationships between job demands and burnout, as well as the relationship between organisational climate and job satisfaction (Ventura et al., 2015). Self-efficacy also interacts with emotional intelligence and resilience as predictors of stress (Llorens-Gumbau & Salanova-Soria, 2014).

With respect to methodology, the facet-specific analysis is consistent with modern trends towards precision in psychological research and measurement of specific constructs. Multidimensional instruments allow researchers to identify the efficacy facets that predict stress, which would be helpful for professionals' development at self-financed colleges.

Consequently, the current study follows a facet-specific approach, focusing on the effects of different self-efficacy facets on occupational stress in teacher educators.

1.1.1 Objective of the Study

The primary objective of the study was to examine the effect of sense of efficacy on the occupational stress of teacher educators working in self-financed B.Ed. colleges.

1.1.2 Specific Objectives of the Study

The study was undertaken with the following specific objectives –

- O₁:** To develop a multiple regression model to predict occupational stress based on different facets of sense of efficacy among teacher educators of self-financed B.Ed. colleges, considering male and female participants together;
- O₂:** To develop a multiple regression model to predict occupational stress based on different facets of sense of efficacy among male teacher educators of self-financed B.Ed. colleges;
- O₃:** To develop a multiple regression model to predict occupational stress based on different facets of sense of efficacy among female teacher educators of self-financed B.Ed. colleges.

1.1.3 Research Questions

- Q₁:** What multiple regression model can be developed to predict occupational stress using different facets of sense of efficacy among teacher educators, considering both male and female participants together?
- Q₂:** What multiple regression model can be developed to predict occupational stress using different facets of sense of efficacy among male teacher educators?
- Q₃:** What multiple regression model can be developed to predict occupational stress using different facets of sense of efficacy among female teacher educators?

1.1.4 Research Hypotheses

- H₁:** The multiple regression coefficients for predicting occupational stress from different facets of sense of efficacy among teacher educators (male and female combined) are statistically significant.

H₂: The multiple regression coefficients for predicting occupational stress from different facets of sense of efficacy among male teacher educators are statistically significant.

H₃: The multiple regression coefficients for predicting occupational stress from different facets of sense of efficacy among female teacher educators are statistically significant.

2. Acquaintances with the Psychological Constructs under Study

The present study is anchored in two central psychological constructs: **self-efficacy (with its specific facets)** and **occupational stress**. A rigorous conceptual understanding of these constructs is essential for analysing their interaction in teacher education settings.

2.1 Self-Efficacy: Concept and Theoretical Basis

The concept of self-efficacy emerged from the perspective of social cognitive theory by **Bandura (1997)**, where it is defined as the belief of individuals that they can organise and perform actions necessary to attain specific goals. Self-efficacy is context-bound and affects how people perceive, react emotionally, motivate themselves, and act.

In education, teacher self-efficacy involves the perceptions held by teachers about their ability to impact student involvement and achievement, even for those students who are uncooperative (**Tschannen-Moran & Woolfolk Hoy, 2001**). Teacher self-efficacy is critical in developing instructional techniques, perseverance, resiliency, and career devotion (**Zee & Koomen, 2016**).

Self-efficacy stems from four main sources: mastery experiences, modelling, verbal encouragement, and physical and emotional conditions (**Bandura, 1997**). These four sources contribute to teachers' efficacy in managing classroom activities and instruction difficulties.

2.1.1 Facets of Teacher Self-Efficacy

Contemporary research conceptualises teacher self-efficacy as a **multidimensional construct**. **Tschannen-Moran and Woolfolk Hoy (2001)** identified three core facets that capture domain-specific efficacy beliefs –

2.1.1.1 Efficacy in Student Engagement

This dimension refers to teachers' perceived ability to motivate students, foster participation, and sustain engagement in learning activities. Teachers high in this facet are more likely to employ strategies that actively involve learners and address diverse learning needs.

2.1.1.2 Efficacy in Instructional Strategies

This facet pertains to teachers' confidence in using effective teaching methods, adapting instruction, and employing appropriate assessment techniques. It reflects pedagogical competence and flexibility in instructional delivery.

2.1.1.3 Efficacy in Classroom Management

This dimension involves teachers' beliefs in their ability to maintain order, manage disruptive behaviour, and create a conducive learning environment. It is particularly relevant in minimising stress arising from classroom discipline issues.

Empirical research supports the multidimensional nature of self-efficacy and indicates that these facets may differentially influence teaching outcomes and psychological well-being (**Skaalvik & Skaalvik, 2014; Zee & Koomen, 2016**).

2.2 Occupational Stress in Teaching

Occupational stress refers to the psychological strain experienced when job demands exceed an individual's coping resources (**Kyriacou, 2001**). In the teaching

profession, stress is often associated with workload, time pressure, role ambiguity, student misbehaviour, and institutional constraints.

Teacher educators, particularly in self-financed B.Ed. colleges, may encounter additional stressors such as job insecurity, administrative overload, and performance accountability. Prolonged exposure to such stressors can adversely affect mental health, job satisfaction, and teaching effectiveness (**Skaalvik & Skaalvik, 2017**).

Chronic occupational stress may also lead to burnout, characterised by emotional exhaustion, depersonalization, and reduced personal accomplishment, thereby impairing professional functioning.

2.3 Relationship Between Self-Efficacy and Occupational Stress

Numerous studies have established an inverse association between self-efficacy and job-related stress. Teachers with greater self-efficacy tend to regard difficult circumstances as more controllable and are more capable of using appropriate coping mechanisms (**Schwarzer & Hallum, 2008**).

Alternatively, lower self-efficacy can lead to increased stress, emotional exhaustion, and burnout. In this case, self-efficacy acts as a mental asset that promotes resilience and makes individuals less vulnerable to stress.

However, recent viewpoints suggest that self-efficacy can have disparate impacts on job stress when applied to specific aspects. As such –

- Classroom management efficacy can help mitigate stress resulting from classroom management problems.
- Instructional efficacy can relieve stress caused by instructional concerns.
- Student engagement efficacy can serve as a buffer against stress associated with learner engagement.

These considerations demonstrate that it is crucial to shift away from a general concept of efficacy toward a more targeted approach based on facets.

2.4 Relevance to Teacher Education Contexts

In teacher education institutions, teacher educators are responsible not only for content delivery but also for shaping the competencies of future teachers. Their professional effectiveness is closely tied to their efficacy beliefs and ability to manage occupational stress.

Understanding the interplay between **facet-specific self-efficacy** and **occupational stress** is therefore crucial for enhancing teacher educators' well-being, improving instructional quality, and fostering sustainable professional development.

3. Review of Allied Literature

Review of Allied Literature combines information from previous research concerning the factors that are being examined to help establish their theoretical basis, empirical findings, and research gap areas. This can be useful in establishing a hypothesis, appropriate measures, and positioning the study in the larger body of scholarly knowledge.

Past literature shows that self-efficacy plays an important role in determining occupational stress among teachers, and there exists a consistent inverse relationship between the two factors. Modern research suggests that it is essential to focus on the specific effect of each facet. The area of self-financing institutes for teacher educators, however, is understudied. The current research will fill this gap.

3.1 Conceptual Foundation of Self-Efficacy in Teaching

The concept of self-efficacy has been derived from Albert Bandura's social cognitive theory, where he describes self-efficacy as an individual's perception of his or her ability to organise and implement activities necessary to complete specific

performance standards (**Bandura, 1997**). In terms of education, teacher self-efficacy is described as “the teachers’ belief about their capacity to affect students’ engagement and learning in the classroom” (**Tschannen-Moran & Woolfolk Hoy, 2001**). The contemporary research pays special attention to the multidimensional character of the phenomenon of self-efficacy, suggesting that self-efficacy involves three distinct dimensions: instructional strategy, classroom management, and student engagement.

This idea is supported by empirical studies that show a differential relation between certain aspects of teacher self-efficacy and classroom management, teacher-student relations, and classroom disruption.

3.2 Occupational Stress among Teachers and Teacher Educators

Teaching is widely regarded as one of the most stressful occupations because of rising administrative pressure, workload, role conflict, and changing educational demands (**Kyriacou, 2001**). Stress among teachers has been proven to be associated with low levels of job satisfaction, exhaustion, and reduced teaching efficacy (**Madigan & Kim, 2021**).

Several recent research studies have highlighted some of the key causes of occupational stress for teachers, such as insufficient institutional support, job security issues, lack of adequate resources, and role overload (**Gaire, 2024; Latif et al., 2023**). In teacher training colleges, which are often self-funded, these factors contribute to even greater levels of stress due to economic pressure, increased responsibility, and higher standards. The educators responsible for training teachers experience additional stress related to academic work, administration, and supervision (**Sarkar & Paroi, 2023**).

Further, meta-analysis research shows that occupational stress is an important factor that determines the psychological state of teachers, affecting their burnout, engagement, and sustainability (**Zhou et al., 2024**).

3.3 Relationship between Self-Efficacy and Occupational Stress

There is a considerable amount of literature on the negative impact of self-efficacy on occupational stress among teachers. Individuals who have high levels of self-efficacy usually demonstrate resilience, proper coping mechanisms, and are resistant to stress and burnout (**Schwarzer & Hallum, 2008**).

There is empirical evidence showing that occupational stress negatively impacts the sense of self-efficacy in teachers in various areas, including interaction with students, lesson preparation, and personal emotional stability (**Kareem, 2022; Latif et al., 2023**). On the other hand, self-efficacy can serve as a psychological resource that protects individuals from burnout (**Fathi et al., 2021; Li, 2023**).

Therefore, not only does a self-efficacy shield teacher from the negative consequences of occupational stress, but it also contributes to the development of their professional and psychological capacities.

3.4 Facet-Specific Effects of Self-Efficacy

The current trend in academic research on self-efficacy involves investigating its facet-level influence on various outcomes instead of viewing it as an umbrella concept. The unique contributions of different facets of self-efficacy to teachers’ coping processes and experiences of stress have been reported.

According to existing literature, classroom management self-efficacy, instructional self-efficacy, and student engagement self-efficacy have distinct impacts on teachers’ professional behaviours. Specifically, while classroom management self-efficacy correlates significantly with decreased classroom misbehaviour and stress, instructional self-efficacy has more of an impact on effective teaching practices (**Aloe et al., 2014; Lazarides et al., 2020**).

In a recently conducted empirical study involving teacher educators at self-finance B.Ed. colleges, it was found that all three facets of self-efficacy, including student engagement self-efficacy, instructional strategies self-efficacy, and classroom management self-efficacy, significantly predict lower occupational stress, suggesting that higher self-efficacy in these facets contributes to stress reduction (**Halder et al., 2023**).

3.5 Contextual and Institutional Influences

The impact of self-efficacy on occupational stress can be explained by context-specific determinants, including institutional environment, administrative support, and technology-based requirements. During the outbreak of the novel coronavirus, teachers faced increased occupational stress that negatively affected their efficacy beliefs, especially related to classroom management and pedagogical adaptation (**Collie, 2021; Pressley, 2021**).

Good organisational atmosphere, sufficient resources, and healthy collegial relations positively influence the self-efficacy levels and reduce stress. Conversely, poor working conditions increase stress and reduce efficacy beliefs (**Bakker & Demerouti, 2017; Skaalvik & Skaalvik, 2018**).

3.6 Research Gap

Though many scientific efforts have been made concerning the issue of teacher self-efficacy and occupational stress, some research gaps persist. First of all, in most cases, self-efficacy is seen as a unitary concept, ignoring its multidimensionality. Furthermore, few studies explore the phenomenon of teacher educators' self-efficacy compared to regular teachers, especially in the case of self-funded institutions. Finally, little research has been devoted to studying the specific effects of self-efficacy dimensions on occupational stress using multiple regression analysis.

4. Methods

The present study employed a **descriptive survey method** within a **correlational research design**. This approach was considered appropriate for examining the relationships between different facets of sense of efficacy and occupational stress. The details regarding the sample, instruments, data collection procedure, and statistical techniques are presented below.

4.1 Research Design

The research design adopted for the present investigation is outlined as follows.

4.1.1 Variables

The study included the following variables –

4.1.1.1 Independent Variable

An independent variable must have at least two levels, each representing a distinct condition or category. In the present study, the independent variables in the multiple regression analysis were the different dimensions of **Sense of Efficacy**, namely –

- (a) Efficacy for Student Engagement
- (b) Efficacy for Instructional Strategies
- (c) Efficacy for Classroom Management

4.1.1.2 Dependent Variable

The dependent variable in the present study was the **composite score of Occupational Stress**, as measured through the selected instrument.

4.2 Sample

A **multiphasic stratified random sampling technique** was used to ensure a representative sample. The sample consisted of **305 teacher educators** (188 males and

117 females) selected randomly from the self-financed B.Ed. colleges in South 24 Parganas, West Bengal, India.

4.3 Tools of Research

The study utilised standardised instruments for data collection. The tools were selected based on their relevance, appropriateness, validity, reliability, and suitability for the present investigation. A brief description of each tool is given below.

4.3.1 Teacher Stress Inventory (TSI) (Fimian, 1988)

The **Teacher Stress Inventory (TSI)**, developed by **Fimian (1988)**, was used to assess occupational stress. The inventory consists of **49 items**, grouped into **10 dimensions**, which are further categorised into stressors and stress symptoms.

Responses are recorded on a **5-point Likert scale**, ranging from 1 (*no strength/not noticeable*) to 5 (*great strength/very noticeable*). The response categories include: definitely not, perhaps not, undecided, probably, and absolutely.

Table 4.3.1: Dimension-wise Distribution of Items

Sl. No.	Source of Stress	Items
1	Time Management	8
2	Work-related Stressors	6
3	Professional Distress	5
4	Discipline and Motivation	6
5	Professional Investment	4
6	Emotional Manifestation	5
7	Fatigue Manifestation	5
8	Cardiovascular Manifestation	3
9	Gastrovascular Manifestation	3
10	Behavioural Manifestation	4

To facilitate interpretation, mean scores were **normalised** using the following formula –

Normalised Mean = (Mean of item responses in a dimension) / (Total number of items in that dimension)

The normalised mean ranges from **1 to 5**, with **3 representing a moderate level of stress**. The interpretation is as follows:

1.00 to 1.99	:	Very Low Stress
2.0 to 2.99	:	Low Stress
3.00 to 3.99	:	High Stress

4.00 to 5.00 : Very high Stress

Higher scores indicate greater levels of occupational stress and should be interpreted cautiously.

4.3.2 Teachers' Sense of Efficacy Scale (TSES) (Tschannen-Moran & Woolfolk Hoy, 2001)

The **Teachers' Sense of Efficacy Scale (TSES)**, developed by **Tschannen-Moran and Woolfolk Hoy (2001)**, was used to measure teachers' efficacy beliefs. The scale is available in both **short form (12 items)** and **long form (24 items)**.

The items are grouped into three subscales –

- (i) Efficacy for Student Engagement (SE; 8 items)
- (ii) Efficacy for Instructional Strategies (IS; 8 items)
- (iii) Efficacy for Classroom Management (CM; 8 items)

The normalised mean was calculated as follows –

Normalised Mean = (Mean of item responses in a subscale) / (Total number of items in that subscale)

The normalised mean ranges from **1 to 9**, with **5 as the midpoint (moderate level of efficacy)**. Interpretation is as follows –

1.00 to 2.99	:	Very low
3.00 to 4.99	:	Low
5.00 to 6.99	:	High
7.00 to 9.00	:	Very high

4.4 Procedure for Data Collection

Prior permission was obtained from the heads of the respective institutions before data collection. The selected instruments were then administered to the teacher educators in accordance with the standardised instructions provided in their respective manuals. The respondents were requested to provide honest and unbiased responses, ensuring the collection of reliable data on the study variables.

5. Presentation of Results

The present section delineates the findings derived from the multiple regression analysis, wherein the **Teacher Stress Inventory (TSI)** scores were treated as the dependent variable, and the three dimensions of the **Teachers' Sense of Efficacy Scale (TSES)** namely *Student Engagement*, *Instructional Strategies*, and *Classroom Management* were considered as independent variables.

5.1 Occupational Stress of Teacher Educators (Total Sample) as Predicted by Self-Efficacy Dimensions

The variables entered into the regression model included the three efficacy dimensions as predictors, with occupational stress (TSI score) as the criterion variable. The *Enter Method* was employed, ensuring simultaneous inclusion of all predictors.

Table-5.1(a): Variables Entered in Multiple Regression Analysis with Teacher Stress Inventory Scale (TSI) Score of the Total Teacher Educators as Dependent Variable

Dependent Variable	Variables Entered	Method
Occupational Stress	Student Engagement, Instructional Strategies, Classroom Management	Enter

Table-5.1(a) shows variables entered in multiple regression analysis.

The dependent variable was the **Teacher Stress Inventory Scale (TSI)** score of the teacher educators of the self-financed B.Ed. colleges.

Independent Variables were the scores of different dimensions of the **Teachers Sense of Efficacy Scale (TSES)**.

Method of Analysis – here **Enter Method** of analysis was considered.

Table-5.1(b): Descriptive Statistics of the Dependent as well as Independent Variables Entered in Multiple Regression Analysis

Variable	N	Mean	Std. Deviation	Remark
Teacher Stress	305	3.01	0.06	High
Student Engagement	305	6.97	1.15	High
Instructional Strategies	305	7.09	1.17	Very High
Classroom Management	305	6.99	1.10	High

The descriptive statistics revealed that teacher educators experienced a **high level of occupational stress** ($M = 3.01$), alongside **high to very high levels of perceived self-efficacy** across all three domains—Instructional Strategies (very high), Student Engagement (high), and Classroom Management (high). This indicates a seemingly paradoxical coexistence of elevated efficacy beliefs and considerable stress.

Table-5.1(c): Model Summary in Multiple Regression Analysis with Variables Entered in Multiple Regression Analysis with Teacher Stress Inventory Scale (TSI) Score of the Teacher Educators as Dependent Variable

R	R^2	Adjusted R^2	Std. Error of the Estimate	Change Statistics				
				R^2 Change	F Change	df ₁	df ₂	Sig. F Change
0.998	0.997	0.997	0.003	0.997	32428.254	3	301	0.000

The regression model demonstrated an **exceptionally high degree of explanatory power**, with

- **$R = 0.998$,**
- **$R^2 = 0.997$,** and
- **Adjusted $R^2 = 0.997$.**

This implies that approximately **99.7% of the variance in occupational stress** is explained by the combined influence of the three self-efficacy dimensions. The **F-value** ($F = 32428.254$, $p < 0.001$) further confirms that the model is statistically highly significant and robust.

Table-5.1(d): ANOVA in Multiple Regression Analysis with Variables Entered in Multiple Regression Analysis with Teacher Stress Inventory Scale

(TSI) Score of the Total Teacher Educators as a Whole Irrespective Gender as Dependent Variable

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1.046	3	0.349	32428.254	0.000
Residual	0.003	301	0.000		
Total	1.050	304			

The ANOVA findings corroborate the model's adequacy, indicating that the regression equation significantly predicts occupational stress. The negligible residual variance underscores the strong predictive capacity of the independent variables.

Table-5.1(e): Coefficients in Multiple Regression Analysis with Variables Entered in Multiple Regression Analysis Teacher Stress Inventory Scale (TSI) Score of the Total Teacher Educators as a Whole Irrespective of Gender as Dependent Variable

Predictors	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	β		
(Constant)	2.93	0.00		2385.39	0.00
Student Engagement	-0.01	0.00	-0.16	-22.45	0.00
Instructional Strategies	-0.12	0.00	-2.30	-299.39	0.00
Classroom Management	-0.10	0.00	-1.83	-223.92	0.00

All three predictors emerged as **statistically significant** ($p < 0.001$) and exhibited **negative beta coefficients**, indicating an inverse relationship with occupational stress:

- **Student Engagement** ($\beta = -0.157$)
- **Instructional Strategies** ($\beta = -2.302$)
- **Classroom Management** ($\beta = -1.832$)

Among these, *Instructional Strategies* exerted the strongest negative influence, followed by *Classroom Management* and *Student Engagement*.

The regression equation is expressed as:

$$TSI = \begin{vmatrix} 2.93 \\ -0.01 \\ -0.12 \\ -0.10 \end{vmatrix} \times 1 \begin{vmatrix} \text{Student} & \text{Instructional} & \text{Classroom} \\ \text{Engagement} & \text{Strategies} & \text{Management} \end{vmatrix}$$

$$TSI = 2.933 - 0.008 \times \text{Student Engagement} - 0.116 \times \text{Instructional Strategies} - 0.098 \times \text{Classroom Management}$$

The independent variables (subscales of *Teacher Sense of Efficacy*) put their highly statistically significant negative effects in manifestation of *Occupational Stress*.

Synthesis of Findings

The findings clearly indicate that **higher levels of perceived teaching efficacy significantly reduce occupational stress** among teacher educators. Specifically, proficiency in instructional strategies and classroom management appears to be particularly crucial in mitigating stress levels.

Thus, the results substantiate that **self-efficacy function as a strong protective psychological resource**, buffering the adverse effects of occupational stress in the context of self-financed B.Ed. colleges.

6. Discussion of Results

This study aimed at identifying the impact of various aspects of the sense of efficacy of teachers such as student engagement, teaching methods, and classroom management skills on occupational stress in teacher educators in self-funded B.Ed. institutions. The results obtained through multiple regression analysis can be explained in terms of various theoretical and empirical implications.

6.1 Predictive Power of Teachers' Sense of Efficacy on Occupational Stress

The output of the regression analysis of the total sample indicates that there is a highly significant predictive power of teachers' sense of efficacy on occupational stress ($R^2 = 0.997$). This suggests that the dimensions of sense of efficacy have a very high capacity to explain the occupational stress of teacher educators.

The high predictive validity is consistent with the conceptualizations of Albert Bandura's theory of social cognitive learning, which explains that people's beliefs about their self-efficacy have an important role in shaping their emotions, perceptions of stress, and coping behaviour (Bandura, 1997).

However, the extremely high value of R^2 requires careful analysis as, firstly, such perfect prediction is rare for behavioural studies and, secondly, can be indicative of problems like multicollinearity, common method bias, or measurement overlap (Field, 2018). However, the significance and theoretical meaning of the relationships still hold their ground.

6.2 Negative Effect of Self-Efficacy Factors on Occupational Stress

The results of multiple regression analysis show that all three self-efficacy factors measured by TSES had statistically significant negative regression coefficients, meaning that the higher the efficacy of teachers in these areas, the lower their occupational stress. It should be considered within the framework of extensive empirical evidence.

(a) Effect of Student Engagement Efficacy on Occupational Stress

The negative impact of the factor measuring efficacy in student engagement indicates that teacher educators who perceive themselves as capable of motivating and engaging students have lower levels of stress. The reason lies in the fact that efficient student engagement eliminates classroom interruptions and contributes to teaching satisfaction. Klassen and Chiu (2010) found similar findings, showing that teachers with higher student engagement.

b) Instructional Strategies and Occupational Stress

Instructional strategies proved to be the most significant predictor ($\beta = -2.302$), showing that being competent at instruction planning and delivery helps in alleviating stress among teachers. Those who consider themselves to be good instructors are more capable of coping with academic pressures, thus avoiding the role strain and anxiety associated with performing. The importance of being proficient at this task was stressed by Megan Tschannen-Moran & Anita Woolfolk Hoy in their 2001 publication.

c) Classroom Management and Occupational Stress

The negative influence of classroom management on teachers' level of stress is significant because those who believe in their ability to manage classes effectively have less stress. Poor classroom management is one of the major factors leading to stress and even teachers' burnout (Kyriacou, 2001).

6.3 Consistency with Contemporary Research

The results of the current study are in line with previous research works, which emphasize the importance of self-efficacy as an essential protective variable from occupational stress and burnout. For example, according to **Zee and Koomen (2016)**, there is a significant relationship between teacher self-efficacy and low levels of stress and enhanced classroom performance. Another research conducted by **Aloe, Amo and Shanahan (2014)** suggests that teachers who have high efficacy beliefs suffer less from burnout.

Furthermore, contemporary studies carried out in the context of higher education demonstrate that teacher educators with high efficacy beliefs exhibit more effective stress coping mechanisms and higher job satisfaction (**Skaalvik & Skaalvik, 2017; Collie, 2021**).

6.4 Implications of High Mean Scores

High to very high self-efficacy and high occupational stress emerged from the descriptive statistics. Such a contradiction is explained by the vulnerability to occupational stress experienced even by individuals who are highly efficacious as teacher educators. This could be attributed to the reality of teaching in self-sponsored universities, which have a lot of pressure associated with work-related issues such as job insecurity, workload, and administrative hassles. The Job Demands-Resources Model explains that although self-efficacy serves as an individual resource that can help protect an individual against stress, too many job demands may cause occupational stress.

6.5 Overall Interpretation

Overall, the current research provides clear evidence of the critical predictive ability of the efficacy construct as a determinant of occupational stress, with all three dimensions having a negative influence on the level of stress experienced by educators. It seems that the dimension of instructional strategies is particularly important in predicting occupational stress, while other dimensions are of lesser significance, although they still matter. In order to ensure psychological well-being and minimise occupational stress, it is crucial to foster efficacy beliefs among teacher educators.

However, the exceptionally strong prediction capacity of the model necessitates further validation and testing of its robustness.

7. Conclusions with Justifications

The conclusions drawn from the present research results demonstrate that different aspects of teachers' sense of efficacy, such as students' engagement, strategies used in teaching, and classroom management, together have a strong predictive power for the level of occupational stress experienced by teacher educators in self-financing B.Ed. colleges. In this regard, the high coefficient of determination obtained in the multiple regression analysis ($R^2 = 0.997$) means that almost all the variance in occupational stress can be explained by the factors mentioned above. Moreover, a high significance of the F-value indicates the validity of the model obtained.

It can be concluded that all the dimensions of teachers' sense of efficacy have a significantly negative influence on the level of occupational stress of educators in self-financing B.Ed. colleges. In other words, the higher their sense of efficacy is, the less stressful they feel. Furthermore, among the factors analysed, strategies used in teaching ($\beta = -2.302$) and classroom management ($\beta = -1.832$) have a greater impact on stress than students' engagement ($\beta = -0.157$). Thus, it can be said that it is the ability of teacher educators to manage classes and implement pedagogical strategies that matters most.

This claim finds significant support through Self-Efficacy Theory, which suggests that higher self-efficacy is associated with better handling of stress-provoking

situations, thus leading to decreased stress levels. Specifically, self-efficacy affects thinking, feeling, and behaviour in situations of high stress at work, as suggested by **Albert Bandura (1997)**. Thus, teachers who hold strong efficacy beliefs are likely to view job demands as more manageable and therefore experience less stress because of this perception.

Moreover, this relationship between teacher self-efficacy and occupational stress has been supported by empirical evidence. As shown in previous studies, teachers with high self-efficacy are better able to cope with stress, possess higher levels of resilience, and suffer from lower rates of burnout (**Klassen & Tze, 2014; Zee & Koomen, 2016**). In particular, higher self-efficacy concerning instructional strategies allows teachers to create good lessons, deal effectively with different types of learners, and avoid stress caused by the uncertainty and ambiguity of role definition. Similarly, classroom management self-efficacy ensures classroom order and avoids disruptive student behaviour.

The slightly weaker (although not insignificant) impact of student engagement implies that although the motivation and engagement of students remain an important aspect, their association with stress reduction appears somewhat less direct compared to the instructional and managerial skills of teachers. It could be due to the fact that the success of student engagement interventions is at least partially influenced by external variables that include, for example, background, institutional conditions, and the number of participants per class.

Yet another crucial reason justifying the focus of the present research concerns the contextual nature of self-financing B.Ed. colleges. As was mentioned above, teacher educators working in such institutions have to deal with extra pressure coming from job insecurity, administrative obligations, and increased performance requirements. In such conditions, efficacy serves as a psychological buffer helping cope with the negative effects of occupational stress (**Skaalvik & Skaalvik, 2017**).

In summary, the results obtained within the present study demonstrate that improving teachers' beliefs about their effectiveness, particularly related to instructional competence and classroom management, can be viewed as an efficient way to mitigate occupational stress among teacher educators.

7.1 Applicative Values in Stress Management Strategies

Conclusions drawn from the current research hold substantial applicability for devising effective stress management programs among teacher educators, especially those teaching in self-financing B.Ed. colleges. Since there exists an inverse correlation between self-efficacy and occupational stress, any measures to bolster teachers' sense of efficacy could be employed as the principal avenue to alleviate stress.

To begin with, continuing education programs should emphasise developing facet-based self-efficacy, especially with regard to instruction and management, since these facets appear to have the greatest negative impact on stress. Skills training pertaining to pedagogy, classroom management, and student engagement could boost teachers' efficacy and lower job-related demands (**Tschannen-Moran & Woolfolk Hoy, 2001; Klassen et al., 2018**).

Second, teacher preparation institutes should establish mentoring and peer coaching systems to enable vicarious experiences and social persuasion, two main sources of self-efficacy as noted by **Bandura (1997)**. This will not only improve their

efficacy beliefs but also create an emotionally supportive environment that will help manage stress (**Schwarzer & Hallum, 2008**).

Thirdly, organisational intervention integration is crucial. The JD-R theory argues that job demands can be reduced and resources increased, such as administrative support, autonomy, and sufficient infrastructure, which could significantly reduce stress (**Bakker & Demerouti, 2017**). Positive leadership and institutional culture increase self-efficacy and protect from work-related stress (**Collie et al., 2020**).

Fourthly, skills acquisition programs, including resilience building, emotional regulation, and mindfulness interventions, can improve teacher coping skills. Evidence shows that self-efficacy interacts with personal resources like resilience and emotional intelligence to decrease burnout and stress (**Fathi et al., 2021; Li, 2023**).

Fifthly, specialised stress management techniques like time management training, task management, and cognitive-behavioural approaches would be useful for teachers to interpret stress positively and adopt effective coping strategies (**von der Embse et al., 2019**). High self-efficacy among teachers makes it possible to apply these techniques effectively, thus promoting mental health.

Lastly, from the results obtained, the importance of the development of such policies at the institutional level cannot be overlooked in relation to factors like job security, equitable workload sharing, and recognition mechanisms. Policies like these can effectively guard against the wear and tear of efficacy beliefs brought about by stress in the long run (**Skaalvik & Skaalvik, 2018**).

Overall, the practical relevance of this research is shown through the establishment of the fact that increasing self-efficacy beliefs in specific domains, along with improvements in organisational and individual levels, can act as an effective solution for occupational stress among teacher educators.

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