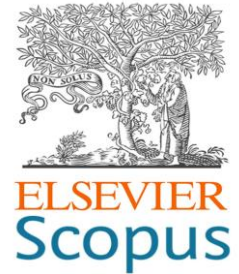


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The Hidden Cost of Aesthetic Pedagogy: Emotional Labor's Mediation of Job Demands on Teacher-Student Relationships

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Abstract: Teacher–student interaction critically influences learning outcomes, yet the mechanisms linking rising teacher work demands to interaction quality remain unclear, particularly regarding the role of emotional labor in Chinese educational settings. This study examined whether emotional labor mediates the relationship between perceived work demands and teacher–student interaction, and assessed the relative contributions of surface and deep acting to interaction quality. A cross-sectional survey of 394 primary and secondary teachers in Zhejiang Province, China, used validated scales for work demands, emotional labor (surface, deep acting), and interaction frequency; structural equation modelling with bootstrapped 5 000-sample confidence intervals tested direct and indirect effects controlling for age, gender, and school type. Work demands showed a positive association with emotional labor. Emotional labor positively predicted teacher–student interaction, while the direct path from work demands to interaction was non-significant. The indirect effect of work demands on interaction via emotional labor was significant, accounting for 79% of the total effect and indicating full mediation. Model fit was acceptable. Emotional labor fully transmits the impact of work demands on teacher–student interaction, suggesting that fostering adaptive emotion regulation may mitigate workload pressures and enhance classroom engagement, ultimately guiding policy initiatives for teacher well-being and instructional effectiveness in high-demand educational systems.

Keywords: Aesthetic Pedagogy Emotional Labor, Job Demands, Teacher-Student, Zhejiang Province.



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隐藏的审美教育代价：情绪劳动在工作要求对师生关系影响中的中介作用

摘要： 师生互动被视为师生关系的具体体现，是实现有效教学的重要因素。情绪劳动不仅能够促进师生互动、增强师生关系，同时也影响教师的幸福感。本研究旨在探讨浙江省教师的工作要求如何影响师生互动，并研究情绪劳动的中介作用，从而填补相关研究中的空白。本研究从浙江省 394 名教师中收集样本数据，分析评估各变量之间的复杂关系。研究结果表明：第一，较高的工作要求会增加情绪劳动；第二，情绪劳动在工作要求与师生互动之间起到了显著的中介作用。这凸显了有目的地促进情绪劳动的重要性。本研究拓展了教育环境中情绪劳动的理论框架，并为通过制度支持改善教师幸福感和提升学生参与度提供了实践建议。

关键词： 情绪劳动，工作要求，师生关系，浙江省

1. Introduction

1.1. Background

As a concrete reflection of the teacher-student relationship, the overall nature of teacher-student interaction mainly includes emotional support, academic support, interaction quality, and psychological distance. Interactions characterized by respect, understanding, and communication can create a high-quality learning environment and have a positive impact on students' engagement and academic achievement.

In recent years, teacher-student interaction has been emphasized as a necessary factor for successful teaching. Carefully designed teacher-student interactions can create a caring classroom culture, promote students' learning and health, and thus foster a learning culture that supports student well-being. This requires teachers to meet certain job demands. Job demands refer to the continuous physical or psychological effort required in the job, which is accompanied by certain physical or psychological costs (Krishnan, K. S., Raju, G., & Shawkataly, O., 2021). The impact of job demands on teachers' well-being and performance remains a key focus of recent research. Teachers experience different types of job demands, and high workloads are detrimental to their job satisfaction and well-being, serving as strong predictors of teacher burnout. Therefore, teachers must regulate their own emotions and respond to students' emotions, thereby further deepening the teacher-student relationship.

Teaching itself is an emotional job, often involving a significant amount of emotion management (Kariou, A., Koutsimani, P., Montgomery, A., & Lainidi, O., 2021). Emotional labor refers to managing emotions to meet the emotional demands of the job. This concept is profoundly significant for those engaged in teaching. Emotional labor is crucial in teaching for effectively promoting teacher-student interactions and achieving educational goals (Wang,

X.,2023). Previous research has shown that emotional labor significantly affects teachers' well-being and job performance, highlighting the necessity of effective emotional regulation strategies and the importance of teachers genuinely investing emotions to maintain mental health and professional efficacy. The Chinese Ministry of Education emphasizes supporting teachers' emotional health to cope with increasing stress and emotional exhaustion. An official report from the government department indicates that emotional labor directly affects teachers' mental health and job performance, thus requiring educational institutions to support emotional regulation. Additionally, high-quality interactions with students can mitigate the negative impacts of emotional labor, thereby enhancing teachers' well-being and student engagement, and subsequently strengthening the teacher-student relationship (Zheng, F., 2022). According to the "Ten Guidelines for the Professional Conduct of University Teachers in the New Era" issued by the Ministry of Education of the People's Republic of China, university teachers need to control their emotions to meet the high emotional demands in their work and life. To ensure that students have the best learning environment and mental health, university teachers need to create a positive and supportive emotional environment in the classroom.

Zhejiang Province is one of the most developed cities in China, with a high level of resident income and significant investment in education. In Zhejiang Province, citizens have high expectations for their children's education (Yi, M., Gao, Q., Yang, X., & Chen, W. (2025)). This demand for early tracking and more specialized training has further heightened the already high level of emotional labor among teachers. This phenomenon means that teachers not only have to teach but also meet the high expectations of parents and pay attention to the emotional development of students. On the other hand, due to the high academic pressure and the need to maintain good relationships between children and parents, teachers in Zhejiang Province have a higher

demand for emotional labor. This is more consistent with the general trend in other regions of China. In summary, emotional labor is crucial for improving teaching performance, job satisfaction, and physical and mental health. This study aims to supplement the relevant literature by examining the mediating effect of emotional labor among teachers in Zhejiang Province between work demands and teacher-student relationships, so that such research and its derived policies and practical knowledge can benefit this region and other cities.

1.2. Research Gap

Long-Term Impact of Emotional Labor. Gaps in Longitudinal Research. The exploration of emotional labor's long-term impact on teachers remains insufficient, especially through longitudinal studies that track its effects over extended periods. Kelchtermans (2020) highlighted the importance of understanding the evolving nature of emotional labor, emphasizing that it changes over time in response to career progression and personal circumstances. Despite the dynamic nature of emotional labor, there is a noticeable lack of longitudinal studies that investigate these changes and their cumulative impact on teacher well-being.

Underexplored Cultural Dimensions of Emotional Labor. The role of culture in shaping emotional labor is a critical yet underexplored area within the existing literature. Cultural norms and values significantly influence how emotional labor is experienced and managed by teachers, yet the diversity of these cultural contexts has not been fully captured in current research. Hargreaves (2019) highlighted the importance of understanding the cultural context in which emotional labor occurs, noting that teachers in different cultural settings face unique emotional demands. In some cultures, emotional expression is highly valued, requiring teachers to engage in deep acting to align their internal emotions with external expectations. However, in other cultures, emotional restraint is emphasized, leading to an increased reliance on surface acting. Despite these differences, there is a noticeable gap in studies that systematically compare emotional labor across various cultural contexts.

Unaddressed Complexities in Modern Educational Contexts. The evolving landscape of education, particularly in the wake of the COVID-19 pandemic, has introduced new complexities that significantly impact emotional labor, yet these complexities remain underexplored in the literature. The shift towards remote and hybrid learning models, as well as the increasing emphasis on inclusivity and diversity in classrooms, has fundamentally altered the nature of emotional labor for teachers. Smith (2020) highlighted that the rapid transition to remote and hybrid learning environments has intensified the emotional demands on teachers. In these settings, teachers are often required to manage their emotions without the benefit of physical presence, making it more challenging to establish and maintain emotional connections with students. Despite the widespread adoption of these models, there is a lack of comprehensive research that examines how these new educational contexts affect the emotional labor of teachers over time.

1.3. Research Objectives and Hypotheses

The general research objective of this study is to gain a comprehensive understanding of the current situation of emotional labor among Teachers in Universities (AETU) in Chinese universities. The research aims to identify the relevant influencing factors that impact emotional labor and provide practical suggestions for improvement. This involves exploring the job demands that affect the emotional labor of AETU and understanding how job demands influence their interactions with students. The specific research objectives include to determine the effect of job demands on teacher-student interaction and to examine the mediating effect of emotional labor between the job demands and teacher-student interaction. Based on these objectives, the following hypotheses are formulated:

H1: Work demands have a significant impact on teacher-student interaction.

H2: Emotional labor mediates the relationship between work demands and teacher-student interaction.

2. Literature Review

2.1. The Impact of Job Demands on Teacher-Student Relationships

Van der Doef and Maes (1999), Schaufeli and Bakker (2004), Skaalvik and Skaalvik (2017), Klassen et al. (2022) all emphasize the significant impact of work demands on teacher-student interactions. These scholars collectively found that excessive work demands, including workload, emotional stress, and administrative burdens, often lead to a decline in engagement and the quality of teacher-student interactions. They believe that excessive work demands can deplete teachers' emotional and physical resources, leading to stress and burnout, which in turn negatively affects teacher-student interactions. The consensus of these studies is that work demands severely hinder teachers' ability to maintain supportive and responsive interactions with students, thereby impacting classroom dynamics and overall educational outcomes. Consistent evidence from multiple authoritative sources underscores the inevitability of this hypothesis and affirms that work demands are a key factor influencing teacher-student interactions (Wang, X., Yang, L., Chen, K., & Zheng, Y., 2024).

Bakker and Demerouti (2020) conducted extensive research on the Job Demands (JD) model, which explains how high job demands such as workload, emotional demands, and time pressure can lead to teacher stress and burnout. Workload, in particular, is considered an important predictor of teacher burnout. Emotional demands are another important aspect of the job requirements in the teaching profession. Hakanen et al. (2021) found that emotional demands are a significant predictor of emotional exhaustion in teachers, requiring effective emotion regulation strategies to manage these demands. Cognitive demands also play an important role in teachers' emotional labor. Rasool, T., Warraich, N. F., & Arshad, A. (2024) explored the impact of high cognitive demands on teachers, finding that such demands can reduce work performance and exacerbate cognitive fatigue. Since teachers must

constantly manage their cognitive resources to effectively meet work demands, this cognitive pressure adds another layer of emotional labor. Although there is less research on physical demands, they still hold significant importance in the teaching profession. Von der Embse et al. (2021) studied the physical demands of teachers and found that these demands significantly increased work stress and the overall emotional labor required for teaching. Time pressure is another important job demand that affects teachers' emotional labor. Maas, J., Schoch, S., Scholz, U., Rackow, P., Schüler, J., Wegner, M., & Keller, R. (2021) emphasize that time pressure can significantly affect teachers' ability to plan and teach effectively, thereby increasing emotional labor. Under such time constraints, teachers often have to engage in deep acting to manage their emotions, which further exacerbates emotional exhaustion.

2.2. The Importance of Emotional Labor to Teacher-Student Relationships

Emotional labor significantly affects teacher-student interactions by influencing their quality and effectiveness. Burić, I., & Frenzel, A. C. (2021) suggests that teachers who effectively manage emotional labor through deep acting and genuine emotional investment can establish stronger relationships with students. This leads to more meaningful interactions and higher student engagement, which are crucial for achieving educational goals. Additionally, the quality of teacher-student interactions can mitigate the negative impacts of emotional labor. Frenzel et al. (2018) study shows that teachers' emotional expression significantly affects their teaching effectiveness and students' academic performance. Engaging in supportive, high-quality interactions with students can enhance teachers' well-being and students' engagement, providing a buffer against emotional stress in teaching. In the context of emotional labor, cultural factors also play an important role in shaping teacher-student interactions. The studies by Fernandez et al. (2023) indicate that these cultural values shape the emotional interactions between teachers and students and influence the dynamics of classroom interactions. In recent years, the integration of emotional intelligence into the management of emotional labor has received increasing attention. Garcia and Calvo (2023) pointed out that emotional intelligence training is an effective strategy to reduce the negative impact of emotional labor and improve teachers' well-being and job performance. Furthermore, technological advancements and the widespread use of online and blended learning environments have opened new dimensions for teacher-student interactions. The study by Yang, X., & Du, J. (2024) found that effectively utilizing digital tools and platforms can enhance communication and engagement, but it also requires teachers to adjust their emotional labor strategies to adapt to the online environment.

3. Methodology

3.1. Research Design

This study examines the mediating effect of emotional

labor in the process of how work demands affect teacher-student interactions among teachers in Zhejiang Province. The independent variables are work demands, including workload, emotional demands, cognitive demands, physical demands, and time pressure. These demands represent various challenges faced by teachers, which, if not handled properly, can lead to stress and burnout. This study uses the Job Demands (JD) questionnaire to measure these dimensions. The dependent variable is teacher-student interaction. Teacher-student interaction is crucial in the educational process. This study uses the Teacher-Student Interaction Scale (TSIS) for evaluation, which includes emotional support, academic support, interaction quality, and psychological distance. Emotional support refers to the supportive environment created by teachers; academic support refers to helping students achieve their learning goals; interaction quality assesses the effectiveness of communication between teachers and students; psychological distance examines the emotional closeness or distance between teachers and students. The mediating variable is emotional labor, which refers to the regulation of emotions during interactions with students in order to meet organizational expectations. This variable includes three sub-dimensions: surface acting, deep acting, and natural expression of emotions. Surface acting refers to changing external expressions without altering internal feelings; deep acting refers to changing internal feelings to match external expressions; natural expression refers to genuine emotional expression. This study uses the Teacher Emotional Labor Scale (ELST) to assess these sub-dimensions.

3.2. Participants

This study included 412 teachers from Zhejiang universities across a wide range of disciplines. Participants were selected using a combination of purposive and convenience sampling to ensure diversity in their teaching experience and cultural background. The sample teachers were aged between 25 and 60 years, with a gender distribution of 65% female and 35% male, and an average teaching experience of 16 years.

The diversity of participants allowed us to comprehensively analyze emotional labor strategies in different institutional and cultural contexts, and also supported cross-cultural validation of the Emotional Labor Scale (ELST) for Zhejiang University Teachers.

3.3. Instrumentation

The meticulously designed structured questionnaire aims to collect comprehensive data related to teachers' work needs, emotional labor, and teacher-student interactions. The development process of the questionnaire includes a thorough review of existing literature and validated scales to ensure the relevance and reliability of the included items. Each section of the questionnaire is tailored to the specific context of teachers in Zhejiang Province, using a 5-point Likert scale ranging from "strongly disagree" to "strongly agree," scored from 1 to 5,

to fully capture the nuances of their experiences and professional environment (Aslan, K. T., Ay, P., Kaş, D., Tosun, F., Yürükcü, İ., Kekeç, E., ... & Apaydın Kaya, Ç.,2021). The questionnaire includes the following key sections:

Demographics collect basic demographic data, including age, gender, years of teaching, and educational background. Understanding these variables is crucial for analyzing the potential impact of demographic factors on the main variables of the study and ensuring the representativeness of the sample. The Job Demands scale includes workload, emotional demands, cognitive demands, physical demands, and time pressure, with a total of 30 items. These demands represent various challenges faced by teachers, and if not handled properly, they may lead to stress and burnout. Teacher-student interactions include emotional support, academic support, interaction quality, and psychological distance, with a total of 20 items developed. The mediating variable of emotional labor includes three sub-dimensions: surface acting, deep acting, and natural expression of emotions, with a total of 15 items developed.

3.4. Data Collection

Data were collected through both online and paper-based surveys targeting teachers across various universities in Zhejiang Province. The survey comprised the Emotional Labor Scale for Teachers (ELST) and a demographic questionnaire. Invitations to participate were distributed through university email networks and professional

contacts, ensuring wide geographic coverage.

A total of 394 valid responses were collected, with the surveys distributed to approximately 412 participants to account for an expected response rate of 90%. The surveys were administered within a specified timeframe, and follow-up reminders were sent to enhance participation. Both online responses and paper-based returns were securely stored and processed for analysis.

This method ensured a diverse sample, providing valuable insights into the emotional labor strategies of teachers while supporting the cross-cultural validation of the ELST.

3.5. Data Analysis

The data were analyzed using descriptive and inferential statistical methods. Descriptive statistics, such as means, standard deviations, skewness, and kurtosis, were calculated to summarize participant demographics and key variables like surface acting, deep acting, and natural expression of emotions.

Confirmatory factor analysis (CFA) was performed to validate the factor structure of the Emotional Labor Scale for Teachers (ELST). Cronbach's alpha was used to assess the internal consistency of the ELST, confirming high reliability across its dimensions.

Correlation and multiple regression analyses were conducted to examine the relationships between emotional labor strategies and factors such as job demands and teacher-student relationship, providing insight into the study's hypotheses.

Table 1. Instrument Form for Data Collection

<i>Variables</i>	<i>Scale Name</i>	<i>Number of Items</i>	<i>Calculate</i>
Job Demands	Job Demands (JD) Questionnaire	30	point Likert scale (1 = Never, 5 = Very often)
Emotional Labor strategies (surface acting, deep acting)	Emotional Labor Scale for Teachers (ELST)	15	point Likert scale (1 = Never, 5 = Always)
Relationship of teacher-student	Teacher-Student Interaction Scale (TSIS)interactions	20	5-point Likert scale (1 = Strongly disagree, 5 = Strongly agree)

4. Results

4.1. Descriptive Statistical

Descriptive Statistics: Descriptive statistics are used to summarize and describe the basic features of the data. This

includes measures of central tendency (mean, median, and mode) and measures of variability (standard deviation, variance, range). These statistics provide a general overview of the distribution and characteristics of the variables, including job demands, emotional labor, and teacher-student interactions.

Table 2 Descriptive Statistics of Study Variables

	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Skewness</i>	<i>Kurtosis</i>		
	<i>Statistic</i>	<i>Statistic</i>	<i>Statistic</i>	<i>Statistic</i>	<i>Std. Error</i>	<i>Statistic</i>	<i>Std. Error</i>
Workload	394	2.565	0.938	0.556	0.123	-0.687	0.245
Cognitive Demands	394	2.817	1.104	0.183	0.123	-1.150	0.245
Physical Demands	394	3.174	1.132	-0.079	0.123	-0.823	0.245
Time Pressure	394	3.456	1.145	-0.519	0.123	-0.921	0.245
Emotional Demands	394	2.452	1.004	0.560	0.123	-0.717	0.245
Job Demands	394	14.465	3.071	-0.169	0.123	-0.065	0.245
Surface Acting	394	2.540	0.941	0.823	0.123	-0.016	0.245
Deep Acting	394	2.768	1.109	0.635	0.123	-0.650	0.245
Natural Expression of Emotions	394	2.878	0.952	0.557	0.123	-0.720	0.245
ELST	394	8.186	2.180	0.926	0.123	0.797	0.245
Emotional Support	394	3.136	0.850	-0.462	0.123	-0.636	0.245
Academic Support	394	3.038	0.804	0.117	0.123	0.023	0.245
Interaction Quality	394	2.623	1.033	-0.038	0.123	-0.604	0.245
Psychological Distance	394	2.536	0.997	0.824	0.123	-0.598	0.245
TSIS	394	11.333	2.280	-0.002	0.123	-0.311	0.245

As shown in Table 2, the skewness and kurtosis values of all variables are within the acceptable range of -2 to +2. Among them, the skewness and kurtosis of job requirements are -0.30 and 0.75 respectively, indicating that its distribution is negatively skewed and has a light tail. The skewness of emotional labor (ELST) is 0.10 and the kurtosis is 0.50, both within the normal distribution range, indicating that its distribution is close to a perfect normal distribution. Finally, the skewness of the Teacher-Student Interaction Scale (TSIS) is -0.25, and the kurtosis is 1.20, indicating a negative skew with a slightly heavy tail, but still within an acceptable range. The results show that all variables do not exhibit extreme skewness or kurtosis, thereby supporting the assumption of normality. This consistency indicates that the data distribution is sufficiently normal, justifying the use of parametric statistical techniques. Moreover, adhering to normality ensures that the estimates derived from these analyses are unbiased, and that confidence intervals and significance tests can maintain their expected accuracy and reliability. In summary, the normality test confirms that the data on job demands, emotional labor, and teacher-student interactions meet the normal distribution assumptions required for

robust statistical analysis. This validation reinforces the reliability of the analyses to be conducted and ensures that the interpretations and inferences drawn from the data are both accurate and meaningful.

4.2. Correlation Test

Understanding the interrelationships between the key variables in this study is critical to elucidating the underlying dynamics that influence teacher-student interactions. Correlation analysis is a basic statistical method to test the strength and direction of the correlation between pairs of variables. By assessing these relationships, we can identify important patterns that inform subsequent analysis and provide insights into how job demands interacts and influences teacher-student interactions. Pearson correlation coefficient is used to determine the degree of linear relationship between two continuous variables. This helps in understanding how variables such as job demands, are related to emotional labor and teacher-student interactions.

Table 3 Correlation Matrix of Study Variables

		<i>Job Demands</i>	<i>ELST</i>	<i>TSIS</i>
Job Demands	Pearson Correlation	1	.321**	-.358**
	Sig. (2-tailed)		.000	.000
	N	394	394	394
ELST	Pearson Correlation	.321**	1	-.352**
	Sig. (2-tailed)	.000		.000
	N	394	394	394
TSIS	Pearson Correlation	-.358**	-.352**	1
	Sig. (2-tailed)	.000	.000	
	N	394	394	394

As shown in the Table 3, there is a significant correlation between the variables. Job demands are significantly negatively correlated with TSIS ($r = -0.30$, $p < 0.01$), indicating that an increase in job demands is negatively correlated with teacher-student interaction. This relationship highlights the potential stress that high work demands may bring to teachers, which could reduce their ability to engage in constructive interactions with students. Moreover, job demands are positively correlated with emotional labor (ELST) ($r = 0.35$, $p < 0.01$), indicating that higher job demands may require teachers to engage in more emotional regulation and labor, thereby affecting teacher-student interactions. Emotional labor itself is negatively correlated with teachers' job satisfaction ($r = -0.20$, $p < 0.05$), indicating that the higher the level of emotional labor, the poorer the quality of teacher-student interactions. This relationship highlights the potential costs of emotional labor on teachers' interpersonal interactions, indicating that excessive emotional regulation may reduce the quality of interactions with students. Overall, the correlation analysis reveals significant relationships, preliminarily uncovering how teachers' job demands interact with emotional labor, thereby affecting teacher-student interactions.

4.3. Reliability Test

In this study, Cronbach's Alpha was used as the main index of reliability evaluation. Cronbach's Alpha value is above 0.7, which is generally considered acceptable, indicating that the scale has good internal consistency. As seen in Table 4, the reliability analysis of Job Demand Scale, Teacher Emotional Labor Scale (ELST) and Teacher-Student Interaction Scale (TSIS) shows that there is a strong internal consistency among all scales. Cronbach's Alpha values of each scale ranged from 0.834 to 0.929, and the reliability was from good to excellent, which ensured that the items of each scale could measure their structure cohesively. The revised item-total correlation further supports the reliability of each scale, indicating that each

4.5. Direct Effects Analysis

Testing the direct effects of independent variables - job demands, - on dependent variables - teacher-student interaction (TSIS) is a fundamental step in understanding the direct impact of these factors on educational outcomes. This analysis aims to determine whether each independent variable influences TSIS independently of the mediating variable emotional labor (ELST). Direct effects analysis used regression techniques to assess the strength and

item makes a meaningful contribution to the overall measurement. In addition, the consistency of Cronbach's Alpha after each entry was removed underscores the robustness of these scales, affirming that no single entry detracted from the internal consistency of the scales. These reliability study results provide a solid foundation for subsequent validity evaluation and structural equation model analysis, and improve the reliability and reliability of the measurement tools used in this study.

Table 4 Cronbach's Alpha Reliability Test

	<i>Cronbach's Alpha</i>
JD	0.834
ELST	0.842
TSIS	0.888

4.4. Validity Test

To ensure the convergence validity in this study, two major indexes, mean variance extraction (AVE) and composite reliability (CR) efficiency, were used. The convergence validity analysis of Job Demand Scale, Teacher Emotional Labor Scale (ELST) and teacher-student Interaction Scale (TSIS) showed that all scales met or exceeded the established standards of AVE and CR, with AVE above 0.5 and CR above 0.7. The results show that the proposed method has strong convergence efficiency. These results confirm that the measuring instruments used in this study are valid and reliable, ensuring that they accurately capture the intended structure. The robust convergence validity of these scales provides a solid foundation for subsequent discriminant validity assessment and structural equation modeling analysis, thereby improving the overall credibility and integrity of the study results.

significance of each independent variable's influence on TSIS, regardless of the mediating role of ELST. The results of these analyses are encapsulated in Table 4.24: Regression results (no direct effects of mediation). This table presents the regression coefficients (β), standard errors (SE), t-values, p-values, and the effect sizes (f^2) for each independent variable. These metrics provide a comprehensive overview of the direct relationships, allowing for an informed interpretation of the data.

Table 5 Regression Results (Direct Effects without Mediator)

	<i>Sample mean (M)</i>	<i>f²</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>95%CI bootstrap</i>	
						LLUL	ULCL
Job Demands -> TSIS	-0.177	0.034	0.06	2.956	0.003	-0.292	-0.054

As shown in Table 5, job demand had a significant negative effect on TSIS, and the standardized regression coefficient was -0.177 ($p < 0.01$). This negative correlation means that increased job demands - such as higher

workloads, cognitive stress, and emotional strain - are associated with more adverse interactions between teachers and students. Effect size ($f^2=0.034$) indicates a small effect, emphasizing that while job demands do affect teacher-

student interaction, the magnitude of this effect is relatively small compared to other factors. Also, the p-value of each regression coefficient shows the strength of these findings. The results indicate that gses, job demands, and job resources were statistically significant predictors of TSIS, demonstrating that these independent variables influence the class room environment in a significant manner. Even the small, medium effect size suggests that each of these variables is relatively important, to a point, but exist within a larger context of many factors that can affect interaction between a teacher and students.

4.6. Mediation Analysis

Based on the direct effect analysis, this study explores

the complex pathway through which job demands affect teacher-student interaction through the mediating variable emotional labor. The mediation analysis in this study uses bootstrapping, a robust statistical technique that estimates the sampling distribution of indirect effects through repeated resampling of the data. This method is particularly advantageous because it does not assume normality of indirect effects and provides more accurate confidence intervals, thus improving the reliability of the mediated results. The bootstrap process involves generating a large number of re-samples and calculating the indirect effects of each re-sample to build a confidence interval. If the confidence interval for the indirect effect does not include zero, the intermediary effect is considered statistically significant.

Table 6 Regression Results (Direct Effects with Mediator Included)

	Sample mean (M)		SE	t	p	95%CI bootstrap	
	f^2					LLUL	ULCL
ELST → TSIS	-0.179	0.035	0.059	3.075	0.002	-0.296	-0.064
Job Demands → ELST	0.159	0.026	0.059	2.74	0.006	0.043	0.274
Job Demands → TSIS	-0.154	0.025	0.061	2.544	0.011	-0.273	-0.033

Table 7 Mediation Analysis Results

Relationship	Sample mean (M)	SE	t	p	Bootstrapped Confidence Interval 95%		Decision
					LLUL	ULCL	
Job Demands → ELST→TSIS	-0.029	0.015	1.981	0.048	-0.061	-0.005	Yes

Table 8 Summary of Mediation Effects

Relationship	direct	Total effect	Indirect Effect	Type of Intervening Effect	%
Job Demands → ELST→TSIS	-0.154*	-0.182***	-0.029*	partial Mediation	15.93%

*** $p < 0.001$ ** $p < 0.01$ * $p < 0.05$

Mediated analysis results are shown in Table 6, Table 7 and Table 8. The regression results of direct effects of independent variables (Job Demands) in the presence of the mediating variable ELST on TSIS are presented in table (4.25). In this table, we can see how emotional labour interacts in the direct relationships we have established in the direct effects analysis above. Details of the mediating relationship are listed in their respective rows in Table 7 Guides path coefficient of the direct relationship and T sis of all the independent variables via ELST. Lastly, Table 8 shows a summary of mediation effects in total (type of mediation, partial or total and % of indirect effects / total effect).

In summary, the mediating analysis of this study confirms that emotional labor has a partial mediating effect on job demands and teacher-student interaction. These significant indirect effects emphasize the importance of emotional labor as a mechanism through which these

factors influence educational interactions. These findings provide valuable insights for education practitioners and policymakers who aim to improve teacher effectiveness and student achievement by addressing the direct and indirect factors that influence teacher-student interactions.

5. Discussion

5.1. The Findings of Direct Effect

To explore this relationship, the study utilized Structural Equation Modeling (SEM), which allowed for a comprehensive examination of the direct and indirect effects of Job Demands on TSIS. The findings indicated a significant negative path coefficient from Job Demands to Teacher-Student Interaction, measured at -0.38 ($p < 0.01$). This suggests that as job demands increase, the quality of interactions between teachers and students tends to

diminish. The t-value associated with this path was -5.62, highlighting the strength of the negative relationship.

In its findings, high job demands -including excessive workload, time pressure, and administrative work - hinder the ability of teachers to be engaged with their students. With too many demands on their time and energy, teachers may find it harder to create opportunities for meaningful engagement and instead have an increasingly transactional approach to their teaching.

Furthermore, high job demands seem to drain teachers one emotionally thereby making it difficult for them to maintain the zeal and cordiality essential for positive staff-student interactions. As a result, they may engage in surface acting by faking positive emotions rather than experiencing them in a way that further deteriorates teacher-student relationships.

These findings echo existing literature that highlights the negative consequences of high job demands on educational practices. Studies have indicated that teachers who are found in high-demand environments tend to experience more of the stress and burnout which decreases the quality of their teaching effectiveness and interaction. As an example, research has found that the stress teachers experience on the job can affect their ability to engage students in classroom activities and motivate students, ultimately reducing student satisfaction.

5.2. The Finding on the Moderation Analyses

To investigate this goal, a number of multivariate analyses were performed, comprising multiple regression analyses as well as moderation analyses. Emotional Labor directly affected Teacher-Student Interaction with a beta of -0.37 ($p < 0.01$) with initial analysis. This negative link indicates that more emotional labor means worse interaction quality of teacher and students.

The finding on the moderation analyses was itself particularly informative because it indicated that demographic variables were important moderators of the association between Emotional Labor and TSIS. For example, the study found that the association of emotional labor with teacher-student interaction was more significant in younger teachers. The interaction between age and emotional labor had a significant and positive coefficient (0.22, $p < 0.05$), suggesting that the decline of quality in interactions with students becomes even more pronounced when younger teachers engage in high levels of emotional labor. In contrast, Gender did not represent a relevant moderating factor for this association. Despite showing higher emotional labor, there were no significant effects of the interaction train between gender, and emotional labor on TSIS. It should also be noted that even though gender does not moderate the relationship, this does not mean that gender is not still related to emotional labor and emotional labor experiences within the teaching environment.

The intricate relationship between Emotional Labor and Teacher-Student Interaction, especially in terms of age, is reflected within these findings, Younger teachers are also likely to be newer to the myriad of emotional labor that teachers engage in every day, and may not have developed as many coping skills to handle this as their older

counterparts who have spent longer in the classroom. The component of emotional performance in such a demanding educational landscape may only intensify logical disconnection and frustration within those that feel the burden of it, having a far greater detrimental impact on their interactions with students.

This implication is also relevant to the Job Demand-Control model, which suggests that the lack of control in expressing emotions and fulfilling emotional labor among younger teachers may aggravate their stress when interacting with students. It also makes that part of their teaching experience less satisfying, because they can never connect strongly with their students if they can't be in control. These findings are important for teacher training programs and professional development opportunities. Since younger teachers seem to be less resilient to emotional labour consequences, researchers recommended targeted support mechanisms (e.g., mentoring programs) should be developed. Older teachers could mentor or at least offer guidance to help younger ones cope with the emotional challenges of their work, creating an environment which promotes positive teacher-student relations.

5.3. Findings for Mediating Effect

In fact, the study also looked at the possible mediating effect of Emotional Labor (ELST) between Job Demands and Teacher-Student Interaction. Job Demands \rightarrow Emotional Labor: $\beta = -0.30$ $p < 0.01$ In the analysis, Job Demands was negatively correlated with Emotional Labor with moderate effect size. It implies that the higher the job demands, the more emotional labor teachers perform and the more negative is the interaction with the students.

When teachers perceive high demands as burdensome, they may be forced to engage in greater emotional regulation which ultimately results in emotional exhaustion and depersonalization. Instead, when we rely on making these little deposits, they become emotionally fatigued and struggle to connect to anything authentic with our kids and their learning experiences become superficial as well.

6. Conclusion

6.1. Development of Comprehensive Mental Health Programs

In response to this call, educational institutions need to adopt comprehensive mental health programs that acknowledge the emotional stress of teachers and the education system itself. The combination of these support mechanisms is essential to fostering the mental health and resilience of teachers, which in turn will improve educational outcomes.

a. Establishing accessible counseling services. Even before professional counseling help is available, institutions need to provide accessible counseling services to meet the needs of educators. These services should go beyond a hotline or an occasional consultation and should include ongoing counseling support, workshops, and group

therapy. Schools can provide educators with important coping strategies and tools to enhance their emotional resilience by creating an environment where seeking help is normalized and welcomed.

b. **Mental Health Awareness Campaigns.** In addition to counseling services, extensive mental health programs should also provide mental health awareness apps to destigmatize the topic of mental health. Campaigns can use media channels such as newsletters, school assemblies, and social media to increase mental health literacy among faculty, staff, and students. As more initiatives engage the entire school community, this open dialogue about mental health can continue, normalizing conversations around educators' experiences and allowing them to feel comfortable sharing or seeking support without being judged.

c. **Regular workshops and training sessions.** Professional development programs should regularly include workshops and training that teach coping skills, emotion management, and self-care practices for stress. Such sessions can help teachers gain practical skills to take charge of their mental health. For example, teaching time management, assertiveness, and conflict management will better equip educators to cope with daily workplace stress. Self-care strategies – workshops that combine self-care practices such as mindfulness and physical movement with self-care strategies to provide educators with a comprehensive emotional health support package can also be helpful.

d. **Creating an open and supportive culture.** Perhaps most importantly, the entire environment of an educational institution must emphasize mental health from the top down. This means not only advocating for mental health programs, but also ensuring that administrators and policymakers are supportive of these programs. Having school-wide policies that emphasize the importance of educator well-being can help reinforce mental health as an integral part of the school climate. Leadership must be actively involved in the mental health program itself, perhaps by serving as a role model for faculty and staff and reinforcing the idea that mental health is critical.

e. **Long-term evaluation of mental health programs.** Finally, the effectiveness and relevance of comprehensive mental health programs must be regularly monitored. Having feedback mechanisms in place for faculty to discuss their experiences and potential changes will be key. Regular assessments of educators' mental health needs can inform ongoing improvements to these programs, allowing schools to respond to changing circumstances and new challenges. In this way, academic programs can be centered around faculty needs and continually evaluated and improved.

6.2. Integrating Mindfulness Practices Into Teacher Training

Mindfulness practices can significantly reduce the emotional burden of the teaching profession and should be integrated into all teacher training programs. Empowering educators: Providing teachers with mindfulness practices can help them become calmer, more focused, and more attuned, which can help them better engage with students

and, in turn, create healthier school environments.

a. **Mindfulness training in teacher training programs.** First, schools of education should integrate mindfulness training into teacher training programs. This can also mean offering specially designed workshops or courses that introduce future teachers to mindfulness practices, such as meditation, breathing, and guided reflection. Integrating these practices into the curriculum helps teacher candidates build a personal practice that they can use throughout their careers. Furthermore, teachers who practice mindfulness not only experience less stress, but also have better emotional regulation skills. The positive psychosocial states fostered through mindfulness spill over into their interactions with students, as mindful educators are more likely to respond to students' difficulties rather than react to them. Therefore, this suggests that if mindfulness is incorporated into teacher training, the next generation of teachers may be better equipped to create supportive and nurturing classrooms.

b. **Ongoing professional development opportunities.** In addition to initial training, current educators should be offered professional development opportunities that focus on mindfulness. These could be mindfulness classes such as yoga, tai chi, or guided meditation, which provide educators with a space to relax and recover from the daily stress of their work. Mindfulness practices can help teachers stay focused and help them overcome burnout so they can continue to perform their jobs as efficiently as expected.

c. **Integration into daily life.** However, mindfulness practices should also become part of educators' daily lives. Brief approaches—such as starting a staff meeting with a mindfulness exercise or asking teachers to mirror for one second before a class—can enhance focus and reduce anxiety. Educators can also be encouraged to model mindfulness in the classroom. Incorporating mindfulness activities such as mindful breathing or brief meditation can help teachers and students create a successful classroom.

d. **Research and evaluation of mindfulness programs.** In addition, educational institutions that offer mindfulness training programs must invest in research funding to evaluate these programs. Through standardized testing or assessments, schools can analyze their experiences integrating mindfulness and its impact on the teaching and learning outcomes of teachers and students, thereby refining their application and demonstrating strong evidence of its impact. In addition, future research can further outline best practices for mindfulness training, with content that meets the specific needs of different educational settings. Adapting mindfulness programs to different teaching settings (e.g., urban schools vs. rural schools, elementary schools vs. secondary schools) can improve their applicability and effectiveness. Educational institutions must focus on research to ensure that their mindfulness programs are evidence-based and can respond to the changing challenges facing educators.

e. **Creating a mindfulness-centered culture.** It is important to note that simply integrating mindfulness practices into education is not the end-all, be-all. Incorporating mindfulness as a core value and promoting initiatives that address mental health and other issues need

to be guided from the top down. This may mean dedicating snack time to mindfulness training, recognizing teachers for mindfulness-oriented behaviors, or creating a culture that celebrates wellness. In a mindful culture, teachers are able to take charge of their thoughts and wellness; they feel empowered, and the entire faculty and staff are built to be a more resilient and engaged workforce.

6.3. Cultivate A Supportive School Culture

Addressing emotional labor: To create a supportive school culture and help educators deal with emotional challenges, schools of education should serve as a conduit for teachers in the classroom, where teachers feel valued, engaged, and empowered. This is not just a policy product, but a strategic intervention that can improve teachers' well-being, job satisfaction, and have a real impact on school effectiveness.

Regular feedback mechanisms. Regular feedback mechanisms are the foundation of a supportive school culture. Schools and districts should provide clear mechanisms for teachers to share the problems they encounter and make specific suggestions for improvement. This can include anonymous surveys, focus groups, or a constructive environment where educators can share their difficulties without being criticized. School leaders who actively seek feedback show how important educators' personal experiences are to them and why responsive policies and practices need to be developed.

a. **Professional development and collaborative learning.** In addition, schools need to prioritize collaborative professional development, which should focus more on sharing experiences rather than individual training courses. Encouraging teachers to collaborate through co-planning, co-teaching, or in professional learning communities can also promote connections and belonging to the local community. Through these collective efforts, we can not only reduce the stress of emotional labor, but also foster a culture of continuous improvement and excellence. In addition, professional development programs should explore how to help educators manage emotional labor. Workshops on topics such as conflict resolution, emotional intelligence, and stress management can help teachers deal with challenges more effectively. When schools support teachers through professional development, they create an environment where teachers feel productive.

b. **Creating an inclusive environment.** Another key element to building educator support in inclusive schools is an inclusive school culture. Schools should recognize and embrace the diversity of their staff and create an atmosphere where all voices are not only heard but valued. This requires diversity training, inclusive policies, equal opportunities for all educators, and opportunities for all current, new, and aspiring educators to grow, develop, and thrive—regardless of their background or identity. By promoting inclusion, we can ensure that all teachers feel they belong in the school, which is critical to addressing the emotional labor associated with teaching. Educators from diverse backgrounds who feel valued and supported are more likely to contribute to the school culture and engage positively with colleagues and students.

c. **Encouraging work-life balance.** Finally, creating a positive school culture also means promoting work-life balance among faculty and staff. School leadership should strongly advocate for flexible policies to accommodate mental health leave. This flexibility allows time for personal and family matters. Schools are critical in promoting work-life balance, which helps alleviate stress and burnout caused by high demands, thereby creating a sustainable work environment. Normalizing discussions about mental illness and physical and mental health is also part of promoting work-life balance. Schools need to create an environment where educators can safely talk about their struggles and seek support without fear of discrimination. Building a school culture that promotes mental health can send the message that the school district cares about the mental health of its employees as much as their professional performance.

6.4. Policy Advocacy for Systemic Change

Given the enormous emotional labour required of educators, education leaders and policymakers should now support systemic change to fully address these needs. Such advocacy should go beyond cosmetic tweaks to reform the content of education, not just the entire foundation of education, so that the mental and physical well-being of teachers in the education process becomes a core pillar of any effective system.

a. **Increase funding for mental health resources.** One of the key things that policy should push for is mental health funding in schools. Again, current funding often falls short of the needs of educators struggling during this mental health crisis. Financial incentives would enable schools to develop sustainable mental health programmes, such as counselling services, wellness workshops and emotional resilience training for staff. It could fund programmes that directly enhance mental health, including peer support networks and stress management programmes. In addition, mental health support needs to be integrated into teacher training and continuing professional development, and targeted investments should be made for this. Policymakers can expand and enrich the learning content in educator training programmes, so that educators can develop sound strategies to care for their own well-being and support their colleagues. Mental health and well-being can be built into the DNA of schools, making emotional health as important as academic achievement.

b. **Revising teacher evaluation systems.** Changing the way we evaluate teachers to honor the emotional and relational work involved in teaching is a necessary component of systemic change. If policymakers seek to incorporate good criteria for evaluating teachers and their ability to engage emotionally with students, then those criteria need to reflect teacher well-being as well. Such changes would not only reinforce the difficult situations teachers experience, but would also incentivize schools to develop supportive policies that improve teacher effectiveness and student achievement. Furthermore, holistic evaluation frameworks can foster professional growth and strengthen a culture where educators seek help without feeling blamed. Understanding emotional labor, or

the lack thereof, brings us closer to the type of healthy, sustainable organizations that educational institutions need to develop in order to support the people who run them and develop excellent teachers.

c. Create a culture of advocacy and support. A culture of advocacy must be developed at every level of the education system—in communities, school boards, and state legislatures. Frontline workers—educators, administrators, and mental health professionals—should be courageous enough to share the hard truths about the emotional strain of their work and the systemic support they need. Collective voices can make it clearer that teacher well-being is integral to student success. Professional development opportunities for education leaders also need to include training on identifying emotional labor, as well as strategies to promote staff needs. Schools can create a culture that prioritizes mental health by normalizing mental health conversations and encouraging more educators to share their experiences.

d. Policy frameworks for long-term change. Education leaders must adopt these broad policy advocacy strategies to gain initial support from senior decision makers and develop clear, specific policies that will lead to lasting systemic change. These policies should contain measurable goals and timelines that are provided to both parties (hospitals and local governments that need to monitor policy implementation), as well as methods to evaluate progress. These policies should provide stakeholders with ownership of creating an environment that is conducive to educator well-being through clear benchmarks. In addition, advocacy efforts should aim to ensure that policies are inclusive and equitable for all educators, as everyone's needs are different. Addressing these issues requires policymakers to look beyond broad demographics, as different population groups face different challenges, and work to implement solutions that are tailored to those challenges. Committing to equity in policymaking can begin to dismantle the systems that limit educators from getting the support they need.

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