



How to firmly retain: Teachers' social-emotional competence and job burnout under the conservation of resources theory

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Abstract: Teacher burnout has become a widespread concern in high-pressure educational systems, particularly in China, where teachers face increasing instructional demands and emotional labor. Although teachers' social-emotional competence has been recognized as an important personal resource, the mechanisms through which it alleviates job burnout remain insufficiently understood. Grounded in the Conservation of Resources theory, this study explored the mediating roles of teacher-student relationship and teaching efficacy in the association between teachers' social-emotional competence and job burnout. The participants were 807 Chinese teachers (female = 81.7%; male = 18.3%; mean teaching ages = 3.57 years; SD = 1.81 years), using a cluster sampling method. The mediating effect was analyzed using structural equation modeling. The results showed that teachers' social-emotional competence associated with lower job burnout. Both teacher-student relationship and teaching efficacy served as independent mediators of the relationship between teachers' social-emotional competence and job burnout. Teacher-student relationship was associated with higher teaching efficacy. Teacher-student relationship and teaching efficacy not only served as independent mediators between teachers' social-emotional competence and job burnout but also played a chain mediating role. Specifically, higher social-emotional competence helped teachers build better teacher-student relationship, which in turn enhanced their teaching efficacy, ultimately leading to lower job burnout. Consistent with the Conservation of Resources theory, findings suggest incorporating social emotional learning into professional development to buffer teacher burnout, foster instructional confidence, and retain a resilient workforce.

Keywords: Teachers' social-emotional competence; job burnout; teacher-student relationship; teaching efficacy

Introduction

Teaching, by its nature, is an emotionally intensive practice that requires sustained and meaningful interpersonal interactions. Because teachers must continuously respond to a heterogeneous student population with highly diverse educational, social, and psychological needs, they have become one of the professional groups most vulnerable to burnout (Wu et al., 2019). Given these occupational pressures, identifying personal resources that can buffer teachers against burnout has become an important research concern. Social-Emotional Competence (SEC), referring to the ability to positively perceive and regulate emotions (Mao, 2020), is an important psychological resource that enables teachers to manage work-related stress, maintain positive self-perceptions, and respond effectively to the complex interpersonal and educational demands of teaching. Despite growing recognition of SEC, existing studies largely focus on its benefits for student outcomes while overlooking its protective role for teachers themselves and the potential for SEC in alleviating teacher job burnout remains insufficiently understood. To address this gap, the present study investigates how SEC mitigates teacher job burnout among Chinese teachers, focusing on the chain mediating roles of teacher-student relationship and teaching efficacy.

Teachers' social-emotional competence and job burnout

Teachers' SEC means being able to be aware of and reasonably regulate their own emotions, understand others, establish and maintain healthy interpersonal relation-

ships, form collective and prosocial awareness, and show prosocial behaviors such as unity, cooperation, and responsibility (Li, 2019).

Because teaching is an inherently relational profession demanding sustained emotional labor, emotional factors at the individual teacher level are the most prominent influencing predictors of professional burnout (Liu et al., 2023). Teaching is an inherently relational profession demanding sustained emotional labor. Recent evidence highlights that SEC functions as a targeted buffer against burnout by operating directly within three unique, high-stress work scenarios (Cervellione et al., 2025). First, in teacher-student interactions, high-SEC teachers can empathize with students' diverse needs and handle behavioral issues patiently, preventing the emotional exhaustion typically caused by prolonged interpersonal friction (Collie, 2025). Second, in classroom management, rather than relying on emotionally draining punitive measures, they employ positive relationship-building strategies to maintain a supportive learning climate, which preserves their internal emotional resources (Barros et al., 2025). Finally, during home-school communication, these teachers effectively regulate negative emotions when facing parental misunderstandings. They utilize perspective-taking and constructive dialogue to transform potential external stressors into collaborative parent-teacher partnerships (Pikić Jugović et al., 2025). Through these specific educational contexts, SEC empowers teachers to adopt adaptive strategies to cope with intense relational pressures, thereby fundamentally alleviating professional burnout.



Mediating effect of teacher-student relationship

Teachers' SEC can positively predict the teacher-student relationship. Teachers with high SEC are typically in a positive emotional state and can interact with students in a warmer and more supportive manner (Jones et al., 2013). When encountering students' disciplinary violations or teacher-student conflicts, these teachers can effectively regulate their own emotional states, maintain rational cognition, and adopt constructive approaches to resolve disputes. Concurrently, teachers with higher SEC tend to possess a stronger sense of collective identity; during their educational practice, they proactively create an inclusive and mutually supportive emotional climate within the classroom, thereby promoting the positive development of the teacher-student relationship.

Meanwhile, teacher-student relationship significantly impacts occupational burnout. Teacher-student relationship focus on affective and emotional facets, and positive teacher-student relationship characterized by closeness and warmth enable teachers to enhance the quality of their emotional engagement through relationship-building educational practices that foster students' sense of safety and belonging (Emslander et al., 2025). Existing studies demonstrate that the perceived quality of the teacher-student relationship is negatively correlated with burnout symptoms (Teuber et al., 2021). A high-quality teacher-student relationship provides teachers with essential emotional support and a profound sense of meaning in their work. When teachers perceive positive feedback and sincere respect from students, these positive interactions can buffer the negative impacts caused by occupational stress. Conversely, when teachers exhibit a low level of acceptance of students' ideas and maintain a low frequency of communication, the emotional connection between them weakens. This alienated teacher-student relationship is likely to lead to emotional exhaustion and depersonalization tendencies among teachers, which in turn exacerbates the severity of professional burnout.

Mediating effect of teaching efficacy

Teaching efficacy serves as the key for teachers to resolve crises of professional competence and buffer against burnout. It refers to teachers' outcome expectations about the consequences of teaching (Ashton, 1985), and it may serve as a crucial mediating variable in the impact of teachers' SEC on professional burnout. Studies have shown that teachers with high SEC have clearer self-awareness, stronger self-management abilities, higher self-confidence, and higher self-esteem, enabling them to conduct self-adjustment and reflection in their work (Mao, 2020).

Teacher efficacy acts as a robust protective factor against professional burnout. Teachers' cognition and belief in their ability to effectively complete educational and teaching tasks in teaching practice and achieve teaching goals will affect their perseverance when things do not go smoothly and their ability to respond to setbacks (Tschannen-Moran & Hoy, 2001). The higher teachers' efficacy, the greater enthusiasm they will show for teaching, and the more investment they will make in teaching (Coladarci, 1992). They also tend to adopt positive coping strategies when facing teaching challenges, rather

than falling into self-doubt or passive avoidance, which effectively buffers the negative impacts of work stress.

Chain mediation role between teacher-student relationship and teaching efficacy

A positive teacher-student relationship is an important source for improving teachers' teaching efficacy (Fritz et al., 1995). For instance, teachers who successfully maintain positive relationships with students can enjoy their workplace (Veldman et al., 2013) and thus are more likely to maintain enthusiasm and passion. Appropriate teacher-students relationships are important to prevent discipline problems and to foster professional development (Wubbels & Brekelmans, 2011). In this process, teachers are more likely to adopt teaching strategies that better meet students' needs; when students' needs are met, their level of engagement in teachers' teaching will increase accordingly.

Relevant theory

The Conservation of Resources (COR) theory posits that individuals are fundamentally motivated to acquire, retain, foster, and protect resources they centrally value (Hobfoll, 1989; Halbesleben et al., 2014). According to this framework, psychological stress and burnout occur when individuals' resources are threatened with loss, or when there is a failure to gain resources following significant resource investment. In the daily educational process, teachers must continuously invest substantial psychological, emotional, and cognitive resources to navigate complex pedagogical and interpersonal demands. When chronic occupational demands deplete these reserves without adequate replenishment, professional burnout inevitably ensues. Within this theoretical lens, SEC serves as a crucial personal resource. Teachers with high SEC possess superior emotional cognition and management abilities, equipping them to effectively regulate emotional labor and prevent severe resource depletion. Furthermore, recent advancements in COR theory emphasize the concept of "resource caravans" and the "transactional model", suggesting that resources do not exist in isolation but rather travel in packs and mutually reinforce one another (Hobfoll et al., 2018).

According to the "transactional model" of COR theory, in the micro and direct environment of the classroom. As an individual characteristic resource, teachers' SEC can be preserved and enriched through positive interactions with students, generating a value-added effect. This resource can then be further applied in their own teaching practice, which is conducive to the improvement of their teaching efficacy. The enrichment of resources helps teachers uphold positive development beliefs and attitudes in their interactions with the surrounding environment, thereby reducing the occurrence of negative emotions, lowering the probability of professional burnout, and enabling them to stay more firmly in their teaching positions.

Applied to the present study, teachers are dynamic aggregates of resources. An initial robust personal resource empowers teachers to effectively accumulate subsequent supportive resources within their educational environment. Specifically, through positive interpersonal interactions, SEC facilitates the cultivation of a

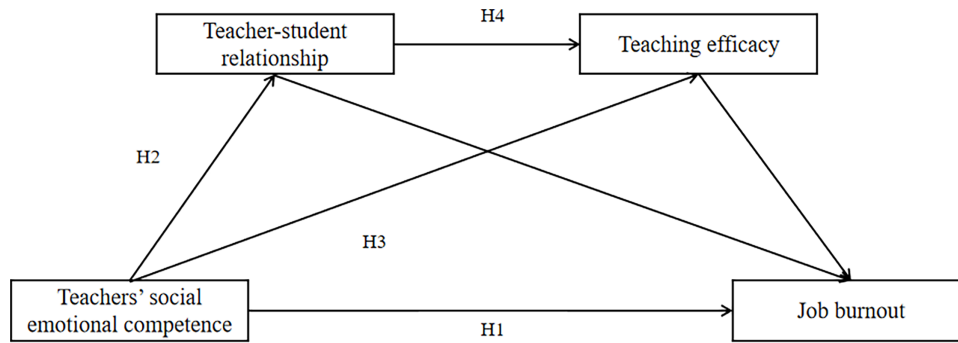


Figure 1. Chain mediation model

high-quality teacher-student relationship, which in turn reinforces teaching efficacy. To sum up, based on the COR theory, this study constructs a chain mediating framework to explore how teachers' SEC fundamentally mitigates professional job burnout through the sequential accumulation of relational and cognitive resources. This framework aims to provide actionable insights for preserving a high-quality and emotionally resilient teaching workforce.

The China context

Examining burnout mechanisms is particularly critical in the Chinese educational context. Influenced by the cultural tradition of "respecting teachers", educators face exceptional moral expectations and perform substantial emotional labor. Simultaneously, China's highly competitive system imposes intense pressure regarding academic accountability and complex parent-student relationship. The "Social Emotional Learning and School Management" project, jointly carried out by the Ministry of Education of China and UNICEF, has localized and refined the connotation of SEC, constructing a six-dimensional framework covering two aspects (cognition and management) and three levels (self, others, and collective).

Although recent national policy reforms emphasize caring for teachers' mental health and alleviating occupational fatigue, empirical data reveal a contrasting reality. Studies show that teachers' workloads continue to increase (Huang, 2022), accelerating a decline in their psychological well-being (Wu, 2014). The profound emotional consumption embedded in these systemic demands severely drains teachers' enthusiasm. Therefore, within this unique cultural and highly demanding environment, exploring the causes of burnout and effective coping strategies requires urgent scholarly attention.

Goal of the study

This study aimed to replicate and extend the findings on teachers' SEC and job burnout by exploring the role of teacher-student relationship and teaching efficacy (see Figure 1 for conceptual model). Our research hypotheses were:

H1: Teachers' SEC is associated with lower job burnout.

H2: Teacher-student relationship and teaching efficacy separately mediate the relationship between teachers' SEC and job burnout to be lower in job burnout.

H3: Teacher-student relationship and teaching efficacy have a chain mediating role between teachers' SEC and job burnout, such that higher SEC improves the teacher-student relationship, which in turn increases teaching efficacy, ultimately reducing job burnout.

Methods

Participants and setting

This study was conducted in 14 primary schools in Beijing, the capital of China, and a cluster sampling method was adopted. We distributed 1100 questionnaires, the number of valid questionnaires was 807, and the effective rate reached 73.4%. The frequency of male and female primary teachers was 148 (18.3%) and 659 (81.7%), respectively, which closely approximates the actual gender ratio of teachers in China's primary education stage. The frequency of teachers with college degree or below, bachelor's degree and master's degree or above was 46 (5.8%), 667 (84.2%) and 79 (10.0%), respectively, with bachelor's degree accounting for most of the teachers. The frequency of teachers' years of teaching experience in the ranges of 0–5 years, 6–10 years, 11–15 years, 16–20 years, 21–25 years, and 26 years and above was 165 (20.9%), 99 (12.5%), 94 (11.9%), 117 (14.8%), 179 (22.7%) and 136 (17.2%), with an overall U-shaped distribution. At last, 385 (49.4%) of the teachers were classroom teachers.

Measures

Teachers' social-emotional competence

The questionnaire was revised and completed based on the revised Teachers' Social-Emotional Competence Questionnaire (TSECQ) by Li (2019), which is widely used in Chinese teachers sample (Tian et al., 2022). The TSECQ comprises 30 questions in six sub-dimensions: self-awareness (5 items, e.g., I know what I'm good at), self-management (5 items, e.g., I can regulate my emotions when needed), others-awareness (5 items, e.g., I can think about problems from others' perspectives), others-management (5 items, e.g., I am an excellent negotiator), collective-awareness (5 items, e.g., I can view problems from the perspective of the school), and collective-management (5 items, e.g., I consciously abide by the school's rules and regulations). Items are scored on a 5-point Likert scale with higher scores indicating better SEC. The Cronbach's alpha coefficient for scores was 0.955, and the validation factor analysis yielded $\chi^2/df = 3.701$,

RMSEA = 0.058, NFI = 0.906, CFI = 0.929, TLI = 0.921, indicating an overall good model fit.

Teacher-student relationship

The questionnaire developed by Whitaker et al. (2015) comprises 6 items in two dimensions of teacher-student relationship climate (3 items, e.g., the atmosphere between me and my students is harmonious and friendly), positive teacher-student relationship (3 items, e.g., I maintain a close and supportive relationship with my students). Items are scored on a 5 point Likert scale, where higher scores indicate better teacher-student relationship. The Cronbach's alpha coefficient for this scale in the present study was 0.849, and the validation factor analysis yielded $\chi^2/df = 6.794$, RMSEA = 0.084, NFI = 0.979, CFI = 0.982, TLI = 0.963, indicating an overall good model fit.

Teacher teaching efficacy questionnaire

The 12-item Teacher Teaching Efficacy Questionnaire developed by Tschannen-Moran and Hoy (2001), is in three dimensions: teaching strategies (4 items, e.g., I can implement a variety of teaching strategies in the classroom.), classroom management (4 items, e.g., I can make students follow the class rules.), and student engagement (4 items, e.g., I can help students realize the importance of learning). Items are scored on a 5 point Likert scale, with higher scores representing greater teacher teaching efficacy. The Cronbach's alpha coefficient for this scale in the present study was 0.960, and the validation factor analysis showed that $\chi^2/df = 6.925$, RMSEA = 0.077, NFI = 0.959, CFI = 0.965, and TLI = 0.947, which was an overall good fit of the model.

Teacher burnout inventory (MBI-ES)

The 22-item MBI-ES by Wu et al. (2016) is in 3 dimensions of emotional exhaustion (9 items, e.g., I feel exhausted after a day of work), low achievement (8 items, e.g., I have done some valuable things in my work) and depersonalization (5 items, e.g., I feel I often treat students as inanimate objects). Items are on a 5-point Likert scale, with higher scores implying a greater sense of burnout in teachers. The Cronbach's alpha coefficient for this scale in the present study was 0.899, and the validation factor analysis showed that $\chi^2/df = 6.098$, RMSEA = 0.082, NFI = 0.917, CFI = 0.930, and TLI = 0.914, which is an overall good fit of the model.

Control variables

Previous studies related to teacher job burnout considered gender, teaching experience as control variables (Tian et al., 2022). Therefore, this study included a set of teacher demographic variables in the model. Gender (male = 1, female = 2), teaching experience (less than 10 years = 1, 10–20 years = 2, 20–30 years = 3, 30–40 years = 4, 50 years and above = 5), level of education (general upper secondary = 1, post-secondary = 2, undergraduate = 3, master's degree and above = 4) and classroom teachers status (1 = classroom teachers, 2 = non-classroom teacher) were measured as categorical variables.

Procedure

The Ethics Committee of the Faculty of Education, Beijing Normal University approved the study (IRB Number: BNU202211100044). Participants granted informed consent to participate in this study. The survey was administered face-to-face during regular work hours to ensure that all participants had equal access and could complete the questionnaire.

Data analysis

The study used SPSS 21.0 and Amos 21.0 for descriptive and correlation analysis, validation analysis and structural equation modelling of the data. Based on the resampling of 5000 data, the Bootstrapping method was used to generate 95% bias-corrected confidence intervals (CI) for the index. The mediation effects are considered statistically significant if the corresponding CI does not overlap with zero.

Common method bias test

Since the current study used a questionnaire survey methodology, we controlled for possible common method bias. In terms of experimental design, we protected the anonymity of the participants to ensure that the participants could answer the questions as honestly as possible. In addition, in terms of statistics, we used Harman's single factor test to include all variables for exploratory factor analysis. It turned out that a single factor can explain 33.831% of the variance, which was much less than 40%. Therefore, it can be assumed that there was no serious common method bias in the data (Podsakoff et al., 2003).

Results

Descriptive statistics and correlation analyses

The means, standard deviations, and correlations of the main variables in this study are shown in Table 1. In the context of the school, the control demographic variables included gender, teaching age, academic qualifications, and whether or not they were classroom teachers. We found that teachers' SEC was significantly positively correlated with teacher-student relationships ($r = 0.671$, $p < 0.001$) and teaching efficacy ($r = 0.666$, $p < 0.001$), and significantly negatively correlated with burnout ($r = -0.447$, $p < 0.001$). Teacher-student relationships were significantly positively correlated with teaching efficacy ($r = 0.752$, $p < 0.001$), and was significantly negatively correlated with burnout ($r = -0.461$, $p < 0.001$). Teaching efficacy was significantly negatively correlated with burnout ($r = -0.442$, $p < 0.001$), and the correlations between the main variables showed that mediation effect tests could be further conducted (Baron & Kenny, 1986).

Teachers' social emotional competence and job burnout

In order to test the structural relationships, a structural equation model was constructed with SEC as the antecedent variable, job burnout as the outcome variable, and teacher-student relationship and teaching efficacy as the mediator variables after controlling for some of the

Table 1. Means, standard deviations and correlations of the main variables

	M	SD	1	2	3	4	5	6	7
1		—							
2	—	—	−0.046						
3	—	—	0.131***	−0.337**					
4	—	—	−0.281***	−0.088*	0.031				
5. SEC	4.334	0.472	0.077*	0.016	−0.012	−0.016			
6. TSR	4.381	0.536	0.142***	−0.022	−0.011	−0.143***	0.671***		
7. TE	4.399	0.538	0.127***	0.067	−0.016	−0.130***	0.666***	0.752***	
8. JB	2.140	0.548	−0.177***	0.044	0.011	−0.048	−0.447***	−0.461***	−0.442***

Note. 1 = gender, 2 = teaching experience, 3 = academic qualification, 4 = classroom teacher; $n = 807$, $*p < 0.05$, $**p < 0.01$, $***p < 0.001$; M: mean, SD: standard deviation, JB: job burnout, TE: teacher efficacy, TSR: teacher-student relationship, SEC: social-emotional competence.

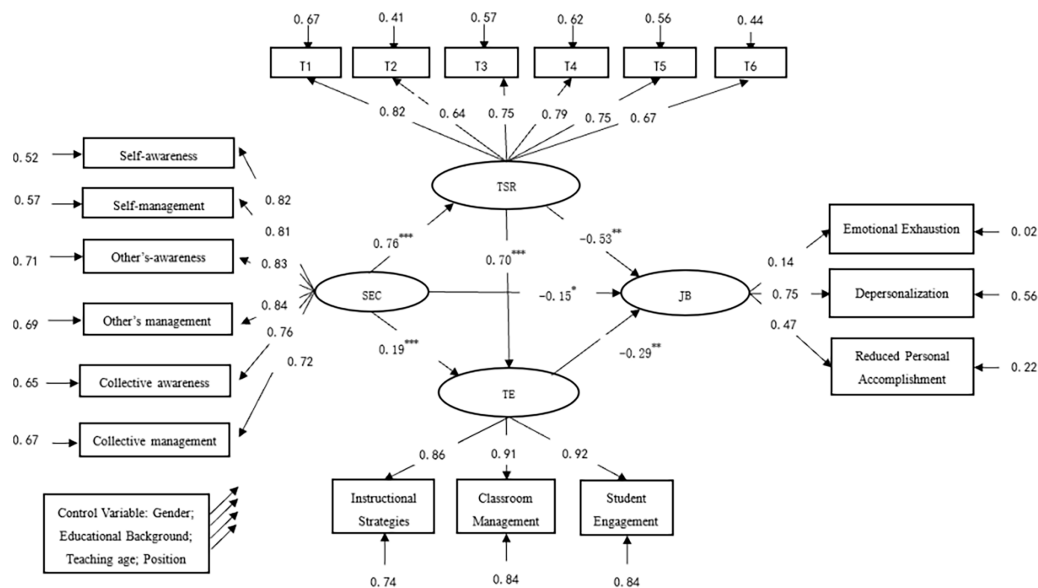


Figure 2. Structural equation model. Variable: SEC—Social emotional Competence, JB—Job Burnout, TE—Teacher efficacy. TSR—Teacher-student relationship; Model fit $\chi^2/df = 4.163$, RMSEA = 0.063, SRMR = 0.034, NFI = 0.943, CFI = 0.956, TLI = 0.948. $*p < 0.05$, $**p < 0.01$, $***p < 0.001$.

demographic variables. The results showed that the fit indices of the model ($\chi^2/df = 4.163$, RMSEA = 0.063, SRMR = 0.034, NFI = 0.943, TLI = 0.948, CFI = 0.956) were within acceptable limits (Wu, 2019). As shown in Figure 2, teachers' SEC negatively and significantly predicted job burnout ($\beta = -0.15$, $p < 0.05$). To further confirm this, the bias-corrected percentile Bootstrap method (5000 resamples) showed that the direct effect of SEC on burnout remained significant (effect size = 0.188, 95% CI $[-0.127, -0.007]$). Consequently, Hypothesis 1 was supported.

Mediation analysis

The effect of teachers' SEC on job burnout was mediated by three distinct pathways (see Figure 2). In order to test the research hypotheses, the mediation effects were examined using the bias-corrected percentile Bootstrap method (5000 resamples). Based on the recommendations of Fang et al. (2012), the results of the bias-corrected percentile Bootstrap were prioritized to determine significance.

Indirect Pathway 1: Teachers' SEC → Teacher-student relationship → Job burnout.

Indirect Pathway 2: Teachers' SEC → Teaching efficacy → Job burnout.

Indirect Pathway 3: Teachers' SEC → Teacher-student relationship → Teaching efficacy → Job burnout.

As is shown in Table 2. First, we tested the independent mediating roles of the teacher-student relationship and teaching efficacy to address Hypothesis 2. The results indicated that the mediating effect of the teacher-student relationship (Indirect Pathway 1) was significant, with an effect size of 0.544 (95% CI $[-0.251, -0.058]$). Similarly, the mediating effect of teaching efficacy (Indirect Pathway 2) was also significant, showing an effect size of 0.071 (95% CI $[-0.046, -0.004]$). Consequently, Hypothesis 2 was supported.

Finally, to address Hypothesis 3, we examined the chain mediating role. The analysis revealed that the chain mediation effect (Indirect Pathway 3) was significant, with an effect size of 0.198 (95% CI $[-0.098, -0.020]$). This confirms that the teacher-student relationship and teaching efficacy play a significant chain mediation role between teachers' SEC and job burnout. Thus, Hypothesis 3 was supported.

Table 2. Summary of hypothesis testing results

Hypothetical path		Point estimate		Product of two coefficients		Bootstrapping				Magnitude of effect	Percentage of intermediation (%)
						Bias-corrected 95% CI		Percentile 95% CI			
		Std.	Unstd.	SE	Z	Lower	Upper	Lower	Upper		
H1	Direct path	−0.146	−0.051	0.031	−1.645	−0.133	−0.009	−0.127	−0.007	0.188	
H2	Indirect Pathway 1	−0.423	−0.141	0.049	−2.878	−0.257	−0.063	−0.251	−0.058	0.544	66.93
	Indirect Pathway 2	−0.055	−0.019	0.011	−1.727	−0.051	−0.005	−0.046	−0.004	0.071	8.70
H3	Indirect Pathway 3	−0.154	−0.054	0.020	−2.700	−0.106	−0.023	−0.098	−0.020	0.198	24.37
	Total effect	−0.778	−0.266	0.080	−3.325	−0.434	−0.117	−0.437	−0.120		

Note. Std. = standardized coefficient; Unstd. = unstandardized coefficient; SE = standard error; Z = Z-statistic.

Table 3. Robustness test of path coefficients across different estimation strategies

Path	Baseline	Adding control variables				Winsorized (5%)	GLS
		+Gender	+Teaching experience	+Educational background	+Class teacher		
M1←X	0.762***	0.758***	0.758***	0.758***	0.759***	0.754***	0.765***
M2←M1	0.695***	0.692***	0.699***	0.701***	0.693***	0.695***	0.726***
M2←X	0.188***	0.190***	0.183***	0.182***	0.188***	0.184***	0.180***
Y←M2	−0.292**	−0.289*	−0.271*	−0.272*	−0.273*	−0.295**	−0.238*
Y←M1	−0.528**	−0.516**	−0.534**	−0.533**	−0.536**	−0.526**	−0.573**
Y←X	−0.146*	−0.168*	−0.166*	−0.167*	−0.163*	−0.143*	−0.133*

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. GLS: generalized least squares.

Robustness test

To examine the reliability and robustness of the model, we conducted robustness checks on the estimation results from the following three aspects. As is shown in Table 3. First, we gradually added control variables to the baseline regression model. Second, we excluded extreme values of the independent and dependent variables by winsorizing at the 5% level. Third, to further test whether the model conclusions depend on a specific estimation method, we supplemented the analysis with generalized least squares (GLS) estimation. The results of these tests show that the direction of the coefficients of the core explanatory variables remains consistent with the baseline model, with only minor differences in coefficient magnitudes and significance levels, indicating that the model is robust.

Collateral findings: heterogeneity analysis

To examine the applicability of the research findings across different teacher groups, this study selected gender, teaching experience, educational background, and class teacher status as grouping variables. A multi-group structural equation model was established in AMOS to test the heterogeneity of path coefficients across groups by comparing the chi-square differences between constrained and unconstrained models. As is shown in Tables 4 and 5. The results indicated that the moderating effect of class teacher status was significant ($\Delta\chi^2(6) = 30.829$, $p < 0.001$), suggesting that the model differs significantly between class teachers and non-class teachers. In contrast, the moderating effects of gender ($\Delta\chi^2(6) = 8.023$, $p = 0.236$), teaching experience ($\Delta\chi^2(6) = 7.194$, $p = 0.303$), and educational background ($\Delta\chi^2(6) = 11.792$, $p = 0.067$) were not significant, indicating cross-group stability of the model across these dimensions. Specifically, class teacher status had a significant moderating effect on four paths: SEC → teacher-student

Table 4. Heterogeneity analysis of the structural model across teacher groups

Grouping variable	Δdf	$\Delta\chi^2$	p
Gender	6	8.023	0.236
Teaching experience	6	7.194	0.303
Educational background	6	11.792	0.067
Class teacher status	6	30.829	0

relationship, teaching efficacy → job burnout, SEC → teaching efficacy, and SEC → job burnout.

Discussion

The results showed that teachers' SEC significantly and negatively predicted job burnout, supporting our first hypothesis. As a critical type of emotional intelligence, SEC is a prerequisite for teachers' practice and development (Bahia et al., 2013). Recognizing and regulating emotions helps teachers combat stress and alleviate burnout (Klusmann et al., 2008). While this buffering function is globally documented (Hascher & Waber, 2021; Moè & Katz, 2021), the Chinese context requires a culturally situated explanation. Specifically, within the Chinese educational context, teachers are embedded in a highly competitive system where societal expectations demand both rigorous academic outcomes and strict adherence to traditional moral standards. Because fulfilling these dual roles requires extraordinary and sustained emotional labor (Tsang et al., 2021), the protective role of SEC is particularly magnified. Therefore, SEC's direct effect on reducing burnout confirms the universal protective nature of emotional intelligence, yet underscores its heightened necessity in high-pressure, collective educational environments. Improving SEC fundamentally dissolves burnout by enhancing emotional control and behavioral flexibility.

Table 5. Path-specific heterogeneity analysis for class teacher status

Path	Δdf	$\Delta \chi^2$	p	Class teacher	Non-class teacher
SEC→TSR	1	11.041	0.001	0.735***	0.807***
TSR→TE	1	3.347	0.067	/	/
TE→JB	1	5.682	0.017	−0.212	−0.371**
TSR→JB	1	0.606	0.436	/	/
SEC→TE	1	10.442	0.001	0.104	0.338***
SEC→JB	1	4.052	0.044	−0.104	−0.224*

Note. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

The results indicated that teacher-student relationship and teaching efficacy independently mediated the relationship between SEC and burnout, supporting Hypothesis 2. First, SEC negatively predicted job burnout largely through the mediating effect of the teacher-student relationship (Corbin et al., 2019), as a cordial relationship helps teachers advance their work, lowering burnout. Second, teaching efficacy serves as an additional pathway, as emotionally competent teachers would evaluate classroom instruction as less challenging (Wang & Wang, 2022). Notably, the teacher-student relationship had a more significant mediating effect than teaching efficacy alone, as SEC primarily fosters relational harmony, which subsequently boosts efficacy. It is widely believed that personal relationships with children afford teachers internal rewards and give meaning to their work (Spilt et al., 2011). Cross-culturally, this highlights a distinctively Chinese characteristic. Unlike Western contexts where professional efficacy is self-derived, Confucian societies place profound moral weight on the teacher-student relationship, making relational harmony a primary source of professional validation. Thus, while positive interactions reduce burnout globally (universality), their prominent mediating role reflects the culturally specific reality that Chinese teachers rely heavily on relational success to sustain occupational well-being (uniqueness).

The results further revealed that the teacher-student relationship and teaching efficacy played a chain mediating role between teachers' SEC and burnout, supporting Hypothesis 3. Teachers with higher SEC better understand students' emotions, build an atmosphere of shared experience (Oberle et al., 2020), and adopt positive strategies. Conversely, teachers with lower SEC struggle to build relationships and manage classrooms, often using punitive strategies (Jones et al., 2013), leading to a vicious circle of burnout. This sequential pathway highlights that positive relational experiences are not only emotionally supportive but also cognitively empowering, reinforcing teachers' beliefs in their professional competence (Bardach et al., 2022). Crucially, this extends existing literature by illustrating that, in the Chinese educational context, a teacher's sense of efficacy is deeply socially embedded. Rather than being a purely individualistic cognitive construct, this efficacy is continually nourished by relational success. While the fundamental psychological mechanism of SEC empowering both relational and cognitive resources is likely universal, the pronounced strength of this chain mediation reflects the cultural emphasis on interpersonal harmony and collective well-being in Chinese schools.

Interpreting the findings through this culturally situated lens highlights SEC's unique contribution to mitigating burnout and opens avenues for future research to explore how different power distances and evaluation systems alter these pathways.

Implications for teacher development research and practice

Theoretically, a teachers' SEC serves as the very foundation for establishing harmonious classroom interactions and fostering a robust sense of instructional capability. Therefore, interpersonal connections and professional self-beliefs are highly likely to act as key conduits translating SEC into reduced burnout. In particular, the potential pathways involving teacher-student relationship and teaching efficacy have rarely been examined as an integrated process.

The findings of this study provide several practical implications for teacher development. Because teachers' SEC reduces burnout directly and indirectly, strengthening their personal and relational resources serves as an effective mitigation pathway. First, teacher professional development programs should emphasize cultivating SEC. As an essential resource enabling teachers to manage emotional demands and maintain well-being, training could incorporate structured workshops on emotional awareness, regulation, and empathy. Participatory formats, including mindfulness and scenario-based reflection, help teachers develop practical strategies for challenging situations. Additionally, ongoing follow-up support facilitates translating this social emotional knowledge into concrete instructional and classroom management strategies. Second, the findings highlight the mediating role of teacher-student relationship in the association between teachers' SEC and job burnout, suggesting it is a crucial relational resource enhancing motivation and buffering stress. Practically, schools could incorporate relationship-building into professional development, focusing on communication, empathy, and constructive dialogue. Creating opportunities for meaningful interactions, such as structured feedback or reflective dialogue sessions, helps teachers understand students' perspectives. Through these approaches, the teacher-student relationship gradually becomes a source of emotional support contributing to professional well-being. Third, the results further reveal that teaching efficacy plays a key role in the chain mechanism linking SEC and teacher-student relationships to reduced job burnout. This suggests strengthening teaching efficacy transforms personal and relational resources into sustained

professional resilience. Schools may support this by linking emotional competence development with instructional improvement, guiding teachers to apply emotional regulation and empathy in instructional decision-making.

Furthermore, feedback derived from classroom interactions helps teachers refine their practices. Institutional structures, such as professional learning communities, further facilitate integrating these resources into effective teaching. Overall, by strengthening teachers' SEC, fostering supportive teacher-student relationship, and enhancing teaching efficacy, schools may create a resource-based developmental pathway that helps reduce teacher job burnout and supports teachers' long-term professional sustainability.

Limitations and future recommendations

Several limitations should be acknowledged. First, the cross-sectional design precludes causal inferences, and the reliance on self-reported data may introduce bias. Second, the sample was restricted to primary school teachers from a single geographical area, which limits generalizability to other regions or academic stages. Given that student characteristics and teaching requirements vary across educational levels, future research should incorporate academic stage as a variable to examine cross-stage model stability. Third, the gender imbalance in our sample (approximately 20% male) reflects the actual distribution in China's primary education context; however, the findings should be generalized to male teachers with caution, and future studies with larger male samples are needed. Fourth, this study analyzed both SEC and job burnout as holistic constructs. It did not delve into how each of the six dimensions of SEC individually influences teacher-student relationships, teaching efficacy, and different facets of job burnout, nor did it adequately integrate traditional factors within the Chinese educational context (e.g., teacher authority) into the analysis. Similarly, examining burnout as a unidimensional construct may obscure differentiated mechanisms across its three dimensions (emotional exhaustion, reduced personal accomplishment, and depersonalization). Future research could employ more in-depth measurement models to directly examine the differentiated pathways of each localized SEC dimension and each burnout dimension, thereby revealing more nuanced mechanisms. Fifth, the relationship between SEC and teaching efficacy warrants further investigation. Future research could introduce variables such as school organizational support and teacher collective efficacy to explore factors that may moderate or mediate the relationship between SEC and teaching efficacy, thereby providing a more comprehensive understanding of the formation mechanisms of teacher efficacy. Despite these limitations, this study provides valuable insights into the mechanisms linking teachers' SEC to job burnout within the Chinese educational context.

Conclusion

Firstly, teachers' SEC significantly negatively affected job burnout. Secondly, the teacher-student relationship and teaching efficacy play a significant independent mediating role between teachers' SEC and job burnout. Lastly,

the teacher-student relationship and teaching efficacy play a chain mediating role between teachers' SEC and job burnout.

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Conflicts of Interest: The authors declare no conflicts of interest.

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