

# Personality Over Demographics: Hierarchical Evidence for Big Five Predictors of Emotional Exhaustion, Cynicism, and Professional Efficacy in Vietnamese Primary School Teachers

Thi Thuy Ngan Ta<sup>1</sup>, Van Quan Bui<sup>2</sup>

<sup>1</sup>*Haiduong University,*

<sup>2</sup>*Hanoi Foreign Languages and Technology College*

Teacher burnout poses a significant challenge to educational systems worldwide, yet evidence regarding its psychological predictors remains uneven across cultural contexts. Drawing on Transactional Stress Theory and the Job Demands–Resources (JD–R) model, the present study examined the relative and incremental contributions of demographic characteristics and Big Five personality traits to emotional exhaustion, cynicism, and professional efficacy among Vietnamese primary school teachers. A sample of 305 teachers completed measures of burnout, personality traits, and demographic characteristics. Hierarchical regression analyses indicated that demographic variables accounted for limited variance across burnout dimensions. In contrast, Big Five personality traits explained substantial additional variance beyond demographics. Conscientiousness emerged as the only trait consistently associated with all three burnout dimensions, negatively predicting emotional exhaustion and cynicism and positively predicting professional efficacy. Neuroticism was uniquely associated with emotional exhaustion, whereas agreeableness and conscientiousness were most relevant for cynicism, and agreeableness, conscientiousness, and openness to experience predicted professional efficacy. These findings suggest that while established personality–burnout associations largely replicate in direction within a collectivist educational context, cultural characteristics may influence the relative salience of specific dispositional mechanisms. The study extends dominant burnout frameworks beyond Western settings and highlights the role of personality traits as proximal psychological factors in understanding teacher burnout.

## INTRODUCTION

Teacher burnout has emerged as a critical challenge in contemporary educational systems due to its detrimental consequences for teachers' psychological well-being, instructional quality, and long-term

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*Author info:* Correspondence should be sent to: Van Quan Bui, Hanoi Foreign Languages and Technology College. *Email:* buianhquan1961@gmail.com

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career sustainability (Burić et al., 2019; Klusmann et al., 2022; Zhang et al., 2022). Burnout is commonly conceptualized as a multidimensional syndrome encompassing emotional exhaustion, cynicism (or depersonalization), and reduced professional efficacy, reflecting emotional depletion, detached or negative work-related attitudes, and diminished perceptions of occupational competence (Maslach & Leiter, 2016a). Given its pervasive impact, identifying robust predictors of teacher burnout remains a central concern in educational and occupational research.

Early research has suggested that demographic variables are salient predictors of teacher burnout. For instance, age and teaching experience have been reported to be negatively associated with emotional exhaustion (Brewer & Shapard, 2004), while male teachers have been shown to report higher levels of cynicism than their female counterparts (Van Horn et al., 1999). However, accumulated evidence indicates that demographic variables explain only a small proportion of variance in burnout outcomes, accounting for approximately 1% of the variance in emotional exhaustion, 3% in depersonalization, and 10% in professional efficacy. Moreover, several studies have reported nonsignificant associations between demographic factors and core burnout dimensions (Cano-García et al., 2005). These modest and inconsistent findings suggest that demographic characteristics function primarily as distal correlates rather than proximal determinants of teacher burnout. Consequently, recent research has increasingly shifted attention toward psychological mechanisms that more directly shape how teachers experience and respond to occupational stressors (Madigan & Kim, 2021; Skaalvik & Skaalvik, 2010).

Transactional stress theory provides a foundational framework for understanding these proximal mechanisms by conceptualizing burnout as the outcome of dynamic interactions between individuals and their work environments, mediated by cognitive appraisal and coping processes (Lazarus & Folkman, 1984). Within this framework, personality traits play a central role in shaping how teachers perceive, interpret and respond to job demands. Primary appraisal involves evaluating whether teaching-related demands, such as workload, classroom management challenges, or administrative pressure, are threatening, whereas secondary appraisal concerns perceived coping resources and efficacy (Lazarus & Folkman, 1984). The Big Five personality traits can systematically influence both appraisal processes (Kim et al., 2019; Roloff et al., 2022). Specifically, teachers high in Neuroticism are more likely to appraise demands as emotionally taxing due to heightened stress sensitivity and negative affectivity, thereby increasing vulnerability to emotional exhaustion (Robins et al., 2018; Sosnowska et al., 2019). In contrast, teachers high in Conscientiousness tend to appraise demands as manageable challenges, supported by greater self-discipline, planning and problem-focused coping, which may protect against exhaustion and inefficacy (Chen et al., 2020; Zhong et al., 2025). Similarly, Extraversion and Agreeableness can promote more positive appraisals of interpersonal demands by facilitating social engagement, emotional expressiveness and cooperative coping, thereby reducing cynicism and depersonalization (Acaray & Yildirim, 2017; Soomro et al., 2022). Although less consistently linked to burnout, Openness to Experience may also serve as a protective factor by fostering cognitive flexibility and adaptive meaning-making when teachers encounter novel or ambiguous demands.

The Job Demands–Resources (JD–R) model complements this cognitive–appraisal perspective by situating burnout within a broader motivational and structural context (Bakker & Demerouti, 2007; Schaufeli & Taris, 2013). According to the JD–R model, burnout develops primarily through a health impairment process in which sustained exposure to excessive job demands, such as workload, emotional labor, and role conflict, lead to depletion of mental and emotional resources, whereas job resources, such as autonomy, social support, and performance feedback, buffer these effects and support professional efficacy. Within this framework, demographic characteristics (e.g., age, gender, and teaching experience) are best understood as distal structural factors that shape teachers’ exposure to job demands and access to job resources, rather than as direct causes of burnout (Brewer & Shapard, 2004; Cano-García et al., 2005; Van Horn et al., 1999).

In contrast, personality traits are increasingly conceptualized within the JD–R model as more proximal personal resources or vulnerabilities that directly shape burnout outcomes. Traits such as Conscientiousness, Extraversion and emotional stability are associated with stronger self-regulation and work engagement, reducing emotional exhaustion and cynicism while supporting professional efficacy (Bardach et al., 2022; Gottschling et al., 2016). Neuroticism, by contrast, is linked to heightened emotional reactivity and impaired recovery, increasing susceptibility to resource depletion and burnout (Yang et al., 2018). Together, transactional stress theory and the JD–R model converge in highlighting personality traits as key mechanisms explaining why teachers exposed to similar job demands may experience markedly different levels of burnout.

Despite the strong theoretical integration of personality, demographic characteristics, and teacher burnout, much of the existing empirical evidence has been accumulated in Western educational contexts, where cultural norms tend to emphasize individual autonomy, self-expression, and personal coping (Bümen, 2010; Cano-García et al., 2005; Helwig, 2006; Inglehart & Oyserman, 2004). Although related studies have also been conducted in non-Western settings, cross-cultural evidence remains uneven, and further research is needed to examine whether established theoretical patterns hold across diverse cultural and institutional contexts. Vietnam thus offers a valuable context for extending this line of research. As a collectivist society characterized by relational interdependence, hierarchical role structures, and strong norms of duty fulfillment, Vietnam differs in meaningful ways from many Western settings, providing an opportunity to examine the applicability of dominant burnout frameworks in a culturally distinct educational environment (Ho et al., 2022; Hofstede, 2011; Tran, 2018).

Importantly, cultural differences do not undermine the relevance of transactional stress and JD–R mechanisms. Rather, these mechanisms may manifest differently across cultural contexts while remaining theoretically applicable. In collectivist settings such as Vietnam, traits like agreeableness and extraversion may be particularly relevant because social harmony, cooperation, and relational support are central to professional functioning (Tychmanowicz et al., 2021). Conscientiousness may also play a salient buffering role in an educational culture that emphasizes moral responsibility, role obligation, and respect for authority (Hoxha & Ramadani, 2023). Conversely, the influence of Neuroticism may be shaped by cultural norms of emotional restraint and heightened concern for social evaluation, potentially intensifying internal stress while limiting

overt coping strategies (Chiu & Kosinski, 1999). Demographic factors may likewise carry culturally specific meanings, for example, age and teaching experience are closely linked to seniority, status, and informal access to institutional resources, while remaining consistent with their theorized distal role within the JD–R framework.

Taken together, these considerations suggest that demographic characteristics are likely to show modest and potentially inconsistent associations with burnout, whereas personality traits may play a more proximal role in shaping emotional exhaustion, cynicism, and professional efficacy among Vietnamese teachers. Examining this hierarchical pattern in a non-Western, collectivist context provides an opportunity to evaluate whether established burnout frameworks operate similarly in culturally distinct educational settings.

### **The Present Study**

Guided by transactional stress theory and the JD–R framework, the present study examines the relative and incremental contributions of demographic characteristics and Big Five personality traits to teacher burnout among Vietnamese primary school teachers. Consistent with prior evidence, the study first evaluates associations between demographic variables and the three burnout dimensions. It then tests whether personality traits explain additional variance beyond demographic factors, thereby assessing the centrality of proximal psychological mechanisms in burnout processes. Based on theory and prior empirical findings, the following hypotheses are proposed:

#### H1 (Demographic effects).

Age, gender, and teaching experience will show small and inconsistent associations with emotional exhaustion, cynicism and professional efficacy.

#### H2 (Incremental validity of personality).

Big Five personality traits will explain significant additional variance in emotional exhaustion, cynicism, and professional efficacy beyond demographic characteristics.

#### H3 (Neuroticism as a risk factor).

Neuroticism will be positively associated with emotional exhaustion and cynicism and negatively associated with professional efficacy.

#### H4 (Protective personality traits).

Conscientiousness, Agreeableness, and Extraversion will be negatively associated with emotional exhaustion and cynicism and positively associated with professional efficacy.

#### H5 (Context-dependent role of Openness).

Openness to Experience will show weaker and context-dependent associations with burnout dimensions; specifically, it will be positively associated with professional efficacy, while its associations with emotional exhaustion and cynicism will be non-significant or variable.

## **METHOD**

### **Participants**

The participants were 305 primary school teachers recruited for the present study. The sample was predominantly female, with 283 women

(92.8%) and 22 men (7.2%). Participants ranged in age from 22.1 to 55.7 years, with a mean age of 39.9 years ( $SD = 8.22$ ). Teaching experience varied considerably, ranging from 1 to 36 years, with a mean of 17.0 years ( $SD = 8.65$ ) and a median of 15.0 years. Data on teaching experience were missing for one participant (0.3%). Overall, the sample represented a wide range of ages and career stages, allowing for meaningful examination of demographic and personality-related differences in burnout outcomes.

### Measurements

#### Teaching Burnout

Teaching burnout was assessed using the Maslach Burnout Inventory, which captures three dimensions: exhaustion, cynicism and reduced professional efficacy (MBI; Schaufeli et al., 2002). The Vietnamese version of the MBI has been validated in a student sample, demonstrating satisfactory psychometric properties, including support for its three-factor structure and expected associations with psychological distress indicators such as depression symptoms (Vu & Bosmans, 2021). To ensure contextual relevance, item wording was systematically adapted to for teaching (e.g., “*I feel emotionally drained by my studies*” was modified to “*I feel emotionally drained by my teaching*”), while preserving the original construct meaning.

**Emotional Exhaustion.** Emotional exhaustion was assessed using the Exhaustion subscale of the Maslach Burnout Inventory. It consists of five items measuring emotional and physical fatigue related to work activities (e.g., “*I feel used up at the end of a day at school*”). Items were adapted to ensure relevance to teaching-related tasks. Responses were rated on a 7-point Likert scale ranging from 0 (never) to 6 (always), with higher scores indicating greater emotional exhaustion. Internal consistency in the present sample was excellent ( $\alpha = .91$ ).

**Cynicism (Disengagement).** Cynicism was measured using the Cynicism subscale of the MBI. The subscale comprises four items assessing psychological disengagement and detached attitudes toward one’s work (e.g., “*I doubt the significance of my teaching*”). Items were adapted to reflect the teaching profession. Responses were recorded on the same 7-point scale (0 = never to 6 = always), with higher scores reflecting greater cynicism. The subscale demonstrated excellent internal consistency in this study ( $\alpha = .91$ ).

**Professional Efficacy.** Professional efficacy was assessed using the Professional Efficacy subscale of the MBI. The subscale includes six items evaluating perceived competence and effectiveness in professional activities (e.g., “*I can effectively solve the problems that arise in my teaching*”). All items were adapted to the teaching context. Responses were rated on a 7-point scale ranging from 0 (never) to 6 (always), with higher scores indicating greater professional efficacy. Internal consistency in the current sample was excellent ( $\alpha = .92$ ).

#### Big Five Personality Traits

Personality traits were measured using the Vietnamese version of the Big Five Inventory (BFI; John & Srivastava, 1999). The BFI measures five broad personality dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. Participants responded to all items on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Reverse-scored items were recoded prior to analysis, with higher scores indicating higher levels of the respective traits. Evidence from cross-cultural research conducted in Southeast Asia, including Vietnam, supports the structural validity and cross-cultural applicability of the five-factor model, including replication of the five-

factor structure and evidence of internal and external validity (Bühler et al., 2020).

**Agreeableness.** Was assessed with nine items (four reverse-scored) reflecting cooperative, trusting, and prosocial tendencies (e.g., “*Is generally trusting*” and reverse-items like “*Is sometimes rude to others*”). The subscale demonstrated good internal consistency ( $\alpha = .83$ ).

**Extraversion.** Was measured using eight items (three reverse-scored) assessing sociability, assertiveness, and positive affect (e.g., “*Is talkative*”). Internal consistency was acceptable ( $\alpha = .68$ ).

**Conscientiousness.** Was assessed with nine items (four reverse-scored) capturing organization, persistence, and goal-directed behavior (e.g., “*Does a thorough job*”). The subscale showed good internal consistency ( $\alpha = .82$ ).

**Neuroticism.** Was measured using eight items (three reverse-scored) assessing emotional instability and stress reactivity (e.g., “*Gets nervous easily*”). Internal consistency was acceptable ( $\alpha = .70$ ).

**Openness.** Was assessed with ten items (four reverse-scored) reflecting intellectual curiosity, imagination, and openness to new ideas (e.g., “*Is original, comes up with new ideas*”). The subscale showed acceptable internal consistency ( $\alpha = .70$ ).

#### **Procedure**

Data were collected using a cross-sectional online survey administered to primary school teachers in Vietnam. Participants were recruited through professional teaching networks, with invitations distributed via email and commonly used messaging platforms. Prior to participation, teachers were informed about the purpose of the study, which examined individual and work-related factors associated with teacher burnout and occupational well-being. Participation was voluntary, and informed consent was obtained electronically via a consent checkbox before access to the questionnaire. Responses were anonymous, and no personally identifiable information was collected.

The survey included measures of emotional exhaustion, cynicism, and professional efficacy using adapted subscales of the Maslach Burnout Inventory, as well as measures of the Big Five personality traits. Demographic information, including age, gender, and years of teaching experience, was also collected. The questionnaire required approximately 15–20 minutes to complete, and no monetary or material incentives were provided.

The study involved a minimal-risk, anonymous survey of adult participants. As the authors’ institution does not have a formal institutional review board or equivalent ethics committee, formal ethical approval could not be obtained. Nevertheless, all procedures were designed and conducted in accordance with internationally recognized ethical principles for research involving human participants, including those outlined in the Declaration of Helsinki. Participants were informed about the study prior to participation, provided informed consent, and were assured of anonymity, confidentiality, and their right to withdraw at any time without penalty.

Data were automatically recorded upon submission. Prior to analysis, the dataset was screened for accuracy and internal consistency. The alignment between demographic variables (e.g., age and teaching experience) was examined to identify implausible or logically inconsistent entries. One case was identified with an erroneous self-reported data-of-birth value, resulting in an implausible age (17.1 years) relative to the reported teaching experience (22 years). The value was treated as missing.

No other inconsistencies were detected. After data screening, the final analytic sample consisted of 305 participants. All subsequent analyses were conducted using the cleaned dataset.

### **Analytic Plan**

All analyses were conducted in R (R Core Team, 2024). For each multi-item measure, mean scores were calculated to represent the underlying construct, including emotional exhaustion, cynicism, professional efficacy, and the five personality traits. Higher scores reflected higher levels of the respective constructs.

Descriptive statistics, including means, standard deviations, and observed ranges, were computed for all study variables. Bivariate associations among burnout dimensions, Big Five personality traits, age, and teaching experience were examined using Pearson product-moment correlation coefficients. Following established conventions, correlation coefficients of approximately .10 were interpreted as small, .30 as moderate, and .50 or higher as large in magnitude (Cohen, 2013).

To test the study hypotheses, three separate hierarchical multiple regression analyses were conducted. In each analysis, emotional exhaustion, cynicism, and professional efficacy served as the respective criterion (dependent) variables (Models 1, 2, and 3). In each model, age, gender and teaching experience were entered simultaneously in the first step. In the second step, the five Big Five personality traits, conscientiousness, agreeableness, extraversion, openness to experience, and neuroticism, were entered simultaneously while retaining the demographic variables. Standardized regression coefficients ( $\beta$ ) were used and model evaluation focused on coefficients of determination ( $R^2$ ) and changes in explained variance ( $\Delta R^2$ ).

Prior to regression analyses, multicollinearity diagnostics were evaluated using variance inflation factors (VIFs). Given the conceptual overlap between age and teaching experience, particular attention was paid to potential collinearity between these variables. Where high multicollinearity was detected, model specification was adjusted based on theoretical relevance, prioritizing variables more proximal to the occupational context.

To assess the assumptions of ordinary least squares (OLS) regression, heteroscedasticity was evaluated using the Breusch-Pagan test, and robustness checks were conducted using heteroscedasticity-consistent standard errors (HC3).

All statistical tests were two-tailed, and significance was evaluated using an alpha level of .05.

## **RESULTS**

### **Descriptive Analyses**

Mean scores and standard deviations for the study variables are presented in Table 1. Emotional exhaustion ( $M = 1.54$ ,  $SD = 1.15$ ), cynicism ( $M = 0.82$ ,  $SD = 1.06$ ) and professional efficacy ( $M = 4.35$ ,  $SD = 1.26$ ) showed moderate variability. The Big Five personality traits also demonstrated moderate variability, with mean scores ranging from 1.88 (neuroticism) to 3.50 (agreeableness).

Inspection of skewness and kurtosis indicated no severe deviations from normality (see Table 1). These results support the use of parametric analyses.

Table 1. Descriptive Statistics for Study Variables

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>SE</i>
EE	305	1.54	1.15	0.00	6.00	0.50	-0.15	0.07
CN	305	0.82	1.06	0.00	6.00	1.37	1.38	0.06
PE	305	4.35	1.26	0.00	6.00	-0.99	1.01	0.07
OE	305	2.42	0.50	0.20	4.20	0.03	1.80	0.03
AG	305	3.50	0.60	2.00	4.44	-0.37	-0.70	0.03
CO	305	3.39	0.60	1.78	4.44	-0.15	-0.78	0.03
NE	305	1.88	0.58	0.38	3.88	-0.23	0.22	0.03
EX	305	2.93	0.53	1.12	4.38	0.07	0.05	0.03
TE	304	16.95	8.65	1.00	36.00	0.26	-0.90	0.50
Age	305	39.92	8.22	22.06	55.71	-0.10	-0.95	0.47

*Note.* EE = emotional exhaustion; CN = Cynicism; PE = professional efficacy; OE = openness to experience; AG = agreeableness; CO = conscientiousness; NE = neuroticism; EX = extraversion; TE = Teaching experience; *M* = mean; *SD* = standard deviation; *SE* = standard error

### Preliminary Analysis

Preliminary analyses examined gender differences in burnout dimensions and bivariate correlations among age, teaching experience, personality traits, and burnout variables. Gender differences were tested using Welch's *t*-tests. Results indicated no statistically significant gender differences in emotional exhaustion,  $t(23.89) = 0.75, p = .46$ , cynicism,  $t(24.46) = 0.41, p = .69$ , or professional efficacy,  $t(24.32) = 0.07, p = .95$ . Mean differences between male and female teachers were small across all three outcomes.

Pearson correlation coefficients among study variables are presented in Table 2. Emotional exhaustion was positively correlated with cynicism ( $r = .69, p < .001$ ) and neuroticism ( $r = .38, p < .001$ ), and negatively correlated with agreeableness ( $r = -.36, p < .001$ ), conscientiousness ( $r = -.38, p < .001$ ) and extraversion ( $r = -.25, p < .001$ ). Cynicism was positively correlated with neuroticism ( $r = .26, p < .001$ ) and negatively correlated with agreeableness ( $r = -.40, p < .001$ ), conscientiousness ( $r = -.37, p < .001$ ), and extraversion ( $r = -.27, p < .001$ ).

Professional efficacy was negatively correlated with emotional exhaustion ( $r = -.22, p < .001$ ), cynicism ( $r = -.32, p < .001$ ), and neuroticism ( $r = -.32, p < .001$ ), and positively correlated with openness to experience ( $r = .37, p < .001$ ), agreeableness ( $r = .54, p < .001$ ), conscientiousness ( $r = .52, p < .001$ ), and extraversion ( $r = .49, p < .001$ ).

Age and teaching experience were strongly correlated with each other ( $r = .93, p < .001$ ).

Table 2. Correlations Among Study Variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. EE	—									
2. CN	.69***	—								
3. PE	-.22***	-.32***	—							
4. OE	-.05	-.03	.37***	—						
5. AG	-.36***	-.40***	.54***	.25***	—					
6. CO	-.38***	-.37***	.52***	.27***	.81***	—				
7. NE	.38***	.26***	-.32***	-.07	-.56***	-.57***	—			
8. EX	-.25***	-.27***	.49***	.45***	.67***	.67***	-.58***	—		
9. TE	.08	.08	.13*	.05	.19**	.27***	-.25***	.18***	—	
10. Age	.10 <sup>+</sup>	.13*	.07	.02	.15*	.22***	-.22***	.14*	.93***	—

*Note.* EE = emotional exhaustion; CN = Cynicism; PE = professional efficacy; OE = openness to experience; AG = agreeableness; CO = conscientiousness; NE = neuroticism; EX = extraversion; TE = Teaching experience.

<sup>+</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

#### Hierarchical Regression Analyses

Three separate hierarchical regression models were estimated for emotional exhaustion, cynicism, and professional efficacy. The results of these analyses are reported in Table 3.

For emotional exhaustion, demographic variables explained a small proportion of variance at Step 1 ( $R^2 = .008$ ). The addition of personality traits at Step 2 significantly increased explained variance ( $\Delta R^2 = .236$ ,  $p < .001$ ), yielding a total  $R^2$  of .244. In the final model, teaching experience ( $\beta = .22$ ,  $p < .001$ ), conscientiousness ( $\beta = -.28$ ,  $p < .01$ ), and neuroticism ( $\beta = .30$ ,  $p < .001$ ) were significant predictors.

For cynicism, Step 1 explained 0.7% of the variance ( $R^2 = .007$ ). The inclusion of personality traits at Step 2 significantly increased explained variance ( $\Delta R^2 = .198$ ,  $p < .001$ ), resulting in a total  $R^2$  of .205. In the final model, teaching experience ( $\beta = .19$ ,  $p < .001$ ), agreeableness ( $\beta = -.27$ ,  $p < .01$ ), and conscientiousness ( $\beta = -.19$ ,  $p < .05$ ) were significant predictors.

For professional efficacy, Step 1 explained 1.7% of the variance ( $R^2 = .017$ ), with teaching experience initially emerging as a significant predictor ( $\beta = .13$ ,  $p < .01$ ). The addition of personality traits at Step 2 significantly increased explained variance ( $\Delta R^2 = .353$ ,  $p < .001$ ), yielding a total  $R^2$  of .370. In the final model, openness to experience ( $\beta = .22$ ,  $p < .001$ ), agreeableness ( $\beta = .29$ ,  $p < .001$ ), and conscientiousness ( $\beta = .17$ ,  $p < .05$ ) were significant predictors, whereas teaching experience and the remaining variables were not.

To assess potential multicollinearity, VIFs were examined. When both age and teaching experience were included, VIF values exceeded acceptable thresholds (VIFs = 7.51 for age and 7.75 for teaching experience), indicating substantial multicollinearity. Given this high collinearity and the conceptual relevance of teaching experience as a proximal work-related variable, age was excluded from subsequent regression analyses to improve model stability. Following this adjustment, all VIF values were within acceptable ranges (all VIFs < 3.5).

To assess the robustness of these findings and the assumptions underlying OLS regression, additional diagnostics analyses were conducted. The Breusch–Pagan test indicated evidence of heteroscedasticity for the cynicism model ( $BP = 17.58, p < .05$ ), but not for emotional exhaustion ( $BP = 12.50, p = .085$ ) or professional efficacy ( $BP = 3.15, p = .871$ ). All models were re-estimated using HC3. The pattern of results remained substantively unchanged across all models, with the same predictors emerging as statistically significant.

Table 3. Hierarchical Regression Analyses Predicting Burnout Dimensions

	Model 1			Model 2			Model 3		
	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$	$\beta$	$R^2$	$\Delta R^2$
<i>Step 1</i>		.008			.007			.017	
Gndr	-.04			-.01			.01		
TE	-.07			.08			.13**		
<i>Step 2</i>		.244	.236***		.205	.198***		.370	.353***
Gndr	-.01			.005			.01		
TE	.22***			.19***			.005		
OE	.002			.08			.22***		
AG	-.10			-.27**			.29***		
CO	-.28**			-.19*			.17*		
EX	.14			.01			.08		
NE	.30***			.06			-.002		

*Note.* Gndr = Gender; Gender was coded 0 = male (reference group) and 1 = female. TE = Teaching experience; OE = openness to experience; AG = agreeableness; CO = conscientiousness; EX = extraversion; NE = neuroticism;  $\beta$  = standardized regression coefficient;  $R^2$  = coefficient of determination;  $\Delta R^2$  = change in  $R^2$ ; Model 1 = Emotional Exhaustion; Model 2 = Cynicism; Model 3 = Professional Efficacy  
\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

## DISCUSSION

The present study examined the relative and incremental contributions of demographic characteristics and Big Five personality traits to three core dimensions of teacher burnout, emotional exhaustion, cynicism, and professional efficacy, among Vietnamese primary school teachers. Using hierarchical regression models grounded in transactional stress theory and the JD–R framework, demographic variables were conceptualized as distal correlates, whereas personality traits were examined as more proximal psychological predictors (Bakker & Demerouti, 2007; Lazarus & Folkman, 1984). By modeling these predictors simultaneously across multiple burnout dimensions, the study provides an empirical test of theoretical assumptions that have been widely articulated but less frequently evaluated within a unified analytic framework, particularly in non-Western contexts.

### Demographic Characteristics as Distal Correlates of Burnout

Consistent with prior research, demographic characteristics explained only a small proportion of variance across all three burnout dimensions (e.g., Van Horn et al., 1999). These findings reinforce the view, articulated in both transactional stress theory and the JD–R model, that demographic characteristics function primarily as distal contextual factors rather than as proximal determinants of burnout (Bakker & Demerouti, 2007; Lazarus & Folkman, 1984).

Demographic variables may shape teachers' exposure to job demands and access to job resources through mechanisms such as

seniority, role expectations, or accumulated experience (Mazzetti et al., 2023), yet they appear insufficient to explain meaningful variability in burnout experiences on their own. This pattern is consistent with prior reviews indicating that demographic variables typically account for only a small proportion of variance in burnout outcomes across occupations (e.g., Jovanović et al., 2025). Importantly, the modest explanatory power of demographic characteristics (e.g., gender, and teaching experience) in the present Vietnamese sample aligns with patterns observed in prior research, including predominantly Western studies as well as investigations in Asian and other non-Western contexts (e.g., Lau et al., 2005; Van Horn et al., 1999). This consistency suggests that demographic characteristics have minimal explanatory power for teacher burnout and that this pattern may generalize across cultural contexts.

#### **Personality Traits as Proximal Predictors of Burnout Dimensions**

In contrast to demographic characteristics, Big Five personality traits accounted for substantial additional variance across all three burnout dimensions. The inclusion of personality traits produced large increases in explained variance, particularly for emotional exhaustion and professional efficacy. These results support the theoretical proposition that personality traits operate as proximal psychological mechanisms shaping stress appraisal, coping, and motivational processes (Bakker & Demerouti, 2007; Lazarus & Folkman, 1984; Swider & Zimmerman, 2010). Conscientiousness emerged as the only trait with consistent protective effects across all three dimensions, underscoring self-regulatory dispositions as a central personal resource linking the emotional, attitudinal, and competence-related aspects of burnout.

For emotional exhaustion model, neuroticism was positively associated with emotional exhaustion, whereas conscientiousness showed a negative association. These findings suggest the roles of affective vulnerability and self-regulatory capacity in teachers' emotional depletion. From the perspective of Transactional Stress Theory, individuals high in neuroticism are more likely to appraise occupational demands as threatening and emotionally taxing due to heightened emotional reactivity (Lazarus & Folkman, 1984). Within the JD-R framework, neuroticism may function as a vulnerability factor that amplifies perceived job demands while limiting effective coping, whereas conscientiousness may operate as a personal resource supporting structured, problem-focused coping and sustained self-regulation (Bakker & Demerouti, 2007; Swider & Zimmerman, 2010).

By contrast, openness to experience, agreeableness, and extraversion were not significantly associated with emotional exhaustion. This pattern diverges from prior meta-analytic findings suggesting broader trait involvement in exhaustion (Liu et al., 2022). Interpersonal orientation and cognitive flexibility may therefore be less strongly related to affective depletion in this context, although this explanation remains tentative and may reflect contextual influences.

For cynicism model, agreeableness and conscientiousness emerged as significant negative predictors of cynicism, suggesting the roles of interpersonal responsibility and self-regulatory commitment in shaping attitudinal disengagement. From the perspective of Transactional Stress Theory, such disengagement may arise when individuals appraise stressors as persistent or uncontrollable (Lazarus & Folkman, 1984; Maslach & Leiter, 2016a). Within the JD-R framework, agreeableness and conscientiousness may function as personal resources that promote adaptive coping, sustained engagement, and alignment with professional

goals, thereby reducing the likelihood of withdrawal and depersonalization (Bakker & Demerouti, 2007; Swider & Zimmerman, 2010).

By contrast, neuroticism, extraversion, and openness to experience were not significantly associated with cynicism, suggesting that affective vulnerability and expressive or cognitive tendencies may be more closely linked to emotional exhaustion than to attitudinal disengagement.

Finally, the professional efficacy model showed a distinct pattern, with agreeableness, conscientiousness, and openness to experience emerging as significant positive predictors. From the perspective of Transactional Stress Theory, positive appraisals of efficacy may arise when teachers perceive themselves as capable of managing work demands through effective coping (Lazarus & Folkman, 1984; Maslach et al., 2001; Maslach & Leiter, 2016a, 2016b). Within the JD–R framework, these three traits may function as personal resources that facilitate goal achievement, reduce the impact of job demands, and promote positive work-related self-evaluations (Bakker & Demerouti, 2007; Swider & Zimmerman, 2010).

In contrast, extraversion and neuroticism were not significant predictors of professional efficacy in the final model. This pattern is compatible with evidence that conscientiousness shows relatively consistent links to teacher outcomes, whereas associations involving other traits may depend more on contextual fit and measurement approach (Huwaë & Schaafsma, 2018; Markus & Kitayama, 2014; Maslach et al., 2001).

Cultural characteristics may partially account for the observed patterns. In collectivist and hierarchical educational contexts such as Vietnam, norms emphasize emotional restraint, sensitivity to social evaluation, harmony-preserving regulation, and role obligations. These norms are likely to shape how stress is experienced and expressed. They may also be associated with greater emotional costs linked to neuroticism, while strengthening the protective roles of conscientiousness, agreeableness, and openness. Agreeableness may facilitate cooperative interactions and the maintenance of social harmony. This may help mitigate cynical attitudes and interpersonal withdrawal (Hook et al., 2009; Koole et al., 2001). Conscientiousness may also be associated with lower levels of cynicism. This may occur through stronger commitment to professional duties, persistence, and adherence to institutional values (Barrick et al., 2001; Bellibaş et al., 2024; Farrukh et al., 2017; Felfe et al., 2008). These tendencies may be particularly relevant in contexts where disengagement carries social and moral costs (Sullivan et al., 2016). Openness to experience may play a contextually relevant role. Beyond cognitive flexibility and learning, it may support adaptive alignment with shared norms and evolving expectations. This may contribute to teachers' sense of professional efficacy, even in relatively standardized systems (Judge et al., 1999).

These interpretations are broadly consistent with prior research in collectivist and non-Western contexts and with theories suggesting that culture may shape stress appraisal and coping without altering the core mechanisms of Transactional Stress Theory or the JD–R model (Bakker & Demerouti, 2007; Choi et al., 2014; Hoang & Pham, 2018; Hoxha & Ramadani, 2023; Klein et al., 2024; Lazarus & Folkman, 1984; Markus & Kitayama, 2014; Oyserman et al., 2002; Tsai et al., 2021; Tychmanowicz et al., 2021). However, cultural characteristics were not directly assessed in the present study; therefore, these interpretations should be considered tentative.

The present study contributes to theory by clarifying the hierarchical distinction between distal and proximal predictors within a unified framework spanning multiple burnout dimensions. Consistent with patterns observed in Western contexts, the finding that personality traits explain additional variance beyond demographic characteristics supports the proposition that stress-related outcomes are more proximally shaped by psychological processes, and that this pattern may extend to non-Western settings. More broadly, the study advances the integration of Transactional Stress Theory and the JD–R model by linking appraisal-based processes with resource-based dynamics (Bakker & Demerouti, 2007; Lazarus & Folkman, 1984). From this perspective, personality traits function both as lenses through which individuals interpret job demands and as personal resources that enable or constrain coping responses, thereby accounting for variability in burnout among teachers exposed to similar working conditions (Schaufeli & Taris, 2013). Importantly, the findings provide empirical support for the applicability of an integrated Transactional Stress Theory and JD–R framework in a non-Western educational context.

At a broader level, the findings suggest that cultural context may offer a useful lens for interpreting which personality-based pathways appear more salient in burnout. The configuration observed across emotional exhaustion, cynicism, and professional efficacy indicates a pattern in which affective vulnerability and self-regulation appear more central than interpersonal orientation or cognitive flexibility. One possible interpretation is that features commonly associated with collectivist and hierarchical educational contexts, such as emphasis on emotional restraint, sensitivity to social evaluation, and role-based responsibility, may align with this pattern (Hofstede, 2011; Markus & Kitayama, 2014; Mesquita, 2001; Tran, 2018). However, because cultural characteristics were not directly measured in the present study, these interpretations remain tentative. In this sense, the findings refine, rather than challenge, existing theory by suggesting that contextual factors may influence the relative prominence of underlying mechanisms, while the core processes described by Transactional Stress Theory and the JD–R model remain applicable across settings.

The present findings have several practical implications for supporting teacher well-being in collectivist and hierarchical educational contexts. Given the central role of Conscientiousness across burnout dimensions, interventions may be most effective when they focus on strengthening self-regulatory capacities, such as workload planning, goal prioritization, and adaptive coping—rather than attempting to modify stable personality traits (Baumeister & Vohs, 2007; Zimmerman, 2000). Professional development programs that provide structured support for time management, instructional planning, and role clarity may help reduce emotional exhaustion and cynicism while enhancing professional efficacy, consistent with the JD-R model's emphasis on aligning personal and job resources (Bakker & Demerouti, 2007; Skaalvik & Skaalvik, 2017).

In addition, leadership practices that recognize sustained effort, reliability, and responsibility may reinforce teachers' sense of competence and reduce disengagement, particularly in systems characterized by high accountability and limited autonomy (Leithwood & Jantzi, 2006; Maslach et al., 2001). These findings also highlight the importance of culturally responsive burnout prevention strategies. In collectivist educational settings, interventions aligned with professional norms such as duty fulfillment, perseverance, and collective responsibility may be more

effective than those emphasizing individual autonomy or emotional expressiveness (Markus & Kitayama, 2014; Oyserman et al., 2002). Together, these implications underscore the importance of integrating individual, organizational, and cultural factors in promoting teacher well-being and professional sustainability.

#### **Limitation and Future Research Directions**

Several limitations should be acknowledged when interpreting the present findings, while also highlighting directions for future research on teacher burnout. First, the cross-sectional design of the study limits causal inference regarding the relationships between personality traits and burnout dimensions. Although Transactional Stress Theory and the JD–R model conceptualize personality traits as stable antecedents (Bakker & Demerouti, 2007; Lazarus & Folkman, 1984), reciprocal processes remain plausible. For example, prolonged emotional exhaustion or cynicism may erode self-regulatory capacity or influence self-perceptions over time. Longitudinal designs are therefore needed to examine temporal ordering, reciprocal effects, and developmental dynamics of personality–burnout associations across teachers’ careers (Camara & Parker, 2025).

Second, the exclusive reliance on self-report measures may introduce shared method variance and response biases. While self-report is widely used and appropriate for assessing subjective experiences such as emotional exhaustion, cynicism, and professional efficacy (Bianchi et al., 2018; Maslach et al., 2001), future studies would benefit from incorporating multi-source data. Combining self-reports with supervisor evaluations, peer reports, or objective indicators may provide a more comprehensive assessment of how personality traits relate to both experienced burnout and observable functioning (Podsakoff et al., 2003).

Third, multicollinearity between age and teaching experience may affect the stability and interpretability of the estimated effects. Preliminary analyses indicated high variance inflation factors when both variables were included in the same model. To address this issue, age was excluded from the final analyses, as teaching experience more directly reflects professional exposure. While this decision improved model stability, it limits the ability to disentangle the distinct contributions of chronological age and professional experience. Future research may benefit from alternative modeling strategies or longitudinal designs to better capture these related but conceptually distinct influences.

Fourth, the sample was predominantly female, reflecting the gender distribution commonly observed among primary school teachers in Vietnam. However, this imbalance limits statistical power for detecting gender differences and limits the reliability of gender-based comparisons. In the present study, gender was included as a covariate, and consistent with the sample composition, it was not a significant predictor in any of the regression models. Accordingly, no substantive interpretations were drawn regarding gender differences. Future research should aim to recruit more gender-balanced samples or specifically examine gender-related processes using designs that ensure adequate statistical power.

Most notably, the present study is limited by the absence of cross-cultural comparison data. Although the Vietnamese context provides a meaningful collectivist and hierarchical educational setting for burnout research, the absence of a comparison sample from more individualistic contexts precludes direct tests of cultural moderation. As a result, conclusions regarding cultural influences on the salience of personality–burnout associations remain inferential rather than comparative. Prior cross-cultural research suggests that personality traits show consistent

directional associations across cultures, but vary in strength depending on norms of autonomy, obligation and social harmony (Hofstede, 2011; Markus & Kitayama, 2014; Schaufeli et al., 2017). Future research incorporating both collectivist and individualist samples within a unified analytic framework would allow explicit tests of how cultural characteristics shape the relative importance of specific personality-based mechanisms. Relatedly, future studies could employ multi-group modeling or cross-cultural structural equation modeling to examine measurement invariance and compare the magnitude of personality–burnout pathways across cultural contexts (Cheung & Rensvold, 2002; Fischer & Poortinga, 2018). Such designs would provide stronger empirical evidence on whether cultural context moderates the salience, rather than the direction, of established associations, thereby directly addressing a central proposition of the present study.

Finally, while the study focused on broad Big Five traits, future research may benefit from examining more fine-grained personality facets or complementary personal resources, such as emotion regulation strategies, resilience, or teacher self-efficacy. Integrating these constructs within Transactional Stress Theory and JD–R frameworks may further elucidate how dispositional and regulatory processes jointly influence burnout across cultural and institutional settings (Gross, 2015; Skaalvik & Skaalvik, 2017).

Taken together, these limitations underscore the need for longitudinal, multi-method, and cross-cultural research designs to deepen understanding of teacher burnout. Building on the present findings, future studies integrating culturally diverse samples will be especially valuable for clarifying how personality traits, job characteristics, and cultural norms interact to shape teacher well-being and professional sustainability.

### CONCLUSION

This study examined the relative contributions of demographic characteristics and Big Five personality traits to emotional exhaustion, cynicism, and professional efficacy among Vietnamese primary school teachers, grounded in Transactional Stress Theory and the JD–R model. Consistent with theoretical expectations, demographic variables explained limited variance, whereas personality traits—particularly conscientiousness—emerged as more proximal and consistent predictors across all three dimensions.

Situated within a collectivist and hierarchical educational context, the findings suggest that dominant burnout frameworks extend beyond Western settings. While the direction of personality–burnout associations appears consistent across cultures, their relative salience may differ, with self-regulatory traits appearing more prominent in contexts characterized by strong norms of duty fulfillment, persistence, and accountability. Conscientiousness, in particular, links affective, attitudinal, and competence-related aspects of burnout, highlighting its role in regulating demands and sustaining professional functioning.

Overall, the findings support the broader applicability of Transactional Stress Theory and the JD–R model while indicating that cultural and institutional contexts may shape the prominence of underlying mechanisms. By integrating personality, culture, and occupational stress perspectives, this study contributes to a more context-sensitive understanding of teacher burnout and informs future research and interventions to promote teacher well-being and professional sustainability.

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