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Emotional Intelligence as a Personal Resource: Predicting Work Engagement and Psychological Climate among Public Primary School Teachers in Johor, Malaysia

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Abstract

Employee work engagement and perceptions of the work environment are central to the functioning of public-sector organisations. In Malaysia, rising early retirement among teachers, often linked to declining interest in the profession, highlights the need to understand what sustains their engagement. Drawing on the Job Demands–Resources (JD-R) model, this study examines emotional intelligence as a personal resource predicting work engagement and psychological climate among public primary school teachers. Data were collected through a cross-sectional online survey of 452 teachers in Johor, Malaysia, recruited through snowball sampling. Hierarchical multiple regression, controlling for gender, age, education level, working experience and district, showed that emotional intelligence significantly predicted work engagement ($\beta = .46$, $p < .001$) and psychological climate ($\beta = .64$, $p < .001$), explaining an additional 12.8% and 24.9% of the variance, respectively. The stronger relationship on psychological climate suggests that personal resources relate not only to employees' motivational states but also to how they appraise their work environment. The findings extend the JD-R model and support integrating emotional competencies into teacher development and leadership initiatives to strengthen engagement and foster more favourable perceptions of the school environment.

Keywords: Emotional Intelligence, Work Engagement, Psychological Climate, Job Demands–Resources Model, Teachers

Introduction

Teaching is widely regarded as one of the most emotionally demanding professions. Teachers are expected to manage large classes, respond to students' academic and emotional needs, work with parents and administrators, and adapt to frequent curriculum and policy changes. In Malaysia, these demands have been linked to teacher stress and burnout. A qualitative study of Malaysian public-school teachers identified student misbehaviour, insufficient parental cooperation, occupational stress and negative emotions as key challenges that lead teachers to experience burnout (Amzat et al., 2021).

There are signs that these pressures are affecting teachers' work engagement. According to figures reported by the Deputy Education Minister, 6,394 teachers, or 1.49% of the national teaching workforce, were approved for early retirement in 2023, up from 5,306 teachers (1.23%) in 2022 (Teh et al., 2025). A parliamentary reply in June 2024 further reported that over 72% of early retirees cited a lack of interest in their roles as the main reason for leaving the profession (Teh et al., 2025). Although Malaysia does not maintain a national index of teacher engagement, these figures suggest that many teachers are struggling to remain engaged in their work.

Research on teachers has increasingly shifted from a focus on negative states such as stress and burnout towards positive states such as work engagement. Work engagement refers to a positive, fulfilling, work-related state of mind characterised by vigour, dedication and absorption (Schaufeli et al., 2002). According to the Job Demands–Resources (JD-R) model, engagement is fostered by the resources available to employees, which include both job resources provided by the organisation and personal resources that individuals bring to their work (Bakker & Demerouti, 2007; Xanthopoulou et al., 2007).

Emotional intelligence is one such personal resource. Emotional intelligence refers to the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions (Salovey & Mayer, 1990). For teachers, emotional intelligence may help them regulate their reactions to difficult classroom situations, maintain positive emotions and build constructive relationships with students, colleagues and school leaders. International research has linked higher emotional intelligence among teachers to lower burnout (Mérida-López & Extremera, 2017) and higher engagement (Mérida-López et al., 2017; Su et al., 2022). In Malaysia, emotional intelligence has been associated with organisational commitment among vocational college teachers (Ahad et al., 2021) and with work engagement among higher education lecturers (Nagalingam et al., 2019), while more recent research has examined its relationship with stress management among primary school teachers (Nair et al., 2026).

Existing research on emotional intelligence in the teaching profession has predominantly focused on its relationship with work-related psychological and attitudinal outcomes. International studies have demonstrated that teachers with higher emotional intelligence experience lower levels of burnout (Mérida-López & Extremera, 2017) and greater work

engagement (Mérida-López et al., 2017; Su et al., 2022). Similarly, empirical evidence from Malaysia has revealed positive relationships between emotional intelligence and both organisational commitment and work engagement (Ahad et al., 2021; Nagalingam et al., 2019). These findings are consistent with the motivational process of the Job Demands–Resources (JD–R) model, which recognises personal resources as important antecedents of employee motivation and work engagement (Xanthopoulou et al., 2007). However, the prevailing literature has devoted comparatively limited attention to the mechanisms through which emotional intelligence may shape employees' perceptions of their work environment. This represents an important theoretical gap, particularly given the proposition within JD–R research that personal resources influence how individuals perceive, interpret, and evaluate their working conditions (Bakker & Demerouti, 2017; Xanthopoulou et al., 2009). Consequently, a more comprehensive understanding of the motivational role of emotional intelligence requires an examination of its influence not only on work engagement but also on the psychological processes through which employees evaluate their work environment.

Psychological climate provides a theoretical framework for examining this alternative pathway. Although climate has traditionally been conceptualised as an antecedent of employee attitudes and behaviours (Brown & Leigh, 1996; Parker et al., 2003), psychological climate represents an individual's cognitive appraisal of the work environment and its significance for personal well-being (James & James, 1989). Consequently, Teachers in the same school, working under the same headmaster and policies, may therefore form different climate perceptions depending on the personal resources they bring to that appraisal. This perspective aligns with JD–R research demonstrating that personal resources influence employees' perceptions of job resources and that these resources are reciprocally related to work engagement (Xanthopoulou et al., 2007, 2009). Similarly, Judge et al. (2000) found that positive core self-evaluations shaped how employees perceived the characteristics of their jobs.

Emotional intelligence is particularly relevant to this process because the six dimensions of psychological climate, namely supportive management, role clarity, contribution, recognition, self-expression, and challenge (Brown & Leigh, 1996), reflect individuals' interpretations of their working conditions and interpersonal experiences. Teachers who perceive, understand and regulate emotions more effectively may interpret these interactions more accurately, respond to ambiguity more constructively and build more supportive relationships, and may therefore appraise their school climate more favourably. Accordingly, the present study conceptualises psychological climate as an outcome of emotional intelligence and an explanatory mechanism through which emotional intelligence may enhance work engagement.

Although a limited number of studies have examined the relationship between emotional intelligence and climate perceptions, their approaches differ from that of the present study in several important respects. Wu (2023) examined school principals' emotional intelligence in relation to the psychological climate and motivation reported by teachers, treating emotional intelligence as a leader attribute rather than as a personal resource of the employees who perceive the climate. Silva et al. (2024) linked healthcare workers' emotional intelligence to a facet-specific safety climate rather than to a general appraisal of the work environment. Existing research has yet to examine whether teachers' own emotional

intelligence predicts their general perceptions of psychological climate, particularly within an integrated model that incorporates work engagement. By examining both outcomes within an integrated framework, the present study seeks to extend the JD–R model in two respects. First, it examines whether emotional intelligence functions not only as a motivational resource that fosters work engagement but also as an appraisal resource that shapes employees' perceptions of their work environment. Second, by examining both relationships within the same sample and analytical framework, the study enables a comparison of the relative strength of these pathways, addressing a limitation of previous research that has predominantly examined these outcomes in isolation.

Moreover, most Malaysian studies of teacher emotional intelligence have focused on secondary school teachers (Surai & Taat, 2024), vocational college teachers (Ahad et al., 2021), or higher education lecturers (Ishak & Jamian, 2021; Nagalingam et al., 2019), leaving primary school teachers relatively understudied. This is a notable gap because emotions play a particularly important role in primary school teaching, where teachers must manage their feelings to maintain a positive classroom climate for young children (Akın et al., 2014) while also attending to pupils' psycho-emotional needs alongside their teaching responsibilities (Arbia et al., 2023).

To address these gaps, the present study examines emotional intelligence as a predictor of work engagement and psychological climate among public primary school teachers in Johor, Malaysia. The study aims to (1) determine the levels of emotional intelligence, work engagement and psychological climate among teachers; (2) examine the relationship between emotional intelligence and work engagement; and (3) examine the relationship between emotional intelligence and psychological climate. By examining both outcomes, the study extends the JD-R model by showing whether personal resources relate to employees' appraisals of the work environment as well as to their motivational states, and provides practical insights for teacher training, professional development and school leadership in Malaysia.

Literature Review

Work Engagement

Work engagement is defined as a positive, fulfilling, work-related state of mind characterised by vigour, dedication and absorption (Schaufeli et al., 2002). Vigour refers to high levels of energy and mental resilience while working; dedication refers to a sense of significance, enthusiasm and pride in one's work; and absorption refers to being fully concentrated and happily engrossed in one's work. Earlier, Kahn (1990) described personal engagement as the harnessing of employees' selves to their work roles and proposed that people engage more fully when they experience psychological meaningfulness, safety and availability at work.

Within the JD-R model, work engagement is the central outcome of a motivational process in which job resources such as social support, feedback and autonomy foster employees' energy and commitment (Bakker & Demerouti, 2007). Xanthopoulou et al. (2007) extended the model by showing that personal resources, which are aspects of the self-linked to resilience, also predict engagement. For teachers, engagement is especially important because engaged teachers are more likely to invest effort in their teaching and remain in the profession.

Psychological Climate

Psychological climate refers to individuals' perceptions of their work environment and the meaning they attach to it (James & James, 1989). Brown and Leigh (1996) proposed that psychological climate consists of six dimensions: supportive management, role clarity, contribution, recognition, self-expression and challenge. They found that a favourable psychological climate was associated with higher job involvement, which in turn was related to effort and performance. A meta-analytic review by Parker et al. (2003) confirmed that psychological climate perceptions are related to a range of work outcomes, including job satisfaction, motivation and performance.

An important feature of psychological climate is that it is measured and interpreted at the individual level. Climate perceptions reflect not only the objective features of the workplace but also the way individuals cognitively appraise those features (James & James, 1989). In a school, this means that teachers may form different perceptions of the same headmaster, colleagues and working conditions depending on their personal characteristics and experiences.

Emotional Intelligence

Salovey and Mayer (1990) defined emotional intelligence as a subset of social intelligence involving the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and actions. Building on this model, Schutte et al. (1998) developed a 33-item self-report measure covering the perception, management and utilisation of emotions. Research has shown that EI is associated with better social relationships and more effective handling of interpersonal situations (Mayer et al., 2008).

In the teaching profession, emotional intelligence has received increasing attention because teachers constantly manage their own emotions and respond to the emotions of students, parents and colleagues. A systematic review by Mérida-López and Extremera (2017) concluded that teachers with higher EI tend to report lower levels of burnout. In Malaysia, Ahad et al. (2021) found significant positive relationships between emotional intelligence, work attitudes and organisational commitment among 263 vocational college teachers.

Theoretical Framework: Job Demands-Resources Model

This study is underpinned by the Job Demands–Resources (JD-R) model (Bakker & Demerouti, 2007), which proposes that employee well-being and work engagement are influenced by the balance between job demands and the resources available to individuals. Job resources, such as support, autonomy and feedback, contribute to the motivational process by helping employees achieve work goals and sustain engagement. Xanthopoulou et al. (2007) extended the JD-R model by demonstrating that personal resources also play an important role in this process. Personal resources refer to positive self-related characteristics that help individuals manage work demands and interact effectively with their environment.

In the present study, emotional intelligence is conceptualised as a personal resource because it enables individuals to recognise, understand and regulate emotions in workplace interactions. Accordingly, higher emotional intelligence is expected to be positively related to work engagement by helping teachers maintain positive emotional states and respond more

effectively to work-related challenges. Emotional intelligence may also be related to psychological climate because emotionally intelligent teachers may interpret interpersonal interactions, managerial support, recognition and role expectations more favourably. Thus, the JD-R model provides a theoretical basis for examining emotional intelligence in relation to both teachers' work engagement and their perceptions of the work environment. This reflects evidence that personal resources influence how employees perceive the resources available in their environment (Xanthopoulou et al., 2009).

Hypotheses Development

Emotional Intelligence and Work Engagement

Teachers with higher emotional intelligence are better able to recognise and regulate their emotions, which may help them recover from stressful classroom situations and sustain the energy and enthusiasm that characterise engagement. Mérida-López et al. (2017) found that emotional intelligence was positively associated with engagement among 288 teachers, and that emotional intelligence boosted engagement when role ambiguity was high. In Malaysia, Nagalingam et al. (2019) found that work engagement mediated the relationship between emotional intelligence and organisational commitment among 361 higher education lecturers, indicating that emotional intelligence is linked to higher engagement. Similarly, in a study of 510 nurses in high-demand hospital wards, Liu et al. (2026) found that emotional intelligence functioned as a personal resource that positively predicted work engagement, consistent with the JD-R model. Based on the JD-R model and these findings, the following hypothesis is proposed:

H1: Emotional intelligence is positively related to teachers' work engagement.

Emotional Intelligence and Psychological Climate

As psychological climate represents employees' individual perceptions and interpretations of their work environment (James & James, 1989), teachers' personal characteristics may shape how positively they perceive their school environment. Emotionally intelligent individuals are better at understanding others' emotions and managing social interactions (Mayer et al., 2008). Teachers with higher emotional intelligence may be better able to develop positive relationships with headmasters and colleagues, respond to unclear situations more constructively, and feel more comfortable expressing themselves in the workplace. Empirically, Silva et al. (2024) found that healthcare workers with higher emotional intelligence perceived a more positive safety climate in their workplace, while Wu (2023) reported that school principals' emotional intelligence was related to psychological climate and teacher motivation. Accordingly, the following hypothesis is proposed:

H2: Emotional intelligence is positively related to teachers' perceptions of psychological climate.

Research Framework

Building on the JD-R theory and the existing literature, this study proposes a research framework that examines the relationship between emotional intelligence, work engagement and psychological climate among Malaysian school teachers. Emotional intelligence is the independent variable, while work engagement and psychological climate are the dependent variables. Emotional intelligence is expected to have a positive relationship with work engagement (H1) and psychological climate (H2). Demographic variables are included as

controls to ensure that the effects of emotional intelligence are not explained by teachers' background characteristics. Figure 1 illustrates the proposed relationships.

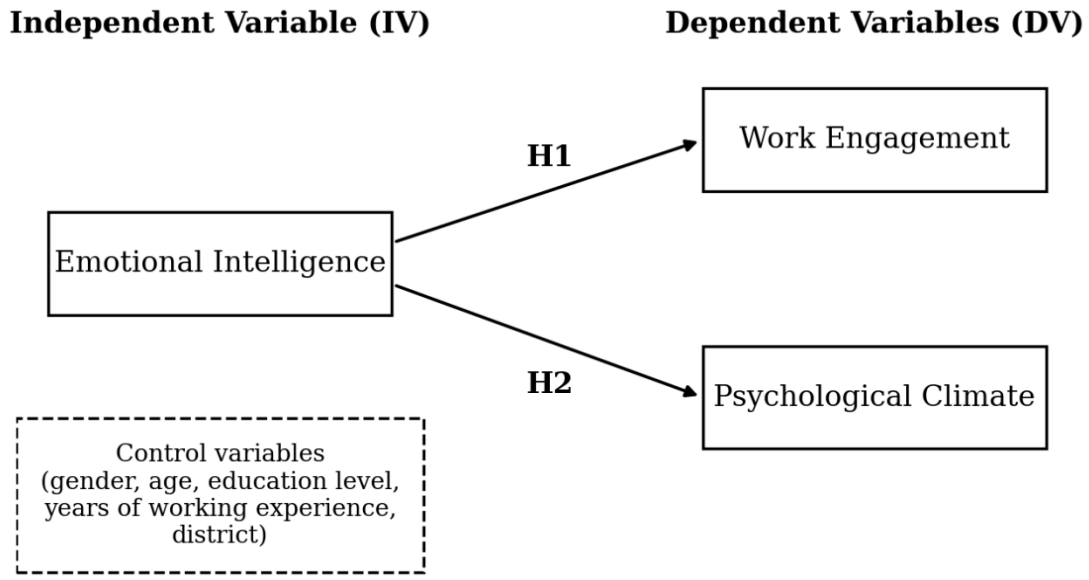


Figure 1 Research framework

Research Methodology

This study employed a quantitative, cross-sectional survey design. The target population comprised teachers in government primary schools in Johor, Malaysia, totalling 27,438 teachers in 2021, the year of data collection (Department of Statistics Malaysia, 2026). Data were collected from teachers in three district education offices with relatively large numbers of primary school teachers: Johor Bahru, Pasir Gudang and Kulai. Snowball sampling was used because a complete sampling frame of teachers was unavailable. School policies limited access to teachers' personal contact information, while COVID-19 movement restrictions during the data collection period also prevented direct questionnaire distribution in schools. Snowball sampling is appropriate when members of a population are difficult to identify or reach directly, because existing participants can refer others who meet the eligibility criteria (Biernacki & Waldorf, 1981; Naderifar et al., 2017).

Based on the population of 27,438 teachers, Krejcie and Morgan's (1970) table suggests a benchmark of 379 respondents at a 95% confidence level and 5% margin of error. A total of 487 questionnaires were received. Of these, 32 were discarded because the respondents taught in secondary schools or outside Johor, and three were removed as univariate outliers based on standardised composite scores ($|z| > 3.29$; Tabachnick & Fidell, 2013), leaving 452 usable responses. Because the hypotheses were tested using multiple regression, statistical power was also assessed with G*Power 3.1 (Faul et al., 2009), using the F test for linear multiple regression (fixed model, R^2 deviation from zero). For a medium effect size ($f^2 = 0.15$), $\alpha = .05$ and eleven predictors, a minimum of 123 respondents is required to achieve a power of .80, and 178 respondents to achieve a power of .95. The final sample of 452 therefore exceeds all of these requirements.

Instrumentation

The questionnaire consisted of four sections. Section A collected demographic information. Section B measured work engagement using the nine-item Utrecht Work Engagement Scale (UWES-9) (Schaufeli et al., 2006), including vigour, dedication and absorption, rated on a 7-point frequency scale from 1 (never) to 7 (always). Section C measured emotional intelligence using the 33-item Schutte Self-Report Emotional Intelligence Test (Schutte et al., 1998), rated on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). Section D measured psychological climate using the 21-item scale developed by Brown and Leigh (1996), covering supportive management, role clarity, contribution, recognition, self-expression and challenge, rated on a 7-point scale from 1 (strongly disagree) to 7 (strongly agree). The full list of items is presented in the Appendix. Using different response formats for independent and dependent variables also served as a procedural remedy for common method bias (Podsakoff et al., 2003).

Negatively worded items (emotional intelligence items 5, 28 and 33; psychological climate items 1 and 20) were reverse coded before analysis. The questionnaire was made available in English and Bahasa Melayu. The Bahasa Melayu version was produced through forward and back translation (Brislin, 1970). A certified professional translator conducted the forward translation, which was reviewed by three teachers; a second translator, blind to the original instrument, back translated it into English, and discrepancies were resolved until the two English versions were equivalent. Content validity was assessed by four academic experts, whose feedback was used to refine the wording and format. A pilot study with 41 teachers from a primary school in Johor Bahru, who were excluded from the main survey, yielded Cronbach's alpha values of 0.880 to 0.926.

Data Collection

Data were collected online through Google Forms from June to November 2021, during the COVID-19 pandemic, when most teachers were not reporting to school physically. The survey link was initially shared in a Facebook group for primary school teachers in Johor and was subsequently distributed through email and WhatsApp. Seven enumerators assisted in disseminating the survey link within their professional networks and received a modest facilitation allowance for their assistance. The forced-response setting ensured that there were no missing data. Participation was voluntary and anonymous, and informed consent was obtained from all respondents before they completed the questionnaire. Approval to conduct the study was obtained from the Ministry of Education Malaysia through the Educational Research Application System (Ref. No. KPM.600-3/2/3-eras (9518)), and the Johor State Education Department (Ref. No. JPNJ.PS.600-1/1/2 Jld 6 (76)).

Data Analysis

Data was analysed using IBM SPSS Statistics version 31. Reliability was assessed through item analysis (corrected item-total correlations) and Cronbach's alpha, and exploratory factor analysis (EFA) was conducted separately for each scale using principal component extraction. The number of factors was assessed using Kaiser's criterion (eigenvalues greater than 1), the scree plot and parallel analysis (Horn, 1965; O'Connor, 2000). A single component was then extracted to assess whether a composite score was appropriate; because only one component was extracted, no rotation was required. Demographic data were summarised using frequencies and percentages, while means and standard deviations described the levels

of the study variables. Pearson correlation analysis examined the relationships among variables. Two hierarchical multiple regression analyses were then conducted to test the hypotheses, with demographic controls entered in Step 1 and emotional intelligence entered in Step 2. Age, education level and working experience were dummy-coded, with the youngest age group, diploma holders and teachers with less than one year of experience as reference groups; categories with few respondents were combined (aged 35 and above; master's and doctoral degrees; seven or more years of experience). Effect sizes were interpreted using Cohen's f^2, with values of 0.02, 0.15 and 0.35 representing small, medium and large effects, respectively (Cohen, 1988).

Analysis and Findings

Reliability Test

Item analysis was first conducted on each scale. The five negatively worded items (emotional intelligence items 5, 28 and 33; psychological climate items 1 and 20) showed negative corrected item-total correlations after reverse coding (−.47 to −.71), well below the recommended minimum of .30 (Nunnally & Bernstein, 1994), and Cronbach's alpha increased when each was deleted. This pattern indicates that respondents did not interpret the negatively worded items as intended, a common method effect associated with reversed items (Weijters et al., 2013). These items were therefore excluded from further analysis, leaving 30 emotional intelligence items, nine work engagement items and 19 psychological climate items. All remaining items had corrected item-total correlations of .54 or above. The reliability of the final scales is presented in Table 1. The Cronbach's alpha values ranged from 0.875 to 0.964, indicating good to excellent internal consistency. All values exceeded the recommended threshold of 0.70 (Nunnally & Bernstein, 1994).

Table 1
Reliability Test Results

Variable	Cronbach's Alpha	No. of Items
Independent Variable		
Emotional Intelligence	0.964	30
Dependent Variables		
Work Engagement	0.875	9
Psychological Climate	0.947	19

Exploratory Factor Analysis

EFA was performed on each scale, as shown in Table 2. The Kaiser-Meyer-Olkin (KMO) values ranged from 0.867 to 0.974, exceeding the recommended minimum of 0.60, and Bartlett's test of sphericity was significant for all scales ($p < .001$), indicating that the data were suitable for factor analysis (Hair et al., 2019). For psychological climate, Kaiser's criterion and parallel analysis both indicated a single factor. For emotional intelligence, parallel analysis indicated a single factor, while the second and third eigenvalues only marginally exceeded 1 (1.25 and 1.15) compared with a first eigenvalue of 14.78. For work engagement, both criteria suggested two factors, but the first eigenvalue (4.57) was more than three times the second (1.34). The first factor explained between 49.27% and 51.74% of the variance across scales, and all items loaded at 0.57 or above.

Although emotional intelligence, work engagement and psychological climate are multidimensional constructs, composite scores were used for three reasons. First, the hypotheses concern the overall constructs rather than their dimensions. Second, the EFA results showed a dominant first factor in each scale. Third, the use of composite scores is consistent with the original instruments. The Schutte Self-Report Emotional Intelligence Test was developed to yield an overall score (Schutte et al., 1998), the UWES-9 total score is recommended because its three dimensions are highly correlated (Schaufeli et al., 2006), and Brown and Leigh (1996) conceptualised psychological climate as multidimensional but supported the use of a higher-order general psychological climate factor. Future research could examine the dimensions separately using confirmatory factor analysis.

Table 2
Exploratory factor analysis for independent and dependent variables

Construct	Items	KMO	Bartlett's χ^2 (df), p	Variance explained (%)	Factor loadings	Eigenvalues > 1	Parallel analysis	1st / 2nd eigenvalue
Emotional Intelligence	30	0.974	8196.15 (435), $p < .001$	49.27	0.571–0.766	3	1	11.8
Work Engagement	9	0.867	1935.02 (36), $p < .001$	50.80	0.634–0.801	2	2	3.4
Psychological Climate	19	0.967	4880.00 (171), $p < .001$	51.74	0.577–0.774	1	1	10.0

Demographic Analysis

From Table 3, the 452 respondents were predominantly female (77.7%), aged below 35 years (86.1%) and Malay (71.5%). Most held a diploma (38.5%) or bachelor's degree (36.5%), and nearly half had one to three years of working experience (47.3%). Respondents were drawn from Pasir Gudang (45.1%), Johor Bahru (42.9%) and Kulai (11.9%).

Table 3
Demographic profile of respondents (N = 452)

Category	Classification	Frequency (f)	Percentage (%)
Gender	Male	101	22.3
	Female	351	77.7
Age (years)	Below 25	206	45.6
	25–34	183	40.5
	35–44	57	12.6
	45 and above	6	1.3
Race	Malay	323	71.5
	Chinese	66	14.6
	Indian	45	10.0
	Others	18	4.0
Marital Status	Single	338	74.8
	Married	105	23.2
	Divorced/Widowed	9	2.0

Category	Classification	Frequency (f)	Percentage (%)
Education Level	Diploma	174	38.5
	Bachelor's degree	165	36.5
	Master's degree	103	22.8
	Doctorate degree	10	2.2
Working Experience (years)	Below 1	101	22.3
	1–3	214	47.3
	4–6	117	25.9
	7–9	17	3.8
	10 and above	3	0.7
District	Johor Bahru	194	42.9
	Pasir Gudang	204	45.1
	Kulai	54	11.9

Note. Percentages may not sum to exactly 100 because of rounding.

Descriptive Analysis

Mean scores were interpreted using three equal intervals. For the 5-point EI scale, means of 1.00–2.33 were classified as low, 2.34–3.67 as moderate and 3.68–5.00 as high. For the 7-point work engagement and psychological climate scales, means of 1.00–3.00 were classified as low, 3.01–5.00 as moderate and 5.01–7.00 as high. From Table 4, all three variables were at a high level. Work engagement recorded a mean of 6.14 (SD = 0.69), psychological climate 6.00 (SD = 0.76), and emotional intelligence 4.32 (SD = 0.49).

Table 4
Descriptive statistics

Variable	N	Scale	Mean	Std. Deviation	Level
Independent Variable					
Emotional Intelligence	452	1–5	4.32	0.49	High
Dependent Variables					
Work Engagement	452	1–7	6.14	0.69	High
Psychological Climate	452	1–7	6.00	0.76	High

Preliminary Checks

Before hypothesis testing, the assumptions of regression were checked. Skewness (−0.50 to −0.28) and kurtosis (−0.90 to −0.37) values for the composite scores were within ±1, indicating approximately normal univariate distributions. Variance inflation factor (VIF) values ranged from 1.23 to 3.10, well below 10, indicating that multicollinearity was not a concern (Hair et al., 2019). Durbin–Watson values of 1.78 (work engagement) and 1.72 (psychological climate) indicated independence of residuals. As all variables were measured using the same self-report questionnaire, Harman's single-factor test was used to check for possible common method bias. The analysis identified seven factors with eigenvalues greater than 1, while the first unrotated factor explained 41.54% of the total variance. Since no single factor accounted for most of the variance, common method bias was not considered a major concern (Podsakoff et al., 2003).

Data screening identified 35 respondents (7.7%) who selected the highest response option across all items, including negatively worded items, suggesting possible inattentive responding. As a sensitivity check, the regression analyses were repeated after excluding

these cases. The results remained substantively unchanged, with emotional intelligence significantly predicting work engagement (β = .45, p < .001) and psychological climate (β = .62, p < .001). This indicates that the main findings were robust to the exclusion of these respondents.

Correlation Analysis

From Table 5, emotional intelligence was strongly and positively correlated with work engagement (r = .688, p < .001) and psychological climate (r = .738, p < .001). Work engagement and psychological climate were also positively correlated (r = .619, p < .001).

Table 5
Pearson correlation between variables (N = 452)

Variable	Emotional Intelligence	Work Engagement	Psychological Climate
Emotional Intelligence	1.000		
Work Engagement	.688***	1.000	
Psychological Climate	.738***	.619***	1.000

Note. ***p < .001 (2-tailed).

Hierarchical Multiple Regression Analysis

Table 6 presents the results of the hierarchical regression analyses. For work engagement, the demographic controls in Step 1 explained 45.3% of the variance, F(10, 441) = 36.55, p < .001. Adding emotional intelligence in Step 2 explained an additional 12.8% of the variance, ΔF(1, 440) = 134.97, p < .001, with the final model explaining 58.2% of the variance. Emotional intelligence was a significant positive predictor of work engagement (β = .46, t = 11.62, p < .001), with a medium-to-large effect size (f^2 = 0.31).

For psychological climate, the demographic controls in Step 1 explained 32.2% of the variance, F(10, 441) = 20.90, p < .001. Adding emotional intelligence in Step 2 explained an additional 24.9% of the variance, ΔF(1, 440) = 254.82, p < .001, with the final model explaining 57.0% of the variance. Emotional intelligence was a significant positive predictor of psychological climate (β = .64, t = 15.96, p < .001), with a large effect size (f^2 = 0.58).

Table 6
Hierarchical regression predicting work engagement and psychological climate (N = 452)

Predictor	WE: B	WE: SE	WE: β	PC: B	PC: SE	PC: β
Step 1: Controls						
Gender (male)	−0.21	0.06	−.13**	−0.22	0.08	−.12**
Age 25–34	0.09	0.08	.06	0.09	0.10	.06
Age 35 and above	−0.11	0.11	−.05	−0.14	0.14	−.07
Bachelor's degree	0.37	0.07	.26***	0.19	0.08	.12*
Postgraduate	0.68	0.07	.43***	0.48	0.09	.27***
Experience 1–3 years	−0.01	0.07	−.01	0.02	0.09	.01
Experience 4–6 years	−0.05	0.09	−.03	−0.04	0.12	−.02
Experience 7 years and above	−0.07	0.16	−.02	0.24	0.19	.06
Kulai (vs Johor Bahru)	0.93	0.11	.44***	0.91	0.13	.39***
Pasir Gudang (vs Johor Bahru)	0.71	0.08	.51***	0.75	0.10	.49***

Predictor	WE: B	WE: SE	WE: β	PC: B	PC: SE	PC: β
R^2			.453***			.322***
Step 2: Add EI						
Gender (male)	−0.12	0.06	−.07*	−0.08	0.06	−.04
Age 25–34	0.00	0.07	.00	−0.04	0.08	−.02
Age 35 and above	−0.09	0.10	−.04	−0.11	0.11	−.05
Bachelor's degree	0.29	0.06	.20***	0.06	0.07	.04
Postgraduate	0.49	0.07	.31***	0.19	0.07	.11*
Experience 1–3 years	−0.01	0.06	−.01	0.01	0.07	.01
Experience 4–6 years	−0.02	0.08	−.01	0.02	0.09	.01
Experience 7 years and above	−0.08	0.14	−.03	0.21	0.16	.06
Kulai (vs Johor Bahru)	0.43	0.10	.20***	0.14	0.11	.06
Pasir Gudang (vs Johor Bahru)	0.37	0.08	.27***	0.22	0.08	.15**
Emotional intelligence	**0.65**	**0.06**	**.46*** **	**0.99**	**0.06**	**.64*** **
R^2			.582***			.570***
ΔR^2			.128***			.249***

Note. WE = work engagement; PC = psychological climate; B = unstandardised coefficient; β = standardised coefficient. Reference groups: female; aged 24 and below; diploma; less than 1 year of working experience; Johor Bahru. *p < .05; **p < .01; ***p < .001.

Summary of Hypotheses Testing

Two hypotheses were formulated and tested in this study. Both hypotheses were supported, as summarised in Table 7.

Table 7

Summary of hypotheses testing

Hypothesis	Relationship	β	t	p	Result
H1	Emotional Intelligence → Work Engagement	.46	11.62	< .001	Accepted
H2	Emotional Intelligence → Psychological Climate	.64	15.96	< .001	Accepted

Note. "→" indicates a hypothesised direct effect, controlling for demographic variables.

Discussion

Discussion on the Findings

This study examined emotional intelligence as a predictor of work engagement and psychological climate among public primary school teachers in Johor, Malaysia. The results show that teachers reported high levels of emotional intelligence, work engagement and psychological climate, and that emotional intelligence significantly predicted both outcomes beyond the effects of demographic factors. Notably, emotional intelligence explained almost twice as much additional variance in psychological climate (24.9%) as in work engagement (12.8%).

Emotional Intelligence and Work Engagement

H1 proposed that emotional intelligence has a significant positive relationship on work engagement. The results supported this hypothesis, with emotional intelligence emerging as the strongest predictor of engagement in the final model. This finding is consistent with Mérida-López et al. (2017), who reported that emotional intelligence was positively associated with teacher engagement, with Nagalingam et al. (2019), whose findings among

Malaysian lecturers linked emotional intelligence to higher engagement, and with Liu et al. (2026), who found a similar positive relationship among nurses in emotionally demanding hospital settings. It also supports the JD-R view that personal resources foster engagement (Xanthopoulou et al., 2007). Primary school teachers with higher emotional intelligence may be better able to regulate negative emotions arising from student behaviour or workload, recover more quickly from stressful events, and maintain the positive emotions that sustain vigour and dedication. This may be particularly relevant in the period of data collection, when teachers were adapting to online teaching during the COVID-19 pandemic.

Emotional Intelligence and Psychological Climate

H2 proposed that emotional intelligence has a significant positive relationship with teachers' perceptions of psychological climate. This hypothesis was also supported, and the relationship was the largest observed in this study. As psychological climate reflects individuals' appraisals of their work environment (James & James, 1989), the finding suggests that teachers' emotional abilities are associated with how they perceive their school environment. Emotionally intelligent teachers may build stronger relationships with their headmasters and colleagues, interpret feedback and ambiguous situations more constructively, and feel more comfortable expressing themselves at work. This interpretation is consistent with evidence that emotional intelligence supports effective social functioning (Mayer et al., 2008), with findings that employees with higher emotional intelligence perceive their workplace climate more positively (Silva et al., 2024).

Demographic Factors

Although not hypothesised, several demographic variables also predicted work engagement. Teachers with bachelor's or postgraduate qualifications reported higher engagement than diploma holders, teachers in Kulai and Pasir Gudang reported higher engagement than those in Johor Bahru, and male teachers reported slightly lower engagement than female teachers. Age and working experience did not significantly predict either outcome. Interestingly, the district and education differences in psychological climate were substantially reduced once emotional intelligence was taken into account, suggesting that these differences may partly reflect differences in teachers' emotional competencies. The district differences in engagement, however, remained significant and may reflect differences in school conditions across districts, which permit further investigation.

Theoretical Contributions

This study contributes to the JD-R literature in two ways. First, it shows that emotional intelligence can serve as a personal resource that is positively related to work engagement among Malaysian public primary school teachers, a group that has received relatively little attention in previous studies. Second, the findings show that emotional intelligence is also strongly related to psychological climate. This suggests that personal resources may be linked not only to how engaged employees feel at work, but also to how they perceive and interpret their working environment. In this way, the study extends the JD-R perspective by highlighting the role of personal resources in shaping employees' perceptions of workplace conditions.

Practical Contributions

The findings offer several practical implications. First, the Ministry of Education and teacher education institutes could incorporate emotional intelligence development, such as emotion

recognition, emotion regulation and interpersonal skills, into pre-service teacher training. Second, schools and district education offices could offer in-service professional development programmes on emotional intelligence, particularly for early-career teachers, who made up most of this sample. Third, headmasters should be aware that teachers may perceive the same school climate differently depending on their emotional skills. Supporting teachers' emotional competencies, alongside improving management support, role clarity and recognition, may therefore strengthen both climate perceptions and engagement, and may help reduce the loss of interest that drives early retirement.

Limitations of the Study

This study has several limitations. First, the cross-sectional design does not allow causal conclusions; for example, a favourable school climate may also help teachers develop their emotional skills. Second, all variables were measured through self-report at a single point in time. Although procedural remedies were applied and Harman's test did not indicate serious common method bias, it cannot be entirely ruled out. Third, snowball sampling and the focus on National Primary Schools in three districts of Johor limit the generalisability of the findings to other states, school types and teacher populations. Fourth, data were collected in 2021 during the COVID-19 pandemic, when teaching conditions were unusual. Finally, work engagement scores were very high, and a small number of respondents appeared to respond inattentively, which may have restricted the variance of this variable, although the results were robust to excluding these respondents.

Recommendations for Future Research

Future studies could use longitudinal or intervention designs to test whether improving teachers' emotional intelligence leads to higher engagement and more favourable climate perceptions over time. Researchers could also examine whether psychological climate mediates the relationship between emotional intelligence and work engagement, and whether job demands moderate this relationship. Probability sampling, data from multiple sources such as headmaster ratings, and samples of teachers from other states and school types would further strengthen the findings. Qualitative methods such as interviews could also provide deeper insight into how teachers use their emotional skills in their daily work.

Conclusion

This study concludes that emotional intelligence is a significant predictor of both work engagement and psychological climate among public primary school teachers in Johor, Malaysia, even after accounting for demographic factors. Teachers who are better able to perceive, understand and manage emotions are more engaged in their work and perceive their school environment more favourably. These findings highlight the value of developing teachers' emotional competencies as part of efforts to promote teacher well-being and retention in Malaysian schools.

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