

## THE CORRELATION BETWEEN SCHOOL CLIMATE DIMENSIONS AND TEACHER WELL-BEING IN MALAYSIAN INDIGENOUS SCHOOLS

<sup>1</sup>Nor Aqilah Kamarudin, <sup>\*2</sup>Azlinzuraini Ahmad, <sup>3</sup>Abi Sofian Abdul Halim, <sup>4</sup>Ramle Abdullah  
& <sup>5</sup>Nurul Izni Kamalrulzaman

<sup>1,2,3,5</sup> Faculty of Business, Economics and Social Development, Universiti Malaysia  
Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia.

<sup>4</sup> Faculty of Applied Social Science, Universiti Sultan Zainal Abidin, Gong Badak Campus,  
21300 Kuala Nerus, Terengganu, Malaysia.

\*Corresponding author: [azlinzuraini@umt.edu.my](mailto:azlinzuraini@umt.edu.my)

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### ABSTRACT

**Background and Purpose:** Teaching at indigenous schools located in rural and outskirts areas is no small feat. Therefore, the teachers at these schools require a consistent and supportive school climate to enhance teacher well-being. As such, this study examines the relationship between the dimensions of school climate and well-being of teachers. It also discusses the application of five dimensions of school climate, namely collaboration, student relations, school resources, decision-making, and instructional innovation.

**Methodology:** Data for this quantitative study was gathered via a set of questionnaires. A total of 291 teachers from indigenous schools along the east coast states of Peninsular Malaysia, which are Kelantan, Terengganu, and Pahang participated in this study. A descriptive analysis of the findings was performed using the Statistical Package for the Social Sciences (SPSS), while an inferential analysis was conducted using PLS-SEM.

**Findings:** The empirical results show a significantly positive correlation between the five previously mentioned dimensions of school climate and teacher well-being.

**Contributions:** The findings of this study affirm the relative importance of school climate and its impact on teacher well-being. This study is significant for the Ministry of Education, indigenous school administrators, teachers, as well as policymakers in developing suitable strategies to improve the school climate and teacher well-being in Malaysian indigenous schools.

**Keywords:** Teacher well-being, collaboration, student relations, school resources, decision-making, instructional innovation.

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## 1.0 INTRODUCTION

The effects of school climate on teacher well-being (TWB) is widely discussed in educational management around the world (Aeltermann, Engels, van Petegem, & Verheghe, 2007; Wang & Degol, 2016; Zakaria, 2020). However, it is not the primary focus, nor is it extensively studied in relation to teachers in Malaysian indigenous schools. Teacher well-being, especially in rural indigenous schools, is a very interesting topic of discussion given the distance of these schools from basic facilities. Due to this, these teachers face a very different set of challenges from their urban peers. Therefore, examining the challenges that rural teachers face will provide meaningful insights into effectively improving the quality of these teachers and their careers. Furthermore, identifying the primary concerns of rural teachers will not only aid the development of school climates that foster teacher commitment, but prevent employee turnover as well. Moreover, existing studies prove that TWB has an indirect but significant effect on the socio-emotional adjustment and academic performance of students (Hamre & Pianta, 2004; Jeon, Buettner, & Grant, 2018; Malmberg & Hagger, 2009; Moolenaar, 2010; Roth, Assor, Kanat-Maymon, & Kaplan, 2007).

The Malaysian education sector faces significant challenges in reducing student dropout rates, especially among indigenous students. Furthermore, the academic achievements of indigenous students in the national Primary School Achievement Test (UPSR) show that they are still far behind their counterparts in other Malaysian schools (Preliminary Report - Executive Summary of the Education Development Plan 2013-2025). Despite many endeavours to address this problem, it remains a pressing concern for many stakeholders (Wan Hanafi, Ahmad, & Ali, 2014). In the hopes of overcoming low academic achievement among

indigenous students, this study examined five dimensions of school climate, which are collaboration (CL), student relations (STR), school resources (SR), decision-making (DM), and instructional innovation (II), and their effects on TWB, which will in turn increase the socio-emotional adjustment and academic achievement of indigenous students.

According to Wang and Degol (2016), examining school climate provides stakeholders with an opportunity to enhance student achievement and reduce problem behaviours as well as dropout rates. Prior studies have established that school climate is a critically important element of TWB (Aelterman et al., 2002, 2007). A few dimensions of school climate, in particular CL and DM, have been found to contribute to TWB in distinct school settings, such as indigenous schools and special education schools (Wu, Wang, Gao, & Wei, 2020). School climate is defined as the personality of a school and reflects the overall state of a school system (Johnson, Johnson, & Zimmerman, 1996; Norton, 2008). Therefore, school climate has remained an important aspect of organisational research throughout the years as it influences TWB, especially in rural schools. As such, this study provides an understanding of the uniqueness of indigenous schools in Malaysia. Teacher well-being (TWB), on the other hand, refers to the positive emotional level of a teacher when one feels comfortable, happy, and healthy. This can be accomplished by balancing environmental factors such as school climate and the personal needs and expectations of teachers (Aeltermann et al., 2007).

Although multiple studies have proven the importance of establishing a positive and healthy school climate in Malaysia, few studies have examined the correlation between school climate and teacher well-being, especially in unique situations such as indigenous schools. Therefore, this study investigated the correlation between five dimensions of school climate (i.e., collaboration, student relations, school resources, decision-making, and instructional innovation) and TWB.

## **2.0 LITERATURE REVIEW**

### **2.1 School Climate**

School climate refers to the quality and character of a school (Johnson et al., 1996). According to Norton (2008), school climate reflects the overall state of the school system. The school climate in indigenous schools, which are primarily located in rural areas, is evidently different from schools located in urban areas. Therefore, it is integral that indigenous school teachers learn culturally responsive pedagogies and develop culturally competent practices that support student success (Darling-Hammond & DePaoli, 2020). A positive school climate that elevates the voice of its students in the classroom as well as provides materials and activities that draw

on diverse cultures enables educators to capitalise on the cultural experiences of its students to promote equity. Tapia-Fonlelm, Fraijo-Sing, Corral-Verdugo, Garza-Teran, and Moreno-Barahona (2020) found a correlation between school environment and the well-being of primary school students aged 10 to 12. However, there are very few studies on the correlation between school climate and TWB, especially in more unique settings such as indigenous schools.

The concept of school climate is multi-dimensional and influences stakeholders including students, teachers, administrators, parents, and the community. There is, however, no consensus on either the definition or dimensions of school climate. A pioneering study by Halpin and Croft (1963) provided the impetus for research into the concept of school climate. The Organizational Climate Descriptive Questionnaire (OCDQ) that they constructed spurred interest in school climate research and led to the development of other similar questionnaires, such as the Organizational Health Inventory (OHI) by Hoy, Tarter, and Kottkamp (1991), the School Level Environment Questionnaire (SLEQ) by Fraser and Rentoul (1983), and the Organizational Climate Index (OCI) by Hoy, Smith, and Sweetland (2002).

The original School-Level Environment Questionnaires (SLEQ) instrument, which was used by many researchers around the world for years, consisted of eight dimensions. However, in 2007, Johnson, Stevens, and Zvoch conducted exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) in addition to revising the original SLEQ instrument to retain only five of the eight original dimensions. This new SLEQ instrument was subsequently renamed the Teachers' Perception of School Climate. Johnsons, Stevens, and Zvoch used principal axis factoring and Oblimin rotation for the EFA. Five factors with eigenvalues  $> 1.0$  were extracted as they accounted for 63.0% of the variance of the original items. These factors were collaboration (CL), which accounted for 33.9% of the variance, student relations (STR) (10.4%), school resources (SR) (8.0%), decision-making (DM) (5.9%), and instructional innovation (II) (4.8%). As the inter-factor correlations ranged from 0.29 to 0.63, it was sufficient to justify the use of an oblique rotation and analyse both pattern and structure matrices. Based on the conceptual considerations, the use of these five factors appeared to be well supported. This solution was consistent with the five hypothesised SLEQ factors, and all 21 items fit into their hypothesised factors.

Based on the findings revealed by Johnsons, Stevens, and Zvoch (2007), this study adopted a revised version of school climate with five dimensions, which are CL, STR, SR, DM, and II. EFA and CFA were conducted to validate the constructs after which 21 items were retained and confirmed for use in both primary and secondary schools. Due to the strong

reputation of the revised SLEQ, this study decided to follow in the footsteps of other studies, such as Mohd Yusoff (2016) and Mohamad Kasim, Ismail, Mohammad, and Ibrahim (2016).

## **2.2 Teacher Well-being**

Well-being, in general, is defined as being physically and psychologically healthy. This encompasses emotional responses, domain satisfactions, and global judgments of life satisfaction (Diener, Suh, Lucas, & Smith, 1999). It is often interpreted as growth and human satisfaction, which is deeply influenced by the contexts surrounding people's lives and, as such, the opportunities for self-realisation. Teacher well-being (TWB) refers to the healthy and successful functioning of teachers at work. This can be measured by the ability of a teacher to develop a positive and dynamic equilibrium between teaching resources and challenges.

Teaching is a profession that involves meaningful and important work. However, it can be challenging due to the complex nature of the job. The job becomes even more complex when the school is in a rural area and the students come from a unique background, as is the case with indigenous schools. This results in high teacher dropout rates as well as the prevalence of overworked or burnout educators in rural schools. These worrying trends have prompted researchers, administrators, and policymakers to pay more attention to TWB (Collie, Shapka, & Perry, 2012; Duckworth, Queen, & Seligman, 2009). TWB has been linked to positive relationships with students, colleagues, and family, as well as higher academic results among pupils (Benevene, De Stasio, & Fiorilli, 2020).

Aelterman et al. (2007) gathered quantitative data from Flemish teachers and found that TWB depends on a teacher's self-assessment of his/her professional state; that is, the perception of being good at teaching. According to Fiorilli et al. (2019), internal support from within the work setting, which are colleagues, supervisors, school principals, and many others significantly contribute to TWB. Therefore, a positive and supportive school climate may be one of the most important factors affecting TWB.

Collie, Shapka, Perry, and Martin (2015) constructed the Teacher Well-being Scale (TWBS), a 16-item instrument with which to measure TWB. It requires teachers to rate the extent to which different aspects of their teaching work influence their well-being. This instrument is a method of gaining insight into the core aspects of teaching that affect teachers. Therefore, this study adopted Collie's TWBS instrument to examine the correlation between school climate and TWB in indigenous schools in Malaysia.

### **2.3 Correlation between School Climate and Teacher Well-being**

Multiple studies have investigated the relationship between work environment and employee well-being. These studies found that employees who are satisfied with their work environment exhibit higher job satisfaction, better job performance as well as good psychological well-being (Greenberger, Strasser, Cummings, & Dunham, 1989; Sargent & Deborah, 1998). Additionally, administrators who provide a work environment that supports and encourages collaboration between employees also contribute to employee satisfaction and well-being (London & Larsen, 1999).

According to Aelterman et al. (2007), school environment critically contributes to TWB. Open and supportive work environments have a positive impact on the TWB, which subsequently increases their commitment to work. This is corroborated by Chang, Geert, and Yifei (2011) as well as Yildirim (2014). Although these studies conclusively prove that school climate significantly impacts TWB, they differ from the present study in terms of school setting; that is, regular schools versus indigenous schools.

#### ***2.3.1 Dimensions of School Climate and Teacher Well-being***

According to Chang et al. (2011), teachers feel more attached to their school in a school climate that features clear goal orientation, positive relations, and shared visions. A study by Webb (2009) found that the practice of sharing ideas between the teachers and their willingness to try new learning approaches had positive impacts on teacher well-being especially in primary schools in England and Finland. Hence, the results of these studies show that instructional innovation (II) is a significant factor that contributes to teacher well-being. A study by Soini, Pyhältö, and Pietarinen (2010) also stresses the importance of instructional innovation in school. Teachers who apply effective teaching pedagogy in their lessons feel more satisfied and subsequently contributes to positive well-being.

Addimando (2019) stated that positive working conditions (both in terms of internal and external resources) will lead to teacher well-being. This is further supported by Lizana, Vega-Fernandez, and Lera (2020), who carried out their study among a group of teachers working in rural schools in Chile, investigating the relationship between their perceived quality of life and their general health condition, including well-being. Their study suggests that good school resources are important to detect early mental and chronic health conditions of rural teachers.

Another dimension in school climate is collaboration. The results of previous studies found that collaboration between teachers had a significant impact on teacher well-being (Paine

& Ma, 1993; Yildirim, 2014). Jacobsson, Akerlund, Graci, Cedstrand, and Archer (2016) conducted a study in Sweden and the result shows that effective collaboration can improve teacher well-being through reduced feelings of fatigue and higher job satisfaction. A two-way communication between school leaders and teachers can also contribute to the teachers' well-being. Similarly, the attitude of the headmaster who is willing to give opportunities to teachers in his school to participate in making decisions is highly encouraged (Butt & Retallick, 2002; Retallick & Butt, 2004; Brown & Roloff, 2011; Le Cornu, 2013). Meanwhile, a study by Spilt, Koomen, and Thijs (2011) emphasizes that good interpersonal interactions between teachers and their students have a positive impact on teacher well-being. In addition, Spilt et al. (2011) in their study also linked the importance of interaction between teachers and students through an interpersonal relationship model where each teacher felt a need to interact with students during lessons.

McCallum and Price (2010) stated that teachers need to have a sense of attachment to students in their school to increase students' self-motivation and further cultivate a sense of well-being among the teachers. These studies prove that the five dimensions of school climate are significant factors that contribute to teacher well-being. Therefore, it is very interesting to know if the same result will emerge if they are tested in a more unique school background such as indigenous schools. Hence, the hypotheses constructed are based on the previous studies that reflected the school climate dimensions as follows:

H1: Collaboration has significant effects on teacher well-being.

H2: Student Relations has significant effects on teacher well-being.

H3: School Resources has significant effects on teacher well-being.

H4: Decision Making has significant effects on teacher well-being.

H5: Instructional Innovation has significant effects on teacher well-being.

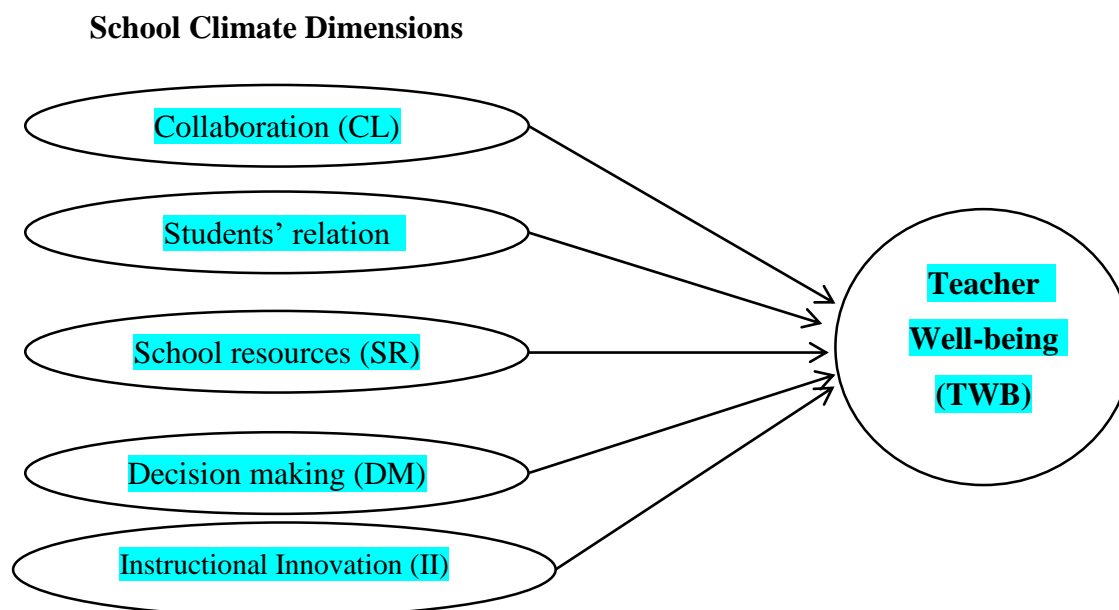


Figure 1: Conceptual framework

### 2.3.2 Self-Determination Theory (SDT)

Self-determination theory (SDT) is a motivational theory that posits that people have a basic psychological need for autonomy, relatedness, and competence (Deci & Ryan, 2017). The fulfilment of psychological needs is essential for psychological health and growth, autonomous motivation, optimal functioning, and self-actualisation (Deci & Ryan, 2008). SDT has been widely used by researchers in the education sector to demonstrate the correlation between the school climate and motivation, engagement, and well-being of students (Christenson, Reschly, & Wylie, 2012; Chiu, 2020). It has also been used to indicate the importance of TWB among pre-service teachers (Kaplan & Madjar, 2017). Considering the urgent need for a greater understanding of the possible correlations between school climate and TWB in indigenous schools, this study uses SDT as the primary theoretical framework.

Many urban teachers enjoy the benefit of working in safe, clean, well-maintained, and even resourceful schools. However, many of their peers do not have these basic assurances, especially those working in indigenous schools in rural areas. The physical and climate-related factors that affect TWB will be explored through the perspective of meeting the basic physical needs for safety and comfort as well as the basic psychological needs for autonomy, competence, and relatedness as identified through SDT. Briefly, SDT proposes that when the climate of a school is positive, it will affect the well-being of its teachers.



### **3.0 RESEARCH METHODOLOGY**

#### **3.1 Sampling Design and Data Collection**

This study was conducted at indigenous schools on the east coast of Peninsular Malaysia which has a total population of 1,050 teachers spread across three states, which are Kelantan, Terengganu, and Pahang. A stratified random sampling method was used to select 600 teachers as the sample of the study. Prior to data collection, the Educational Research Application System (eRAS 2.0), an online system, was used to seek approval from the Ministry of Education (MOE) Malaysia to conduct the research. The MOE then issued a letter granting access to indigenous schools to conduct a pilot test and formally collect data. Further access to the indigenous schools was then sought in person at the respective State Education Departments of Kelantan, Terengganu, and Pahang. Although access to the indigenous schools was granted, it proved impossible to personally visit some of these rural schools as they were in very remote areas. Not only would the journey be difficult but also quite dangerous as these schools were only accessible via unpaved roads or rivers. After several discussions and under the advisement of the officers at the State Education Departments, the postal service was used to randomly distribute 600 questionnaires to indigenous schools in Kelantan, Terengganu, and Pahang. The sample size of this study (600) was determined using the Raosoft® online sample size calculator as it incorporates many significant factors of determining sample size such as margin of error, confidence level, and variability. The site also provides the calculating formulas, making it a more trustworthy sample size calculator (Meysamie et al., 2014). The Raosoft® online sample size calculator recommended a sample size of 282 teachers for a 5% margin of error, 95% confidence level, and 50% response distribution. Over a period of three months, 291 questionnaires were collected, thereby yielding a response rate of 47.1%. Table 1 illustrates the respondents' demographic profile.

Table 1: Demographic characteristics of respondents

Demographic	Factor	Frequency (N=291)	Percentage (%)
Gender	Male	158	54.3
	Female	133	45.7
Age	between 20-30 years old	59	20.3
	between 31-40 years old	140	48.1
	between 41-50 years old	59	20.3
	between 51-60 years old	33	11.3
School Location	Outskirts	194	66.7
	Rural	97	33.3
Teaching Experience	between 1-10 years	142	48.8
	between 11-20 years	90	30.9
	between 21-30 years	40	13.7
	more than 30 years	19	6.5

### 3.2 Instrumentation

A set of questionnaires was used to gather the required data. A five-point Likert scale was used to measure all the constructs of the research model as previous studies have indicated satisfactory reliability and validity. Two education officers from the State Education Departments then reviewed the content validity of the questionnaire. The 21 items used to measure CL, STR, SR, DM, and II were adapted from Johnson et al. (2007). TWB was measured using the Teacher Well-Being Scale (TWBS) proposed by Collie et al. (2015) and consisted of 16 items.

### 3.3 Validity and Reliability

The validity and reliability of an instrument is important to ensure that the obtained findings are reliable and strong (Kerlinger & Lee, 2001). Therefore, it is important to validate the instrument and ensure its quality. To validate the sets of questionnaires, they were first distributed to education officers in the district and state education departments of Terengganu, Kelantan, and Pahang. These officer-validated questionnaires were deemed suitable to evaluate teachers working in indigenous schools. Two experts from universities also reviewed the set of questionnaires during pre-testing.

Prior to data collection, a pilot study involving 35 teachers from selected indigenous schools in Pahang was conducted. The Cronbach alpha ( $\alpha$ ) of the pilot study was determined

to ensure the reliability of the instrument. The  $\alpha$  of the school climate construct was 0.704 and 0.853 for the TWB construct. As the  $\alpha$  of both constructs exceeded 0.7, the reliability of each item was deemed acceptable and reliable (Sekaran & Bougie, 2010)

#### **4.0 DATA ANALYSIS AND FINDINGS**

According to Hair, Risher, Sarstedt, and Ringle (2019), the PLS-SEM approach was suitable for the study as it focused on the prediction between factors in the research model. As the purpose of the study was to predict the correlations between variables, the Smart Partial Least Squares (PLS) method was employed to test the hypotheses. The PLS-SEM analysis consisted of two stages: (1) analysis of the validity and reliability of the measurement model (i.e., the relationship between the indicators and the constructs), and (2) validation of the structural model (i.e., the relationship between the constructs or hypothesis testing).

##### **4.1 Measurement Model**

The measurement model was evaluated using two types of validity approaches: (1) convergent validity and (2) discriminant validity (see Figure 2). Convergent validity is measured by examining factor loading, average variance extracted (AVE), and composite reliability (Hair et al., 2019). Convergent validity can be established if factor loading exceeds 0.708, AVE reaches a value of 0.5, and CR is achieved with a minimum value of 0.7 (Hair et al., 2019). For some low loadings, 9 items (KG14, KS1, KS2, KS4, KS6, KS13, KS14, KS15, and KS16) were removed from the scale. Table 2 shows that the results of the convergent validity are acceptable as the results of factor loading, AVE and CR are higher than the threshold values, thus the convergent validity of the measure is now confirmed.

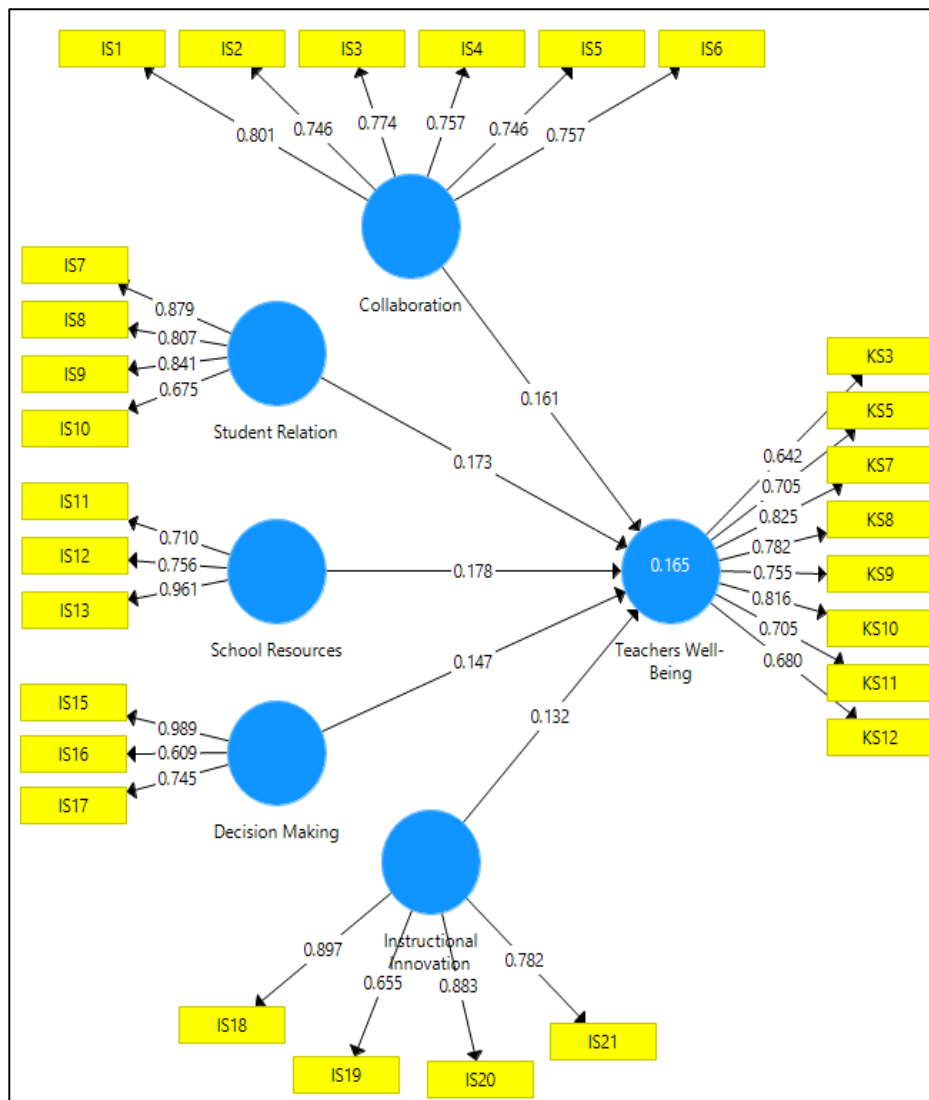


Figure 2: Measurement model

Table 2: Convergent validity

Constructs		Items	Loading	CR	AVE
Collaboration (CL)		IS1	0.801		
		IS2	0.746		
		IS3	0.774	0.89	0.58
		IS4	0.757		
		IS5	0.746		
		IS6	0.757		
Student Relation (STR)		IS7	0.879		
		IS8	0.807	0.88	0.65
		IS9	0.841		
		IS10	0.675		
School Resources (SR)		IS11	0.710		
		IS12	0.756	0.85	0.67
		IS13	0.961		
Decision Making (DM)		IS15	0.989		
		IS16	0.609	0.83	0.63
		IS17	0.745		
Instructional Innovation (II)		IS18	0.897		
		IS19	0.655	0.88	0.66
		IS20	0.883		
		IS21	0.782		
Teacher Well-being (TWB)		KS3	0.642		
		KS5	0.705		
		KS7	0.825		
		KS8	0.782		
		KS9	0.755	0.91	0.55
		KS10	0.816		
		KS11	0.705		
		KS12	0.680		

The heterotrait-monotrait ratio of correlations (HTMT) was used to examine the discriminant validity of the measurement model. Discriminant validity is the extent to which a construct is truly distinct from the other constructs by empirical standards. As seen in Table 3, the HTMT

is lower than the required threshold of the HTMT .85 criterion of Franke and Sarstedt (2019). This indicates that adequate discriminant validity is achieved in this study.

Table 3: Discriminant validity (HTMT Criterion)

Constructs	CL	DM	II	SR	STR	TWB
CL						
DM	0.16					
II	0.14	0.09				
SR	0.11	0.14	0.08			
STR	0.20	0.11	0.14	0.14		
TWB	0.22	0.16	0.18	0.20	0.26	

#### 4.2 Structural Model

The result of the measurement model indicates that the reliability, indicator reliability, convergent validity, and discriminant validity of the construct are satisfactory. Therefore, it could be used in the structural model. To test the lateral collinearity of the structural model via the variance inflation factor (VI), the values and corresponding t-values were evaluated. Prior to testing the structural model, it is crucial to determine that there are no collinearity issues. As seen in Table 4, the VIF of each construct is lower than the conservative value of 3.3 (Diamontopoulos, 2006). Therefore, collinearity is not an issue in this study.

Table 4: Collinearity test

Constructs	VIF
Collaboration (CL)	1.06
Decision making (DM)	1.04
Instructional Innovation (II)	1.03
Student Relation (SR)	1.04
Student Resources (STR)	1.02

As suggested by Hair et al. (2019), a bootstrapping procedure with a resample of 5000 was used to test the five hypotheses. It was used to determine the statistical significance of the path coefficient and to calculate the t-values of this study. Table 5 shows the results of the significance of the hypotheses and includes the path coefficient and t-values. The results of the structural model revealed that all five hypotheses significantly correlate with their respective

endogenous variables. CL significantly affects TWB, therefore H1 is supported (path coefficient = 0.16,  $t = 2.57$ ,  $p < 0.01$ ). As STR significantly influences TWB, H2 is supported (path coefficient = 0.17,  $t = 3.24$ ,  $p < 0.01$ ). SR positively correlates with TWB, hence, H3 is supported (path coefficient = 0.18,  $t = 2.72$ ,  $p < 0.01$ ). H4 shows that DM positively correlates to TWB (path coefficient = 0.15,  $t = 2.40$ ,  $p < 0.05$ ). Lastly, II positively influences TWB, therefore, H5 is supported (path coefficient = 0.13,  $t = 2.42$ ,  $p < 0.05$ ). Figure 3 and Table 5 indicate the structural model and the results for hypothesis testing.

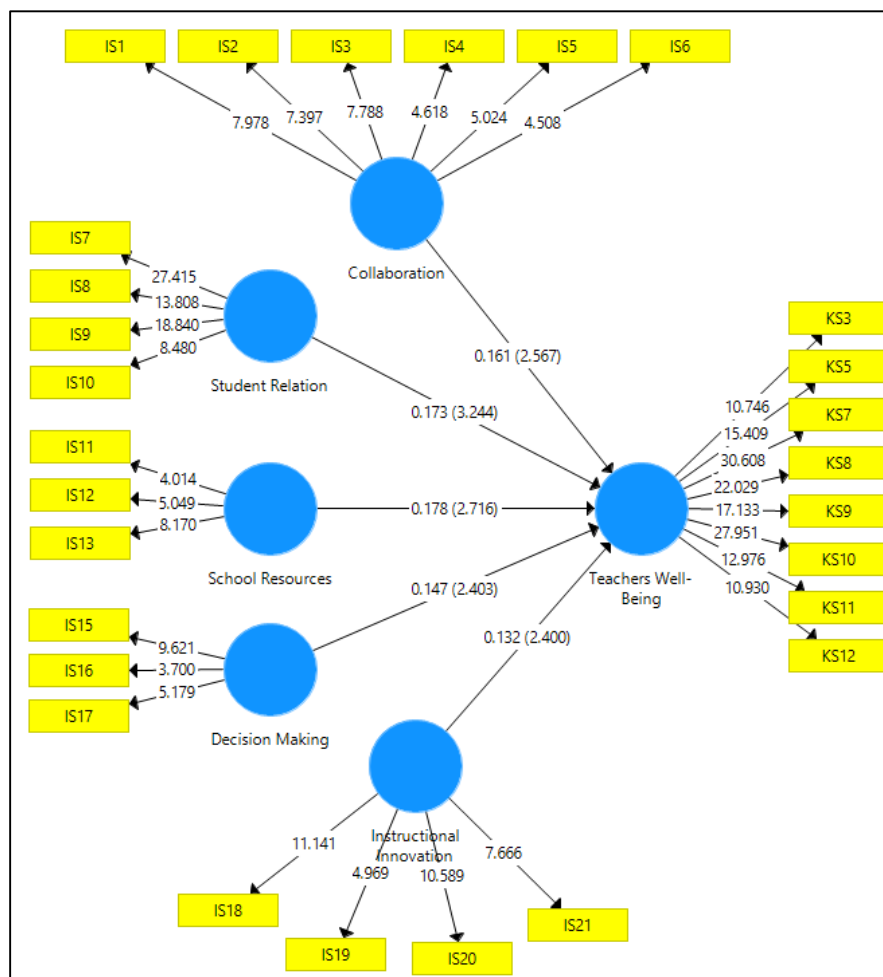


Figure 3: Structural model

Table 5: Hypotheses results

Relationship	Path Coefficient	t - value	p - value	Results
CL->TWB	0.16	2.57	0.01	Support
STR->TWB	0.17	3.24	0.00	Support
SR->TWB	0.18	2.72	0.01	Support
DM->TWB	0.15	2.40	0.02	Support
II->TWB	0.13	2.40	0.02	Support

The coefficient of determination ( $R^2$ ) and the predictive relevance ( $Q^2$ ) of the exogenous variables on the endogenous variables are reported in this section. An  $R^2$  of 0.165 suggests that CL, STR, SR, DM, and II explained 16.5% of the variance in TWB. As the  $Q^2$  of TWB was 0.08, above zero (Hair, Hollingsworth, Randolph, & Chong, 2017), the model was able to predict TWB. Of the investigated exogenous variables, STR had the biggest impact on TWB followed by SR, CL, DM, and II.

## 5.0 DISCUSSION AND CONCLUSION

The results indicated that the five dimensions of school climate, namely collaboration (CL), student relations (STR), school resources (SR), decision-making (DM), and instructional innovation (II) have a significantly positive influence on teacher well-being (TWB). These findings are consistent with the outcomes of previous studies (Aelterman et al., 2002, 2007; Chang et al., 2011; Paine & Ma, 1993) and confirm the relative importance of school climate and its impact on TWB. This is also supported by the self-determination theory (SDT) which states that teacher support and TWB are important factors that influence teacher effectiveness as well as the well-being of the students they teach. This is also unique to teachers and students in rural and indigenous schools. As school climate impacts TWB as well as stress and burnout (Gray, Wilcox, & Nordstokke, 2017), this study provides twofold implications – both empirical and theoretical.

### 5.1 Empirical Implications

Firstly, as predicted by and based on the SDT proposed by Deci and Ryan (2008), the result implies that school climate positively influences TWB. The empirical evidence on TWB at indigenous schools supports the five hypotheses of this research. As the  $R^2$  was approximately 0.165, it suggests that CL, STR, SR, DM, and II explain 16.5% of the variance in TWB.



Therefore, there are other factors that influence TWB at indigenous schools in the East Coast of Malaysia.

The main purpose of this study was to determine the extent to which the five school climate dimensions influence TWB at indigenous schools. An inferential analysis showed that all five dimensions of school climate significantly correlate with TWB. The results of this study are similar to the findings of previous studies (Paine & Ma, 1993; Aelterman et al., 2002, 2007; Chang et al., 2011). This emphasises the existence of a relationship between school climate and TWB, especially in the CL and II constructs. This also indicates that, even in rural and indigenous schools, teachers must find ways to collaborate (CL) and use instructional innovation (II) more effectively to attract and hold their students' attention. This is because students may be more interested and understand better if teachers use examples and approaches that the students are familiar with, such as plants, animals, and jungles. Teaching students certain values and making them focus in class is a big challenge. Furthermore, while some students reach schools at any time of the day, some would prefer doing other things, such as fishing, bird hunting or swimming, rather than attending class.

This study also found a significant correlation between student relations (STR) and TWB. This is corroborated by Spilt et al. (2011) who suggest, based on the coping theory of Lazarus on interpersonal relationships, that teachers have a basic need for relatability with the students in their class. Therefore, teachers need to establish STR by understanding the lives of their students outside the classroom. As a student's preference for nature and the jungle may contribute to truancy or absenteeism, teachers must use interpersonal skills when developing STR. As such, it is important to understand that school climate may also influence TWB as teachers have to adjust their approach accordingly.

Apart from that, other factors, such as receiving support from the school principal or administrators in the decision-making process, are consistent with the Job Demand-Control Support Model proposed by Karasek and Theorell (1990) and Kristof (1996). According to Chang et al. (2011), school climate and TWB are interrelated. Similar to the findings of both these studies, this study found that teachers feel more related to their school through a shared vision that also creates a positive relationship between colleagues. Therefore, it is clearly important to receive managerial support in decision-making as well as adequate school resources because these two factors significantly influence TWB in rural and indigenous schools. As good leadership, authority in decision-making, and school resources are designed and supplied by the Ministry of Education, these factors may warrant periodic revision to increase practicality and relevance in rural and indigenous settings.

## **5.2 Theoretical Implications**

The empirical implications of this study have contributed to the understanding of self-determination theory (SDT) by validating that the dimensions of school climate significantly correlate to teacher well-being (TWB). This study advocates that school climate constructs such as collaboration (CL), student relations (STR), school resources (SR), decision-making (DM), and instructional innovation (II) can influence TWB in indigenous schools. Therefore, an open and positive school climate is crucial for TWB, not only to reduce stress and burnout (Gray et al., 2017), but also to motivate teachers (Kaplan & Madjar, 2017).

As education stakeholders consider improvements to school safety, student dropout rate, and student well-being, many have turned their attention to the role of schools in promoting TWB. While most previous studies have focused on student well-being, this study focused on TWB instead. This is because it is essential to explore ways of supporting teachers that consistently experience high levels of stress and burnout, especially in indigenous schools that are not as conducive as schools in urban areas.

## **5.3 Practical Suggestions and Future Directions**

In conclusion, indigenous schools should comprehensively improve their school climate to increase teacher well-being (TWB) which will, in turn, result in better academic achievements and lower dropout rates among indigenous students. In terms of education policy, this study points towards the importance of TWB as well as the school climate of indigenous schools. As the findings of this study show, all five dimensions of school climate positively and significantly affect TWB in indigenous schools. Therefore, the Ministry of Education and agencies related to the indigenous community, such as the Department of Orang Asli Development (JAKOA), should pay special attention and consider conducting regular training sessions and workshops for teachers and administrators at indigenous schools to further improve students' academic performance and the relatability with the students in their class. Additionally, the results of this study greatly contribute to the Malaysia Education Blueprint 2013-2025 in terms of equity, which is to reduce the gap between the academic achievements of urban and rural students as well as their socio-economic status.

Furthermore, teachers and students in rural areas should be provided with more school resources and instructional materials that cater to their unique needs. This would enable teachers to generate more innovative instructional approaches with which to collaborate with their students, such as incorporating natures and their lives. The dimensions of school climate warrant serious consideration as they significantly influence TWB in rural and indigenous

schools in the east coast of Peninsular Malaysia. Future studies may consider other factors such as rewards and compensation, teacher behaviour, self-efficacy, teacher commitment, and readiness to help among rural teachers. This may also attract more indigenous persons to the teaching profession who will then serve their own communities. Although the dropout rate at indigenous school is high and most students find it challenging to complete their formal education, effort and dedication on the part of teachers is important in shaping school climate. At some indigenous schools, it is a major challenge to retain students until they pass their primary or secondary school assessments. Even then, many students are not able to pass the national Malaysian Certificate of Education (SPM) or Malaysian Higher School Certificate (STPM) examinations; the latter being the minimum requirement for entry into all Malaysian tertiary education institutions. Therefore, it is our hope that by engaging and collaborating with the relevant agencies, the school climate and TWB will improve, then more students could pursue education to the tertiary level, so that more teachers are appointed from their own communities in the future.

Indigenous schools in other parts of Malaysia may have different outcomes and contexts as different ethnic groups have different traits and values. Therefore, teachers may face different challenges and cultures at other indigenous schools and areas. The education level and socio-economic status of indigenous communities in the east coast of Peninsular Malaysia may also vary from that of indigenous communities in the west coast states of Peninsular Malaysia such as Selangor or Perak (Kunasekaran et al., 2017; Masron, Masami, & Ismail, 2013; Ramle, Mohamad Hafis, & Asmawi, 2014). For instance, the Mah Meri tribe and their school on Carey Island, Selangor are on another level unlike the schools for the Semoq Beri, Semai, Orang Batek, Temiar, and Jakun tribes in the east coast of Peninsular Malaysia, which are in remote and hard-to-reach areas. In conclusion, this study provides stakeholders with a better understanding of school climate dimensions and TWB at indigenous schools in the east coast of Peninsular Malaysia.

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