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CONFIRMATORY FACTOR ANALYSIS AND EFFECTS OF PRINCIPAL LEADERSHIP STYLE: MOTIVATION ON STANDARD1 ASSESSMENT MEQSW2 MANAGEMENT OF TERENGGANU NATIONAL SCHOOLS

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ABSTRACT

The goal of the Ministry of Education Malaysia (MOE) is to develop a self-improvement system that is capable of sparking innovation and increasing higher achievement. The Ministry has revised the Malaysian Education Quality Standards (MEQS) self-assessment instrument to enable school assessment to be more holistic. Therefore, it is branded as the Malaysian Education Quality Standards (MEQS) Wave 2 (MEQSw2). The MEQSw2 instrument has been improved and this will enable school leadership to carry out continuous improvements to improve school performance. The instrument used combines various existing assessment instruments to avoid overlap in assessment, thus increasing efficiency. Overall, the study findings show that the factors of the Headmaster's leadership style (based on transformational leadership, transactional leadership, laissez faire leadership) and teacher management motivation have a significant and positive effect on the Standard1 Assessment MEQSw2. The factor of teacher management motivation does not function as a mediator in the relationship between the Headmaster's leadership style based on transformational leadership, transactional leadership, laissez faire leadership and the Standard1 Assessment MEQSw2. The overall results of this study show that the Headmaster's leadership style, teacher management motivation, are important factors in influencing the Standard1 Assessment MEQSw2 among the management of Terengganu National Schools.

KEYWORDS: Headmaster Leadership Style, Teacher Management Motivation, Standard1 Assessment MEQSw2, Structural Equation Modeling (SEM).

1. INTRODUCTION

The National Education Goal is a strong vision towards achieving the national education vision based on our country's National Education Philosophy. It plays an important role in efforts to produce first-class human capital which will then be able to increase the economy of the people with high incomes by 2020 (Yahya Don, 2012). Education requires a process of change that can develop the country and its children in the future. Effective and quality education will help produce a new generation who understand the meaning of life and responsibility. Such new young people will strive to develop their talents and potential towards building a better life, whether through themselves, family, race, religion, or country (Yahya Don, 2012; Najeemah Mohd Yusof, 2012). Therefore, education is the main tool of the country that functions as a medium and channel to meet the needs of the country in various aspects, especially in preparation for the formation of new leaders of the country. To respond to the direction of the National Education Vision, education leadership needs to mobilize efforts to ensure that it can be realized and in line with the National Education Philosophy which is the backbone of education in all implementations. The entire education management and leadership needs to be aware of the education vision outlined to increase high productivity (Yahya Don, 2012).

The effectiveness of leadership in making national education a success is closely related to various positive qualities which require internal strength in facing any obstacles and challenges and daring to take risks through the creative, innovative and imaginative power of a leader (Yahya Don, 2012). Teachers are the backbone of the education system, and their level of motivation directly affects the level of education quality. This is because teacher motivation has an influence on the success of the school, namely being able to inspire students and create a positive learning atmosphere in the school. When teachers are motivated, they bring enthusiasm, creativity, and a positive attitude to the teaching and facilitation process which can create an interesting and effective learning environment. Therefore, the influence of the leadership style of the principal must be able to instil optimal motivation among teachers in the school. This is because the leadership style of the principal is able to influence teacher motivation and the success of an organization by ensuring that the obligations and responsibilities to the institution are fulfilled with great commitment and responsibility in all activities at the school (Murgaya & A. Hamid, 2020). The leadership style of school

leaders has a major influence on how teachers and students in schools inspire themselves to evaluate and make the best decisions and complete tasks with dedication. Leadership style has also increased teachers' motivation to teach and commitment to their careers by enabling them to use various leadership techniques and strategies to influence and motivate colleagues and students to advance learning and realize the goals of the National Education Philosophy, which is the creation of individuals who are physically, emotionally, spiritually, and intellectually balanced.

MEQSw2 is a redrafting of the Malaysian Education Quality Standards (MEQS) 2010 with several improvements resulting from a series of studies and improvement actions. This effort is to ensure the role of the Headmaster as a high-impact leader who is able to mobilize and mobilize school staff in an integrated manner to develop the school and improve the quality of teaching and learning. In ensuring the success and effectiveness of each plan that has been arranged, the Headmaster needs support and cooperation from his subordinates to implement and make each plan that has been arranged a success. In this case, teachers are the implementers of all these agendas. Therefore, the Headmaster's leadership style is important in building good relationships with all teachers and school staff as coordinators, controllers, planners and implementers (Ofojebe & Ezugoh, 2010). This is also in line with the opinion of Azizi, Halimah, Noordin and Lim (2011) in the Report of the Meeting of the Excellent Principals Movement in 1998 which stated that effective school leaders need to have excellent communication skills, build good relationships with those around them, accept responsibility professionally, make decisions based on mutual agreement and several other personal skills. The purpose of this research is to identify the influence of Headmaster Leadership Style (based on Transformational Leadership, Transactional Leadership, Laissez Faire Leadership) and Teacher Management Motivation on Standard1 Assessment MEQSw2 Management of Terengganu National Schools.

The focus of this study is to identify the influence of Principal Leadership Style (PLS) and teacher motivation on the assessment of standard1 MEQSw2 among the management of National Schools in Terengganu. The Malaysian Education Blueprint (MEB) 2013-2025 has entered its third (3) wave of implementation in 2025, which is in 2021. The focus of implementation in Wave three (3) is that all schools, teachers and principals must demonstrate

performance above the minimum standard. Therefore, the Ministry of Education Malaysia will focus on increasing operational flexibility to foster a culture of peer leadership for the development of professional excellence. The Ministry will also shift most schools to a school-based management model and develop a school success model based on innovation in teaching. MEQSw2 is a redrafting of the Malaysian Education Quality Standards (MEQS) 2010 with several improvements resulting from a series of studies and improvement actions. This effort is to ensure the role of the Headmaster as a high-impact leader who is able to mobilize and mobilize school staff in an integrated manner to develop the school and improve the quality of teaching and learning. In ensuring the success and effectiveness of each plan that has been arranged, the Headmaster needs support and cooperation from his subordinates to implement and make each plan that has been arranged a success. In this case, teachers are the implementers of all these agendas. Therefore, the Headmaster's leadership style is important in building good relationships with all teachers and school staff as coordinators, controllers, planners and implementers (Ofojebe & Ezugoh, 2010). This is also in line with the opinion of Azizi, Halimah, Noordin and Lim (2011) in the Report of the Excellent Principals Movement Meeting (REPM) in 1998 which states that effective school leaders need to have excellent communication skills, build good relationships with those around them, accept responsibility professionally, make decisions based on mutual agreement and several other personal skills.

2. RESEARCH METHODOLOGY

The research method used is quantitative and uses research instruments that have been adapted according to the suitability of factors Headmaster Leadership Style (based on Transformational Leadership, Transactional Leadership, Laissez Faire Leadership) and Teacher Management Motivation on Standard1 Assessment MEQSw2 of Management of Management of Terengganu National Schools. Data were analysed using Structural Equation Modelling (SEM) with the help of the IBM-SPSS-AMOS version 24.0 program. SEM is formed with two (2) main models namely Measurement Model and Structural Model. Before the SEM test is performed, an adaptation test should be conducted to ensure that the indicators tested truly represent the construct being measured (Chik, Abdullah, Ismail & Mohd Noor, 2024); Hair et al., 2006; Schumacker & Lomax, 2004). Confirmatory Factor Analysis (CFA) is

a measurement model test to ensure that each construct meets procedures such as validity and reliability for each construct tested (Kline, 2016; Hair, Black, Babin, Anderson & Tatham, 2006; Schumacker & Lomax, 2004). The fit of the measurement model is very important to ensure that each latent construct in this study has fit with the data studied before SEM can continue (Kline, 2016; Schumacker & Lomax, 2004).

Using the CFA method can assess the extent to which the observed factors are significant to the latent construct used. This evaluation is done by examining the value of the strength of the regression structure path from the factor to the observed variable (i.e. Factor Loading value) instead of the relationship between the factors (Byrne, 2013). Through the use of CFA, any item that does not fit the measurement model is dropped from the model. This discrepancy is due to the low value of the load factor. Researchers need to perform the CFA process on all the constructs involved in the model, either separately or in a pooled CFA model (Alias & Hartini, 2017). The suitability of the tested hypothesis model was verified by using Fitness Indexes to see the value of Root Mean Square Error of Approximation (RMSEA<0.08), Comparative Fit Index (CFI>0.90) and Chi Square/Degrees of Freedom ($\chi^2/df < 5.0$). According to Hair et al. (2006) if the χ^2 value is less than 2.00 but significant, then it is necessary to state whether the sample size is large or vice versa. A sample size that exceeds 200 can cause the χ^2 value to be significant. Because of that, Hair and his colleagues suggested two other indices namely CFI and RMSEA to ensure that the CFA analysis forms the one-dimensionality of the study model. If the CFI value exceeds 0.90 and the RMSEA is less than 0.08, it is said that there is one-dimensionality for the formation of each construct.

3. FINDINGS

3.1. Confirmatory Factor Analysis (CFA)

There are two models that need to be analysed in carrying out Structural Equation Modelling (SEM), namely the Measurement Model and the Structural Model. Chik et al. (2024) suggest two steps that need to be carried out in a Structured Equation Modelling (SEM) namely: a) Confirming the Measurement Model of all the constructs involved through the Confirmatory Factor Analysis (CFA) method, and b) Modelling all the constructs into Structural Model as well as doing SEM procedures (Chik et al., 2024; Hoque, Awang, Jusoff, Salleh & Muda, 2017; Kashif, Samsi, Awang & Mohamad., 2016). The fit of the Measurement Model with the study data is

important to validate a SEM. If the Measurement Model does not match the data from the field, then the constructed SEM is invalid. Therefore, the first step in SEM analysis is to determine the appropriateness of the Measurement Model to the data from the field. Analysis of the fit of the Measurement Model with field data is done by using Confirmatory Factor Analysis (CFA) to confirm the proposed Measurement Model of the construct. Testing the Validity and Reliability of the Measurement Model: Before evaluating the appropriateness of a constructed model, the evaluation of One-dimensionality, Validity and Reliability of the Measurement Model of the construct of this study needs to be carried out first. One-dimensionality: This requirement can be met through the items deletion procedure that has a low Factor Loading value until it reaches the set Fitness Indexes level. Items with a Factor Loading value of less than 0.6 are considered unimportant to the measurement of the construct and should be discarded. Validity: The three types of validity that must be achieved by a construct measurement model are Construct Validity, Convergent Validity and Discriminant Validity. Construct Validity: Refers to the accuracy of a measurement instrument used to measure the intended construct in the study. Construct Validity describes the extent to which a statement in the item used can measure the construct that the researcher wants to measure. Construct Validity is achieved when all Fitness Indexes for the construct in question meet the specified level (Chik et al., 2024). Table 1 below shows the three categories of fit index that need to be achieved by a construct measurement model, namely Absolute Fit, Incremental Fit and Passionate Fit.

Table 1: Three (3) Categories of Matching Indexes and Recognized Index Types.

Category Name	Index Name	Index Value	Findings
1. Absolute fit	RMSEA	0.053	Reach the set level
2. Incremental fit	CFI	0.979	Reach the set level
3. Parsimonious fit	ChiSq/ df	2.096	Reach the set level

Source: Chik et al. (2024).

Convergent Validity: Refers to the relationship of a measurement model with other measurement models in theory. Convergent validity of a construct will be achieved if all Average Variance Extracted (AVE) values reach a minimum value of 0.50. Discriminant Validity: Explains the extent to which a construct does not have too strong a relationship

with another construct in the same model so that it can be said that a construct is a shadow or repetition (redundant) of another construct. Discriminant Validity is assessed through the discriminant validity index summary. According to Chik et al. (2024) and Hoque et al. (2017), discriminant validity for a construct can be achieved if all diagonal matrix values are greater than other values in row cells and also in column cells. The diagonal value of the matrix is the square root of the AVE, while the values in the matrix are the correlations between the constructs in the model. Average Variance Extracted (AVE): The AVE value is calculated from the factor loading value for each item in a certain construct and needs to reach a minimum limit of 0.50 ($AVE > 0.5$) to prove the reliability of the Measurement Model of a latent construct in this study, which can be achieved (Chik et al., 2024; Hoque et al., 2017). Reliability: SEM uses the Composite Reliability (CR) value to verify the reliability of the Measurement Model according to the factor loading value of each item. Each construct that has a value of $CR > 0.6$, has achieved Composite Reliability (Chik et al., 2024; Hoque et al., 2017).

3.2. CFA Analysis for the Measurement Model of Headmaster Leadership Style Based on Transformational Leadership Construct

The analysis of Fitness Indexes in Table 2 below shows that the Transformational Leadership construct Measurement Model has reached the level of the Fitness Index level as stated in Table 1 above. This means that Construct Validity has been achieved (Chik et al., 2024; Hoque et al., 2017).

Table 2: Analysis To Determine Validity for Transformational Leadership Construct.

Category Name	Index Name	Index Value	Findings
1. Absolute fit	RMSEA	0.053	Reach the set level
2. Incremental fit	CFI	0.979	Reach the set level
3. Parsimonious fit	ChiSq/ df	2.096	Reach the set level

The Measurement Model for the Transformational Leadership construct has reached the value of the Conformity Index level. This means that Construct Validity for this construct, has been achieved (Chik et al., 2024; Kashif et al., 2016).

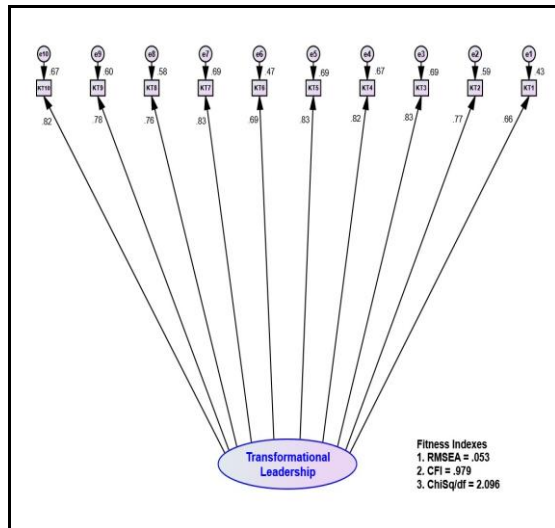


Figure 1. The Measurement Model of Transformational Leadership Construct.

3.3. CFA Analysis for the Measurement Model of Headmaster Leadership Style Based on Transactional Leadership Construct

The analysis of Fitness Indexes in Table 3 below shows that the Transactional Leadership construct Measurement Model has reached the level of the Fitness Index level as stated in Table 1 above. This means that Construct Validity has been achieved (Chik et al., 2024).

Table 3: Analysis To Determine Validity for Transactional Leadership Construct.

Category Name	Index Name	Index Value	Findings
1. Absolute fit	RMSEA	0.079	Reach the set level
2. Incremental fit	CFI	0.981	Reach the set level
3. Parsimonious fit	ChiSq/df	3.403	Reach the set level

The Measurement Model for the Transactional Leadership construct has reached the value of the Conformity Index level. This means that Construct Validity for this construct, has been achieved (Chik et al., 2024; Kashif et al., 2016).

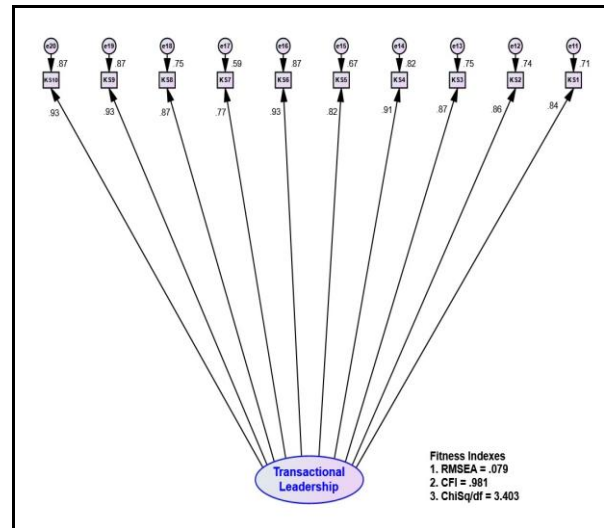


Figure 2. The Measurement Model of Transactional Leadership Construct

3.3. CFA Analysis for the Measurement Model of Headmaster Leadership Style Based on Laissez Faire Leadership Construct

The analysis of Fitness Indexes in Table 4 below shows that the Laissez Faire Leadership construct Measurement Model has reached the level of the Fitness Index level as stated in Table 1 above. This means that Construct Validity has been achieved (Chik et al., 2024; Hoque et al., 2017).

Table 4: Analysis To Determine Validity for Laissez Faire Leadership Construct.

Category Name	Index Name	Index Value	Findings
1. Absolute fit	RMSEA	0.048	Reach the set level
2. Incremental fit	CFI	0.988	Reach the set level
3. Parsimonious fit	ChiSq/df	1.870	Reach the set level

The Measurement Model for the Laissez Faire Leadership construct has reached the value of the Conformity Index level. This means that Construct Validity for this construct, has been achieved (Chik et al., 2024; Kashif et al., 2016).

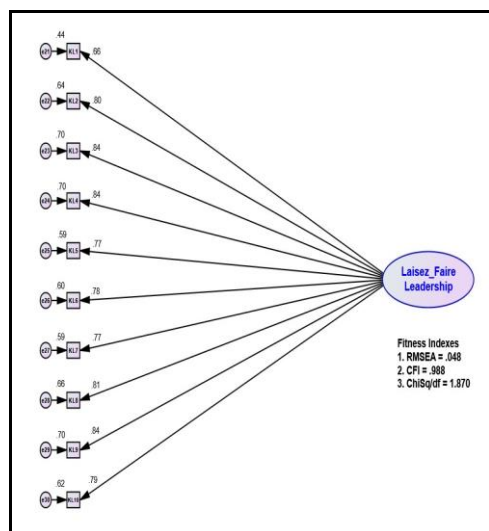


Figure 3. The Measurement Model of Laissez_Faire Leadership Construct

3.4. CFA Analysis for the Measurement Model of Teacher Management Motivation Construct

The analysis of Fitness Indexes in Table 5 below shows that the Teacher Management Motivation Construct Measurement Model has reached the level of the Fitness Index level as stated in Table 1 above. This means that Construct Validity has been achieved (Chik et al., 2024; Hoque et al., 2017).

Table 5: Analysis To Determine Validity for Teacher Management Motivation Construct.

Category Name	Index Name	Index Value	Findings
1. Absolute fit	RMSEA	0.053	Reach the set level
2. Incremental fit	CFI	0.982	Reach the set level
3. Parsimonious fit	ChiSq/df	2.089	Reach the set level

The Measurement Model for the Teacher Management Motivation construct has reached the value of the Conformity Index level. This means that Construct Validity for this construct, has been achieved (Chik et al., 2024; Kashif et al., 2016).

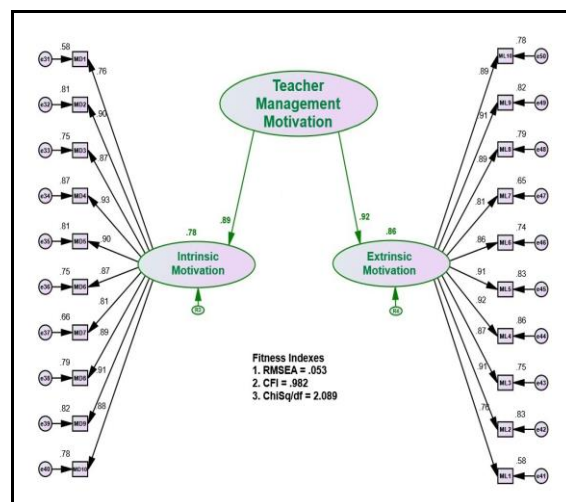


Figure 4. The Measurement Model of Teacher Management Motivation Construct

3.5. CFA Analysis for the Measurement Model of Standard1 Assessment MEQSw2 Construct

The analysis of Fitness Indexes in Table 6 below shows that the Standard1 Assessment MEQSw2 construct Measurement Model has reached the level of the Fitness Index level as stated in Table 1 above. This means that Construct Validity has been achieved (Chik et al., 2024; Hoque et al., 2017).

Table 6: Analysis To Determine Validity for Standard1 Assessment MEQSw2 Construct.

Category Name	Index Name	Index Value	Findings
1. Absolute fit	RMSEA	0.077	Reach the set level
2. Incremental fit	CFI	0.987	Reach the set level
3. Parsimonious fit	ChiSq/df	3.245	Reach the set level

The Measurement Model for the Standard1 Assessment MEQSw2 construct has reached the value of the Conformity Index level. This means that Construct Validity for this construct, has been achieved (Chik et al., 2024; Kashif et al., 2016).

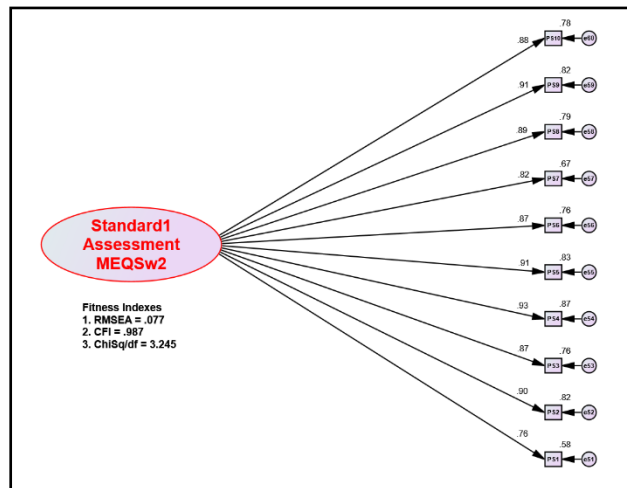


Figure 5: The Measurement Model of Standard1 Assessment MEQSw2 Construct.

3.6. Combined Confirmatory Factor Analysis of All Measurement Models (Pooled CFA)

This Pooled CFA analysis is necessary to evaluate the correlation value between the constructs in the Discriminant Validity procedure. If the correlation value between two constructs exceeds 0.85, then there is redundancy between the two constructs (Chik et al., 2024; Hoque et al., 2017). A model involving a second order construct is a construct that has dimensions or sub-constructs where each dimension or sub-construct has a certain number of items. Researchers will have difficulty combining all the second-level constructs in one model to conduct Pooled Confirmatory Factor Analysis (Pooled CFA). The solution, all second order constructs need to be summarized into a first order construct model by taking the mean item of each sub-construct or dimension (Chik et al., 2024; Hoque et al., 2017). The results of the Pooled CFA procedure are shown in Figure 6 below. The single headed arrow value is the factor loading values of each item and the double headed arrow value is the correlation between constructs. Through the Pooled CFA method, only one model fit index that represents all the constructs is released. Table 7 below shows that all three categories of model fit index for the construct measurement model have been achieved.

Table 7 Analysis to Determine Validity for All Constructs and Sub-Constructs.

Category Name	Index Name	Index Value	Findings
1. Absolute fit	RMSEA	0.057	Reach the set level
2. Incremental fit	CFI	0.913	Reach the set level
3. Parsimonious fit	ChiSq/df	2.233	Reach the set level

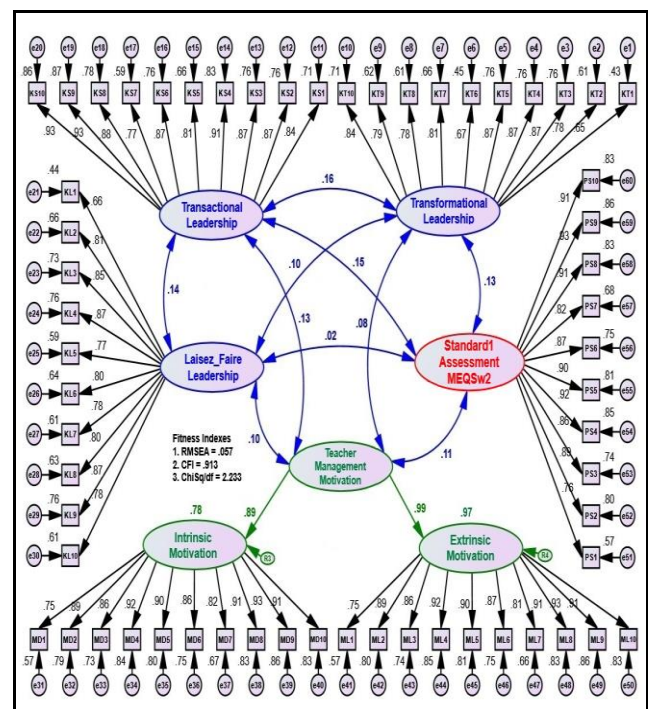


Figure 6. Pooled CFA Analysis Findings.

Discriminant Validity is necessary to prove that all the constructs in the model do not have a strong relationship with each other leading to the problem of multicollinearity (Chik et al., 2024). Table 8 below shows the Discriminant Validity Index Summary between all the constructs in the model.

Table 8: Discriminant Validity Index Summary.

Constructs	(a)	(b)	(c)	(d)	(e)
Transformational Leadership (a)	0.913				
Transactional Leadership (b)	0.160	0.925			
Laissez_Faire Leadership (c)	0.100	0.140	0.918		
Teacher Management Motivation (d)	0.080	0.130	0.100	0.941	
Standard1 Assessment MEQSw2 (e)	0.130	0.150	0.020	0.110	0.934

Table 8 above presents the square root value of AVE for each construct on the diagonal matrix. The other values in the table are correlations between the two constructs. According to Chik et al. (2024), Discriminant Validity will be achieved if all the values of the square root of AVE (Diagonal) are greater than other values whether the values are in rows or columns. Findings from Table 8 show that Discriminant Validity for all constructs in the model has been achieved.

4. ANALYSIS EFFECT

There are two (2) types of output when running the SEM (Structural Equation Modelling) procedure, namely graphic output and text output. The graphical output produces standardized regression values and unstandardized regression values between constructs. Running the SEM procedure produces standardized regression values and unstandardized regression values.

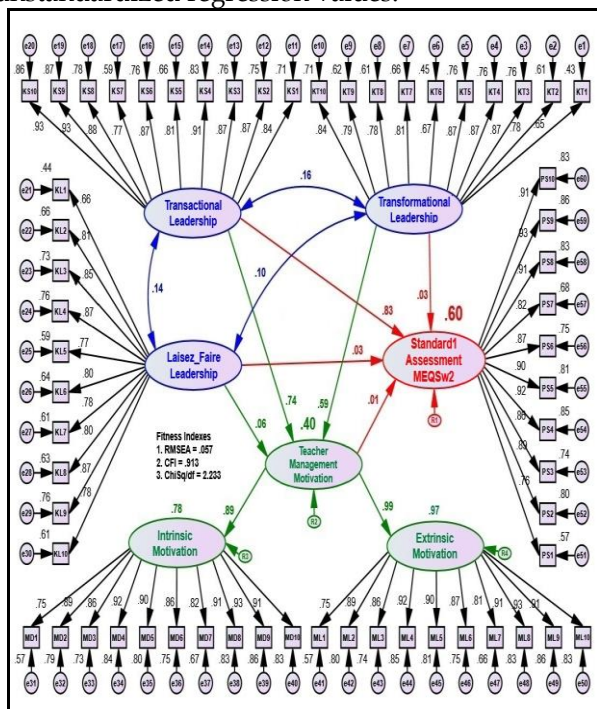


Figure 7: Standardized Regression Values.

The R2 value for the Standard1 Assessment MEQSw2 (SAM) is 0.60. This shows four (4) predictor constructs in the model (one headed arrow) which are Transformational Leadership (TFL), Transactional Leadership (TSL), Laissez Faire Leadership (LFL) and Teacher Management Motivation (TMM) contributed as much as 60 percent (%) to Standard1 Assessment MEQSw2 (SAM) among the population in this study. The R2 value for Teacher Management Motivation (TMM) is 0.40. This shows three (3) predictor constructs in the model (see arrow) which are Transformational Leadership (TFL), Transactional Leadership (TSL) and Laissez Faire Leadership (LFL) contribute as much as 40 percent (%) to Teacher Management Motivation (TMM) among the population in this study.

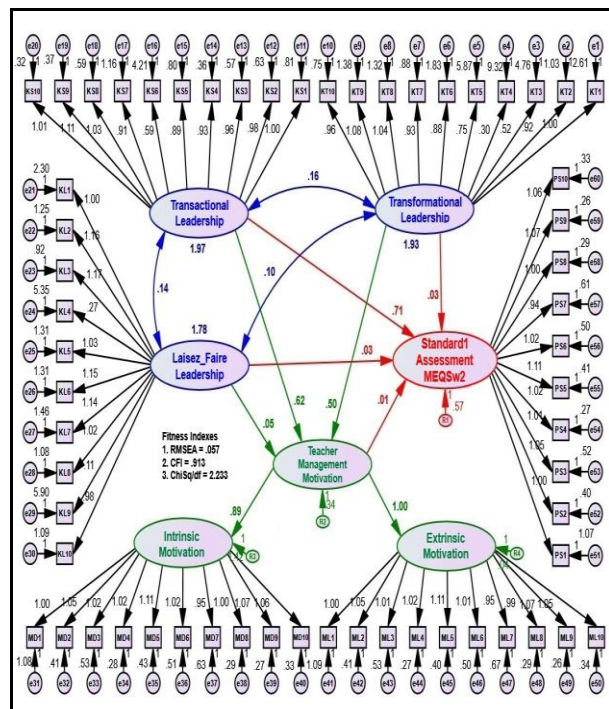


Figure 8: Unstandardized Regression Values.

The regression equation for Standard1 Assessment MEQSw2 (SAM) and Teacher Management Motivation (TMM) is:

$$a) \text{ SAM} = 0.03\text{TFL} + 0.71\text{TSL} + 0.03\text{LFL} + 0.01\text{TMM} \quad (R^2 = 0.60 = 60 \%).$$

$$b) \text{ TMM} = 0.50\text{TFL} + 0.62\text{TSL} + 0.05\text{LFL} \quad (R^2 = 0.40 = 40 \%).$$

The double-headed arrow is the value of the correlation between two independent, namely the correlation between Transformational Leadership (TFL) with Transactional Leadership (TSL) results in a value of 0.16, between Transformational Leadership (TFL) with Laissez Faire Leadership (LFL) results in a value of 0.10, between Transactional Leadership (TSL) with Laissez Faire Leadership (LFL) results in a value of 0.14, and the result of this correlation value shows that the Structural Equation Modelling (SEM) model built is valid based on the construct, due to the non-occurrence of multicollinearity problems.

Table 9 from Figure 8 above, shows the results of direct effect hypothesis testing for Transformational Leadership (TFL), Transactional Leadership (TSL), Laissez Faire Leadership (LFL) and Teacher Management Motivation (TMM) (independent variable) on Standard1 Assessment MEQSw2 (SAM) (dependent variable).

Table 9: Hypothesis of Direct Effect Between Constructs.

Direct Effects Hypothesis	P	Decision
H ₁ : Transformational Leadership has a significant effect on Standard1 Assessment MEQSw2.	0.011	Supported

H2: Transactional Leadership has a significant effect on Standard1 Assessment MEQSw2.	***	Supported
H3: Laissez_Faire Leadership has a significant impact on Standard1 Assessment MEQSw2.	***	Supported
H4: Teacher Management Motivation has a significant effect on Standard1 Assessment MEQSw2.	***	Supported
H5: Transformational Leadership has a significant effect on Teacher Management Motivation.	0.039	Supported
H6: Transactional Leadership has a significant effect on Teacher Management Motivation.	0.017	Supported
H7: Laissez_Faire Leadership has a significant effect on Teacher Management Motivation.	***	Supported

Analysis Effect of Headmaster Leadership Style Based on Transformational Leadership (TFL) on Standard1 Assessment MEQSw2 (SAM).

Based on the analysis of Figure 8 above and Table 10 below shows that Transformational Leadership (TFL) has a significant effect on Standard1 Assessment MEQSw2 (SAM). The estimated regression weight (β) is 0.029, the significance level is 0.011 (Estimate = 0.029, S. E. = 0.117, C. R. = 2.543, Label = Significant). The results of this study show that Transformational Leadership (TFL) has a positive and significant effect on Standard1 Assessment MEQSw2 (SAM). Therefore, when Transformational Leadership (TFL) increases by 1 unit, an increase also occurs by 0.029 units on Standard1 Assessment MEQSw2 (SAM). Therefore, the testing of hypothesis H1 in this study is supported based on the observed data.

Table 10: Regression Coefficient Value, Probability (p) Transformational Leadership (TFL) on Standard1 Assessment MEQSw2 (SAM).

Construct	Construct	Estimate	S. E.	C. R.	P	Label
SAM	- TFL	0.029	0.117	2.543	0.011	Significant

Analysis Effect of Principal Transformational Leadership Based on Transactional Leadership (TSL) on Standard1 Assessment MEQSw2 (SAM).

Based on the analysis of Figure 8 above and Table 11 below shows that Transactional Leadership (TSL) has a significant effect on Standard1 Assessment MEQSw2 (SAM). The estimated regression weight (β) is 0.712, the significance level is 0.000 (Estimate = 0.712, S. E. = 0.179, C. R. = 3.982, Label = Significant). The results of this study show that Transactional Leadership (TSL) has a positive and significant effect on Standard1 Assessment MEQSw2 (SAM). Therefore, when Transactional Leadership (TSL) increases by 1 unit, an increase also occurs by 0.712 units on Standard1 Assessment MEQSw2 (SAM). Therefore, the testing of hypothesis H2 in this study is supported based on the observed data.

Table 11: Regression Coefficient Value, Probability (p) Transactional Leadership (TSL) on Standard1 Assessment MEQSw2 (SAM).

Construct	Construct	Estimate	S. E.	C. R.	P	Label
SAM	- TSL	0.712	0.179	3.982	***	Significant

Analysis Effect of Headmaster Leadership Style Based on Laissez Faire Leadership (LFL) on Standard1 Assessment MEQSw2 (SAM).

Based on the analysis of Figure 8 above and Table 12 below shows that Laissez Faire Leadership (LFL) has a significant effect on Standard1 Assessment MEQSw2 (SAM). The estimated regression weight (β) is 0.029, the significance level is 0.000 (Estimate = 0.029, S. E. = 0.053, C. R. = 19.824, Label = Significant). The results of this study show that Laissez Faire Leadership (LFL) has a positive and significant effect on Standard1 Assessment MEQSw2 (SAM). Therefore, when Laissez Faire Leadership (LFL) increases by 1 unit, an increase also occurs by 0.029 units on Standard1 Assessment MEQSw2 (SAM). Therefore, the testing of hypothesis H3 in this study is supported based on the observed data.

Table 12: Regression Coefficient Value, Probability (p) Laissez Faire Leadership (LFL) on Standard1 Assessment MEQSw2 (SAM).

Construct	Construct	Estimate	S. E.	C. R.	P	Label
SAM	- LFL	0.029	0.053	19.824	***	Significant

Analysis Effect of Teacher Management Motivation (TMM) on Standard1 Assessment MEQSw2 (SAM).

Based on the analysis of Figure 8 above and Table 13 below shows that Teacher Management Motivation (TMM) has a significant effect on Standard1 Assessment MEQSw2 (SAM). The estimated regression weight (β) is 0.007, the significance level is 0.000 (Estimate = 0.007, S. E. = 0.044, C. R. = 20.106, Label = Significant). The results

of this study show that Teacher Management Motivation (TMM) has a positive and significant effect on Standard1 Assessment MEQSw2 (SAM). Therefore, when Teacher Management Motivation (TMM) increases by 1 unit, an increase also occurs by 0.007 units on Standard1 Assessment MEQSw2 (SAM). Therefore, the testing of hypothesis H4 in this study is supported based on the observed data.

Table 13: Regression Coefficient Value, Probability (p) Teacher Management Motivation (TMM) on Standard1 Assessment MEQSw2 (SAM).

Construct	Construct	Estimate	S. E.	C. R.	P	Label
SAM	-	TMM	0.007	0.044	20.106***	Significant

Analysis Effect of Headmaster Leadership Style Based on Transformational Leadership (TFL) on Teacher Management Motivation (TMM)

Based on the analysis of Figure 8 above and Table 14 below shows that Transformational Leadership (TFL) has a significant effect on Teacher Management Motivation (TMM). The estimated regression weight (β) is 0.502, the significance level is 0.039 (Estimate = 0.502, S. E. = 0.243, C. R. = 2.069, Label = Significant). The results of this study show that Transformational Leadership (TFL) has a positive and significant effect on Teacher Management Motivation (TMM). Therefore, when Transformational Leadership (TFL) increases by 1 unit, an increase also occurs by 0.502 units on Teacher Management Motivation (TMM). Therefore, the testing of hypothesis H5 in this study is supported based on the observed data.

Table 14: Regression Coefficient Value, Probability (p) Transformational Leadership (TFL) on Teacher Management Motivation (TMM).

Construct	Construct	Estimate	S. E.	C. R.	P	Label
TMM	TFL	0.502	0.243	2.069	0.039	Significant

Analysis Effect of Headmaster Leadership Style Based on Transactional Leadership (TSL) on Teacher Management Motivation (TMM).

Based on the analysis of Figure 8 above and Table 15 below shows that Transactional Leadership (TSL) has a significant effect on Teacher Management Motivation (TMM). The estimated regression weight (β) is 0.642, the significance level is 0.017 (Estimate = 0.642, S. E. = 0.260, C. R. = 2.398, Label = Significant). The results of this study show that Transactional Leadership (TSL) has a positive and significant effect on Teacher Management Motivation (TMM). Therefore, when Transactional Leadership (TSL) increases by 1 unit, an increase also occurs by 0.642 units on Teacher Management Motivation (TMM). Therefore, the testing of hypothesis H6 in this study is supported based on the observed data.

Table 15: Regression Coefficient Value, Probability (p) Transactional Leadership (TSL) on Teacher Management Motivation (TMM).

Construct	Construct	Estimate	S. E.	C. R.	P	Label
TMM	TSL	0.642	0.260	2.398	0.017	Significant

Analysis Effect of Headmaster Leadership Style Based on Laissez Faire Leadership (LFL) on Teacher Management Motivation (TMM).

Based on the analysis of Figure 8 above and Table 16 below shows that Laissez Faire Leadership (LFL) has a significant effect on Teacher Management Motivation (TMM). The estimated regression weight (β) is 0.050, the significance level is 0.000 (Estimate = 0.050, S. E. = 0.081, C. R. = 14.546, Label = Significant). The results of this study show that Laissez Faire Leadership (LFL) has a positive and significant effect on Teacher Management Motivation (TMM). Therefore, when Laissez Faire Leadership (LFL) increases by 1 unit, an increase also occurs by 0.050 units on Teacher Management Motivation (TMM). Therefore, the testing of hypothesis H7 in this study is supported based on the observed data.

Table 16: Regression Coefficient Value, Probability (p) Laissez Faire Leadership (LFL) on Teacher Management Motivation (TMM).

Construct	Construct	Estimate	S. E.	C. R.	P	Label
TMM	-	LFL	0.050	0.081	14.546***	Significant

5. CONCLUSION

Overall, the CFA analysis conducted on the measurement model for Headmaster Leadership Style (based on Transformational Leadership, Transactional Leadership, Laissez Faire Leadership), Teacher Management Motivation and Standard1 Assessment MEQSw2 construct, has reached the level of fitness indexes. The results of the combined confirmatory factor analysis of all measurement models (Pooled CFA), prove that all constructs do not have a strong relationship with each other to avoid the existence of multicollinearity problems. Overall, the analysis of the impact of the Headmaster Leadership Style based on Standard1 Assessment MEQSw2 (SAM), shows a significant effect. The analysis of the impact of the Headmaster Leadership Style based on Transformational Leadership (TFL), Transactional Leadership (TSL) and Laissez Faire Leadership (LFL) on Teacher Management Motivation (TMM), also showed a significant effect. The results of this study show the effect of factors based on Transformational Leadership (TFL), Transactional Leadership (TSL), Laissez Faire Leadership (LFL) and Teacher Management Motivation (TMM), very important in Management of Terengganu National Schools. Therefore, the

Headmaster Leadership Style needs to play a role on these factors to further improve the academic achievement of students, besides the emphasis is also given to Management of Terengganu National Schools.

Through this study, it is also shown that effective Principal Leadership Style plays an important role in increasing teacher motivation, especially in the context of compliance with Standard1 Assessment MEQSw2. It is generally known that this standard assesses the leadership competence of principals in leading, guiding, and building a positive work culture in schools. The findings of a study by Saujani (2021) show that there is a positive and strong relationship between compliance with Standard1 Assessment MEQSw2 and teacher motivation, where strategic and supportive leadership can increase work morale among teachers. In addition, this study also found that transformational leadership practiced by principals, such as providing inspiration, guidance, and intellectual encouragement, has indirectly contributed to improving teacher quality and the effectiveness of teaching and learning in the classroom (Perumal & Abdul Wahab, 2024).

Overall, it can be stated that the combination of effective principal leadership style and compliance with Standard1 Assessment MEQSw2 is not only able to increase teacher motivation, but also strengthen school management and improve the quality of education overall. Therefore, it is important for principals to continue to strengthen their leadership through continuous professional training and practice more dynamic leadership practices to ensure a conducive and quality learning environment in schools. This study confirms that Principal Leadership Style and Teacher Motivation play an important role in influencing school achievement in the Standard1 Assessment MEQSw2. These two factors interact to form a positive school environment, which in turn improves the overall performance of the school. Therefore, to achieve excellence in the Malaysian education system according to the Global Education Achievements, it is important for the MOE and school leadership to ensure that the Influence of an effective Principal Leadership Style combined with high motivation among teachers is formed for the sake of educational excellence in the country.

This finding also suggests that Principals need to practice a Leadership Style that constantly builds and enhances Teacher Motivation to ensure that schools can meet the standards set in Standard1 Assessment MEQSw2. In addition, increasing teacher motivation through continuous recognition and support can

lead to better school evaluation and Principal management and support towards creating quality schools and holistic student development. In conclusion, this study emphasizes that effective Principal Leadership has a great impact on teacher motivation and school achievement in the assessment of Standard1 Assessment MEQSw2. Although good leadership is an important foundation in ensuring the success of an educational institution, it needs to be supported by other factors such as teacher well-being, a strong support system, and a teacher-, parent- and student-friendly education policy as the main pillars of the education system. Through an inclusive and strategic leadership approach, schools can achieve higher levels of excellence, thereby providing a positive impact on the quality of education as a whole. Therefore, to ensure that principal leadership can have a more comprehensive impact, an inclusive, flexible, and strategic leadership approach needs to be applied, in addition to strengthening the relationship between school administration, teachers, students, and other stakeholders. Principals need to play the role of leaders who not only manage school administrative affairs but also be a source of inspiration for teachers in improving their professional competence. Leadership practices that prioritize effective communication, openness in decision-making, and providing opportunities for teachers to grow academically and professionally will produce teachers who are more committed and innovative in carrying out their duties.

In addition, positive work environment factors and support from various parties such as the ministry, education department, and parents also play a role in ensuring success in the education system. High teacher workload and excessive work pressure are often the main causes of their decreased motivation, therefore, support in the form of administrative assistance, reduction of workload not related to teaching, and appropriate rewards can be contributing factors to increasing teacher motivation and performance. By creating a system that supports teachers' career development and well-being, schools can ensure that they remain enthusiastic and committed in carrying out their responsibilities. In addition, the effectiveness of principals' leadership in increasing teacher motivation and school performance also needs to be continuously studied to ensure that the approaches used are always relevant to changes in the education system from time to time. Education is a field that is constantly evolving and experiencing various changes and new challenges, including technological changes, 21st century

learning needs, and higher demands for professionalism among educators. Therefore, principals must always strive to adapt their leadership style to current needs and be prepared to accept the changes and innovations that often occur in education.

Overall, the study found that there is a significant relationship between the Headmaster's Leadership Style and Motivation in improving the quality of teaching and learning which ultimately has a positive impact on the Standard1 Assessment MEQSw2. This

finding suggests that Headmasters need to practice Leadership Styles that build and increase Teacher Motivation to ensure that schools can meet the standards set in Standard1 Assessment MEQSw2. In addition, increasing teacher motivation through continuous recognition and support can lead to better assessment achievement. . In short, headmasters as school leaders must be careful and wise in choosing the most appropriate leadership practice pattern for a particular situation to improve the quality of education.

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