

The Validity and Reliability Constructs of The Principal Transformational Leadership, Teacher Commitment and Classroom Assessment Teachers of Terengganu National Schools

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Abstract: Leadership is a subject that attracts attention because it is often associated with influence, power and wealth. In this study, the researcher only chose one leadership style, namely transformational leadership. The concept of transformational leadership was introduced by James Mac Gregor Burns in 1979 in his study related to political leadership. According to Burns, transformational leadership is a process in which leaders and followers help each other to increase motivation and morale to a higher level. The researcher only chose one leadership style, namely Transformational Leadership. The concept of transformational leadership was introduced by James Mac Gregor Burns in 1979 in his study related to political leadership. This study was conducted to develop and validate an instrument based on the EFA process for measuring the Principal Transformational Leadership (based on Cultivating Ideal Influence, Building Intellectual Stimulation, Inspiring Motivation, Individual Consideration), Teacher Commitment and Classroom Assessment teachers of Terengganu National Schools. This study uses quantitative research methods based on Structural Equation Modeling (SEM) to analyze various relationships between variables in the study model. Before the data is analyzed using SEM, Exploratory Factor Analysis (EFA) is carried out to identify the appropriateness of the items used in the research instrument. This study describes in detail the procedure of conducting EFA analysis for each construct. The findings of this study show validity values based on Kaiser-Meyer-Olkin (KMO), Total Variance Explained (TVE), Factor Loading (FL) and reliability values based on Cronbach's Alpha (CA), have met all the required values.

Keywords: Exploratory Factor Analysis (EFA), Validity, Total Variance Explained, Factor Loading, Reliability

Introduction

Leadership is a subject that attracts attention because it is often associated with influence, power and wealth (Khairil Annas, 2009). Various leadership styles have been introduced by early researchers on leadership. However, in this study, the researcher only chose one leadership style, namely transformational leadership. The concept of transformational leadership was introduced by James

Gregor Burns in 1979 in his study related to political leadership. According to Burns, transformational leadership is a process in which leaders and followers help each other to increase motivation and morale to a higher level (Rahman, Hossain, et al., 2025). Burns has categorized transformational leadership into four categories, namely intellectual leaders, reform leaders, revolutionary leaders and charismatic transformational leaders. Burns' idea was developed by Bass who saw transformational leadership based on how leaders influence their followers to enable them to be trusted, admired and respected (Khairil Annas, 2009). In keeping with the current of modernity and post-innovation in the world of education which is increasingly challenging in line with the advancement of Science and Technology which is increasingly sophisticated, the Ministry of Education of Malaysia has planned the Malaysian Education Development Plan (PPPM) 2013-2025 in order to improve the quality of Malaysian education. The plan which outlines the aspirations of the system and students was launched in September 2013 and the planning needed to ensure that the process of change in the education system occurs more quickly and continuously (Hossen, 2023). This plan was prepared by taking into account the content of the development plan produced by the United Nations such as Education for All (EFA) and Millennium Development Goals (MDG).

Leaders who are considered transformational focus their efforts on long-term goals, value and emphasize development and inspire their followers to pursue visions, change and align the system to fulfill the vision. According to Nursyafina, Aida Hanim and Ghazali (2018), they do not work with existing systems or train their followers to take responsibility for their own development and that of others. The principal is the main leader in the school. Therefore, the form of administrative management greatly influences teacher commitment (Hossen & Salleh, 2024). Leadership is a subject that attracts attention because it is often associated with influence, power and wealth (Khairil Annas, 2009). Various leadership styles have been introduced by early researchers on leadership. However, in this study, the researcher only chose one leadership style, namely Transformational Leadership. The concept of transformational leadership was introduced by James Mac Gregor Burns in 1979 in his study related to political leadership.

Transformational Leadership also provides strategic direction to the organization, processes for quality improvement, solutions for recruitment and retention, and the foundation for a sustainable future. Teaching is a complex job and requires teachers to engage not only in terms of energy and thought but also in their feelings. Without a high sense of commitment to their field of work, teachers will face an increasing and challenging workload (Nias, 1996). This is because at the same time, teachers also need personal and family commitments (Hossen & Pauzi, 2025b). Therefore, teachers need to be smart in managing between personal commitments at home and commitments to teaching at school. The education system is the foundation of community and national development. As a developing country, the education sector in Malaysia needs to experience a shift in thinking that can pioneer a new millennium in all aspects of education to improve Malaysia's position in the regional education hub (Ambo tang, 2013).

Exploratory Factor Analysis (EFA)

EFA is conducted to identify some components that exist in the set of questionnaires that have been formed. EFA is a statistical technique that transforms a set of original construct data linearly into a set of smaller constructs that can give a comprehensive picture of all the information contained in the original construct (Duntemen, 1989). The purpose of EFA is to reduce the dimensions of the original

data to several smaller components that can be interpreted more easily and meaningfully (Duntemen, 1989; Lewis-Beck, 1994 & Field, 2006). According to Tabachnick and Fidell (2007), EFA needs to go through several stages. The first stage calculates the correlation matrix between all the factor-analyzed constructs (Alam et al., 2025). The next stage involves extracting some factors from the correlation matrix and determining the number of factors formed. The rotation of the factors is done to improve the interpretation so that the factors are more meaningful and can be interpreted. The final and most important stage in factor analysis is to interpret the results of the factors obtained and give an appropriate name to each factor.

This study uses items in an instrument that has been built by the researcher himself. According to Chik and Abdullah (2018), Chik, Abdullah, Ismail and Mohd Noor (2024), Awang (2012) and Hoque et al. (2017), if a researcher adapts an item that has been built by a previous researcher or builds a new item in the instrument or modifies the statement to fit the current study, then they need to re-run the EFA (Exploratory Factor Analysis) procedure. This is because the current study area may be different from previous studies, or the current study population is much different from previous studies in terms of socio-economic status, race and culture. Therefore, there may be some items that were built before, no longer suitable for the current study or there may also be a different item structure in the current study compared to the structure in the previous study. Thus, researchers need to recalculate the Internal Reliability value for the current instrument, which is the new Alpha Cronbach value (Chik et al., 2024, Awang, 2012; Hoque et al., 2017).

Findings

Exploratory Factor Analysis (EFA) for Principal Transformational Leadership Based on Cultivating Ideal Influence

The Principal Transformational Leadership based on Cultivating Ideal Influence which uses as many as five (5) items and is labeled as MPI1 to MPI5. Next, the use of an interval scale for the measurement of items is between one (1) to 10. Principal Component Analysis (PCA) in the EFA process using varimax rotation for the Principal Transformational Leadership based on Cultivating Ideal Influence for the measurement of five (5) items. Table 1 below shows the Bartlett's test results that are significant for P values less than 0.05 ($P < 0.05$). Next, the value for the measurement of sampling adequacy from Kaiser-Meyer-Olkin (KMO) is 0.871. The value obtained has exceeded the minimum limit value of 0.6 and the achievement of both of these tests (Bartlett's test is significant and KMO value > 0.6), showing that the data used in this study is appropriate according to the EFA procedure (Chik et al., 2024; Hoque et al., 2017; Awang, 2012).

Table 1: KMO Values and Bartlett's Test for Principal Transformational Leadership Based on Cultivating Ideal Influence

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.871
Bartlett's Test of Sphericity	Approx. Chi-Square	279.642
	df	10

Sig. 0.000

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Reading from Table 2 below found that Principal Transformational Leadership based on Cultivating Ideal Influence measured using five (5) items in one (1) component can measure Principal Transformational Leadership based on Cultivating Ideal Influence as much as 70.307%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 2: Total Variance Explained for Principal Transformational Leadership Based on Cultivating Ideal Influence

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	3.515	70.307	70.307

Thus, the researcher wants to know the selected items to measure the component. Table 3 below shows the distribution of items accepted to measure Principal Transformational Leadership based on Cultivating Ideal Influence. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024).

Table 3: Factor Loading for One (1) Component Principal Transformational Leadership Based on Cultivating Ideal Influence

Component Matrix ^a	
Items	Component
MPI1	0.874
MPI2	0.759
MPI3	0.817
MPI4	0.885
MPI5	0.880

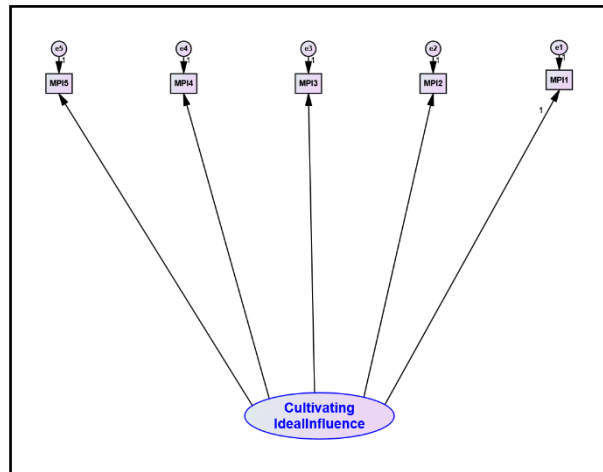


Figure 1: Position of Components and Items for Principal Transformational Leadership Based on Cultivating Ideal Influence (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 4 below shows the Cronbach's Alpha value for each item in the Principal Transformational Leadership based on Cultivating Ideal Influence that exceeds 0.7 and can be used in this study (Chik et al., 2024).

Table 4: Cronbach's Alpha Value for Each Item in the Principal Transformational Leadership Based on Cultivating Ideal Influence

Component	Number of Items	Cronbach's Alpha
1	5	0.884

Exploratory Factor Analysis (EFA) for Principal Transformational Leadership Based on Building Intellectual Stimulation

The Principal Transformational Leadership based on Building Intellectual Stimulation which uses as many as five (5) items and is labeled as MRI1 to MRI5. Next, the use of an interval scale for the measurement of items is between one (1) to 10. Principal Component Analysis (PCA) in the EFA process using varimax rotation for the Principal Transformational Leadership based on Building Intellectual Stimulation for the measurement of five (5) items. Table 5 below shows the Bartlett's test results that are significant for P values less than 0.05 ($P < 0.05$). Next, the value for the measurement of sampling adequacy from Kaiser-Meyer-Olkin (KMO) is 0.884. The value obtained has exceeded the minimum limit value of 0.6 and the achievement of both of these tests (Bartlett's test is significant and KMO value > 0.6), showing that the data used in this study is appropriate according to the EFA procedure (Chik et al., 2024; Hoque et al., 2017; Awang, 2012).

Table 5: KMO Values and Bartlett's Test for Principal Transformational Leadership Based on Building Intellectual Stimulation

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.884
	Approx. Chi-Square	459.033
Bartlett's Test of Sphericity	df	10
	Sig.	0.000

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Reading from Table 6 below found that Principal Transformational Leadership based on Building Intellectual Stimulation measured using five (5) items in one (1) component can measure Principal Transformational Leadership based on Building Intellectual Stimulation as much as 81.167%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 6: Total Variance Explained for Principal Transformational Leadership Based on Building Intellectual Stimulation

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.058	81.167	81.167

Thus, the researcher wants to know the selected items to measure the component. Table 7 below shows the distribution of items accepted to measure Principal Transformational Leadership based on Building Intellectual Stimulation. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024).

Table 7: Factor Loading for One (1) Component Principal Transformational Leadership Based on Building Intellectual Stimulation

Component Matrix ^a	
Items	Component
MRI1	0.893
MRI2	0.849
MRI3	0.928
MRI4	0.895

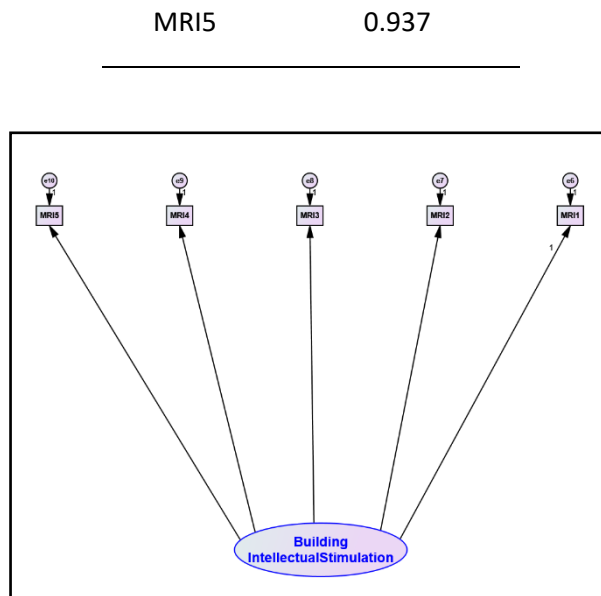


Figure 2: Position of Components and Items for Principal Transformational Leadership Based on Building Intellectual Stimulation (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 8 below shows the Cronbach's Alpha value for each item in the Principal Transformational Leadership based on Building Intellectual Stimulation that exceeds 0.7 and can be used in this study (Chik et al., 2024; Hoque et al., 2017).

Table 8: Cronbach's Alpha Value for Each Item in the Principal Transformational Leadership Based on Building Intellectual Stimulation

Component	Number of Items	Cronbach's Alpha
1	5	0.940

Exploratory Factor Analysis (EFA) for Principal Transformational Leadership Based on Inspiring Motivation

The Principal Transformational Leadership based on Inspiring Motivation which uses as many as five (5) items and is labeled as MB1 to MB5. Next, the use of an interval scale for the measurement of items is between one (1) to 10. Principal Component Analysis (PCA) in the EFA process using varimax rotation for the Principal Transformational Leadership based on Inspiring Motivation for the measurement of five (5) items. Table 9 below shows the Bartlett's test results that are significant for P values less than 0.05 ($P < 0.05$). Next, the value for the measurement of sampling adequacy from Kaiser-Meyer-Olkin (KMO) is 0.879. The value obtained has exceeded the minimum limit value of 0.6 and the achievement of both of these tests (Bartlett's test is significant and KMO value > 0.6), showing

that the data used in this study is appropriate according to the EFA procedure (Chik et al., 2024; Hoque et al., 2017; Awang, 2012).

Table 9: KMO Values and Bartlett's Test for Principal Transformational Leadership Based on Inspiring Motivation

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.879
	Approx. Chi-Square	529.844
Bartlett's Test of Sphericity	df	10
	Sig.	0.000

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Reading from Table 10 below found that Principal Transformational Leadership based on Inspiring Motivation measured using five (5) items in one (1) component can measure Principal Transformational Leadership based on Inspiring Motivation as much as 83.290%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 10: Total Variance Explained for Principal Transformational Leadership Based on Inspiring Motivation

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.165	83.290	83.290

Thus, the researcher wants to know the selected items to measure the component. Table 11 below shows the distribution of items accepted to measure Principal Transformational Leadership based on Inspiring Motivation. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024).

Table 11: Factor Loading for One (1) Component Principal Transformational Leadership Based on Inspiring Motivation

Component Matrix ^a	
Items	Component
MB1	0.844
MB2	0.953
MB3	0.927

MB4	0.951
MB5	0.884

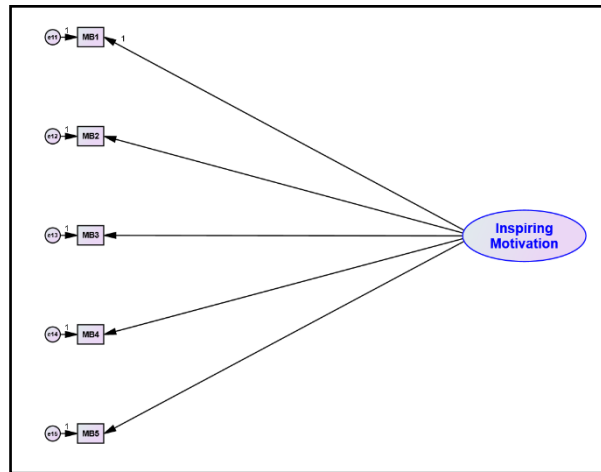


Figure 3: Position of Components and Items for Principal Transformational Leadership Based on Inspiring Motivation (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 12 below shows the Cronbach's Alpha value for each item in the Principal Transformational Leadership based on Inspiring Motivation that exceeds 0.7 and can be used in this study (Chik et al., 2024).

Table 12: Cronbach's Alpha Value for Each Item in the Principal Transformational Leadership Based on Inspiring Motivation

Component	Number of Items	Cronbach's Alpha
1	5	0.949

Exploratory Factor Analysis (EFA) for Principal Transformational Leadership Based on Individual Consideration

The Principal Transformational Leadership based on Individual Consideration which uses as many as five (5) items and is labeled as PI1 to PI5. Next, the use of an interval scale for the measurement of items is between one (1) to 10. Principal Component Analysis (PCA) in the EFA process using varimax rotation for the Principal Transformational Leadership based on Individual Consideration for the measurement of five (5) items. Table 13 below shows the Bartlett's test results that are significant for P values less than 0.05 ($P < 0.05$). Next, the value for the measurement of sampling adequacy from Kaiser-Meyer-Olkin (KMO) is 0.880. The value obtained has exceeded the minimum limit value of 0.6 and the achievement of both of these tests (Bartlett's test is significant and KMO value > 0.6), showing that the data used in this study is appropriate according to the EFA procedure (Chik et al., 2024; Hoque et al., 2017; Awang, 2012).

Table 13: KMO Values and Bartlett's Test for Principal Transformational Leadership Based on Individual Consideration

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.880
	Approx. Chi-Square	496.725
Bartlett's Test of Sphericity	df	10
	Sig.	0.000

Table 14 below found that Principal Transformational Leadership based on Individual Consideration measured using five (5) items in one (1) component can measure Principal Transformational Leadership based on Individual Consideration as much as 81.407%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 14: Total Variance Explained for Principal Transformational Leadership Based on Individual Consideration

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.070	81.407	81.407

Thus, the researcher wants to know the selected items to measure the component. Table 15 below shows the distribution of items accepted to measure Principal Transformational Leadership based on Individual Consideration. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024).

Table 15: Factor Loading for One (1) Component Principal Transformational Leadership Based on Individual Consideration

Component Matrix ^a	
Items	Component
PI1	0.931
PI2	0.797
PI3	0.944
PI4	0.892
PI5	0.939

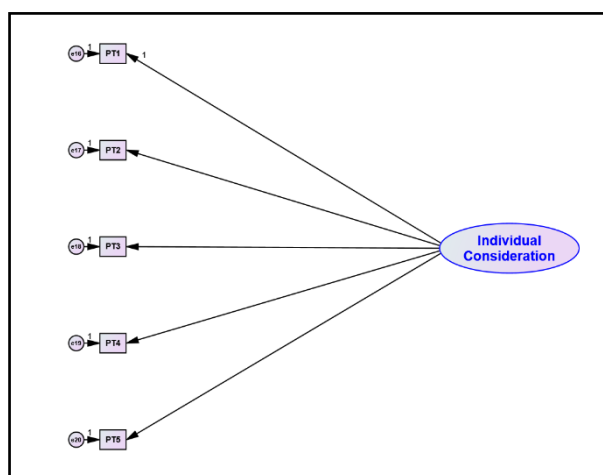


Figure 4: Position of Components and Items for Principal Transformational Leadership Based on Individual Consideration (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 16 below shows the Cronbach's Alpha value for each item in the Principal Transformational Leadership based on Individual Consideration that exceeds 0.7 and can be used in this study (Chik et al., 2024).

Table 16: Cronbach's Alpha Value for Each Item in the Principal Transformational Leadership Based on Individual Consideration

Component	Number of Items	Cronbach's Alpha
1	5	0.942

Exploratory Factor Analysis (EFA) for Teacher Commitment

The Teacher Commitment which uses as many as 10 items and is labeled as KG1 to KG10. Next, the use of an interval scale for the measurement of items is between one (1) to 10. Principal Component Analysis (PCA) in the EFA process using varimax rotation for the Teacher Commitment for the measurement of 10 items. Table 17 below shows the Bartlett's test results that are significant for P values less than 0.05 ($P < 0.05$). Next, the value for the measurement of sampling adequacy from Kaiser-Meyer-Olkin (KMO) is 0.878. The value obtained has exceeded the minimum limit value of 0.6 and the achievement of both of these tests (Bartlett's test is significant and KMO value > 0.6), showing that the data used in this study is appropriate according to the EFA procedure (Chik et al., 2024; Hoque et al., 2017; Awang, 2012).

Table 17: KMO Values and Bartlett's Test for Teacher Commitment

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.878
Bartlett's Test of Sphericity	Approx. Chi-Square	580.849

df	45
Sig.	0.000

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Reading from Table 18 below found that Teacher Commitment measured using 10 items in one (1) component can measure Teacher Commitment as much as 86.975%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 18: Total Variance Explained for Teacher Commitment

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	4.997	86.975	86.975

Thus, the researcher wants to know the selected items to measure the component. Table 19 below shows the distribution of items accepted to measure Teacher Commitment. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024).

Table 19: Factor Loading for One (1) Component Teacher Commitment

Component Matrix ^a	
Items	Component
KG1	0.770
KG2	0.794
KG3	0.762
KG4	0.747
KG5	0.751
KG6	0.739
KG7	0.774
KG8	0.774
KG9	0.784
KG10	0.771

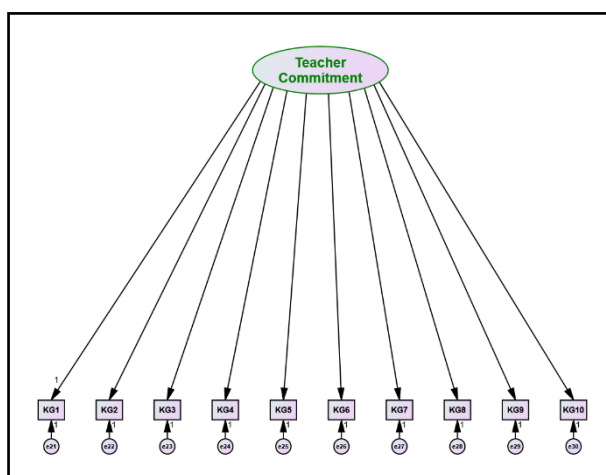


Figure 5: Position of Components and Items for Teacher Commitment (Before and After EFA)

Another piece of information that researchers need to report is the reliability value of the items that have been built to measure that construct. The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 20 below shows the Cronbach's Alpha value for each item in the Teacher Commitment that exceeds 0.7 and can be used in this study (Chik et al., 2024; Hoque et al., 2017).

Table 20: Cronbach's Alpha Value for Each Item in Teacher Commitment

Component	Number of Items	Cronbach's Alpha
1	10	0.848

Exploratory Factor Analysis (EFA) for Classroom Assessment

The Classroom Assessment which uses as many as 15 items and is labeled as PBD1 to PBD15. Next, the use of an interval scale for the measurement of items is between one (1) to 10. Principal Component Analysis (PCA) in the EFA process using varimax rotation for the Classroom Assessment for the measurement of 15 items. Table 21 below shows the Bartlett's test results that are significant for P values less than 0.05 ($P < 0.05$). Next, the value for the measurement of sampling adequacy from Kaiser-Meyer-Olkin (KMO) is 0.913. The value obtained has exceeded the minimum limit value of 0.6 and the achievement of both of these tests (Bartlett's test is significant and KMO value > 0.6), showing that the data used in this study is appropriate according to the EFA procedure (Chik et al., 2024; Hoque et al., 2017; Awang, 2012).

Table 21: KMO Values and Bartlett's Test for Classroom Assessment

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.913
Bartlett's Test of Sphericity	Approx. Chi-Square	1779.284

df	105
Sig.	0.000

Total Variance Explained (TVE) is important for researchers to know what percentage of the items used can measure a research construct. Reading from Table 22 below found that Classroom Assessment measured using 15 items in one (1) component can measure Classroom Assessment as much as 84.654%. This value is sufficient because it exceeds the minimum requirement of 60% (Chik et al., 2024; Hoque et al., 2017).

Table 22: Total Variance Explained for Classroom Assessment

Component	Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %
1	5.248	84.654	84.654

Thus, the researcher wants to know the selected items to measure the component. Table 23 below shows the distribution of items accepted to measure Classroom Assessment. All items have a factor loading value exceeding the minimum limit of 0.6 and items that are less than 0.6 should be discarded because they do not contribute to the measurement of the construct (Chik et al., 2024).

Table 23: Factor Loading for One (1) Component Classroom Assessment

Component Matrix ^a	
Items	Component
PBD1	0.766
PBD2	0.824
PBD3	0.882
PBD4	0.858
PBD5	0.879
PBD6	0.890
PBD7	0.854
PBD8	0.858
PBD9	0.855
PBD10	0.816
PBD11	0.828

PBD12	0.874
PBD13	0.817
PBD14	0.871
PBD15	0.877

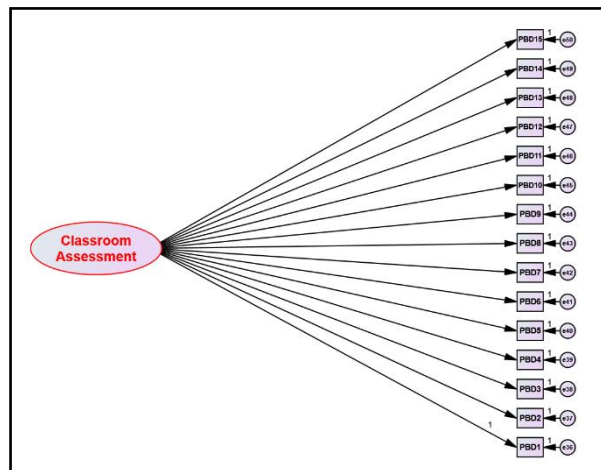


Figure 6: Position of Components and Items for Classroom Assessment (Before and After EFA)

The measure of instrument reliability is estimated through Cronbach's Alpha value that exceeds the minimum limit of 0.7 to be adopted in the study. Table 24 below shows the Cronbach's Alpha value for each item in the Classroom Assessment that exceeds 0.7 and can be used in this study (Chik et al., 2024; Hoque et al., 2017).

Table 24: Cronbach's Alpha Value for Each Item in the Classroom Assessment

Component	Number of Items	Cronbach's Alpha
1	15	0.867

Overall Results of Exploratory Factor Analysis (EFA)

Based on the results of the EFA analysis on the questionnaire items, no items were excluded. Table 25 below shows the overall latest position of the items after the EFA analysis was carried out.

Table 25: Overall EFA Analysis

No	Constructs	Validity			Reliability	
		Kaiser-Meyer-Olkin Measure of Sampling	Bartlett's Test of Sphericity	Total Variance Explained	Items Factor Loading (>0.60)	Cronbach's Alpha (>0.70)

	Adequacy (KMO>0.6)	(Sig.< 0.05)	(>60%)		
1 Principal Transformational Leadership					
a) Cultivating Ideal Influence	0.871	0.000	70.307	5 item > 0.60	0.884
b) Building Intellectual Stimulation	0.884	0.000	81.167	5 item > 0.60	0.940
c) Inspiring Motivation	0.879	0.000	83.290	5 item > 0.60	0.949
d) Individual Consideration	0.880	0.000	81.407	5 item > 0.60	0.942
2 Teacher Commitment	0.878	0.000	86.975	10 item > 0.60	0.848
3 Classroom Assessment	0.867	0.000	84.654	15 item > 0.60	0.867

Conclusion

Overall, the requirements of the items in each Principal Transformational Leadership (based on Cultivating Ideal Influence, Building Intellectual Stimulation, Inspiring Motivation, Individual Consideration), Teacher Commitment and Classroom Assessment teachers of Terengganu National Schools, as a whole meet the achievement of Bartlett's Test (significant), KMO value (> 0.6), factor loading value exceeds the minimum limit of 0.6 and Cronbach's Alpha exceeds the minimum limit of 0.7 to be used in the study. This reflects that the items are not set aside and qualified to be used in this study (Chik et al., 2024; Hoque et al., 2017). Figure 7 shows all the items in the study model after EFA.

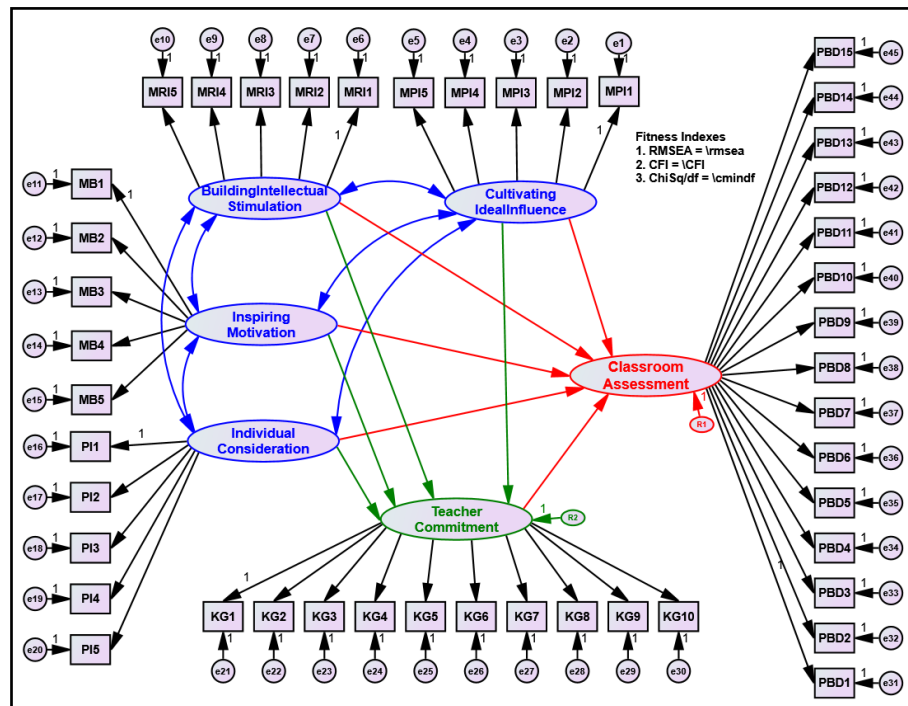


Figure 7: Overall Principal Transformational Leadership, Teacher Commitment and Classroom Assessment

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Conflicts of Interest: The author has no conflicts of interest to disclose concerning this study.

Declarations: This manuscript has not been published to any other journal or online sources.

Data Availability: The author has all the data employed in this research and is open to sharing it upon reasonable request.

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