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The Influence of Principals' Instructional Leadership on the Teachers' Commitment and Students' Outcome at Ordinary School in Kedah Malaysia

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Abstract

This study investigates the impact of principals' instructional leadership practices on teachers' commitment and students' holistic development in public secondary schools in Kedah, Malaysia. A quantitative research approach was employed, utilizing a survey method with questionnaires distributed via Google Forms. The study sampled 374 secondary school teachers using stratified and simple random sampling techniques. Data were analyzed using the Statistical Package for the Social Sciences (SPSS) Version 26.0, with Exploratory Factor Analysis (EFA) conducted in three stages: identifying correlations between factors, extracting factors, and rotating factors. To assess the construct validity of the questionnaire, Confirmatory Factor Analysis (CFA) was performed using IBM-SPSS-AMOS Version 24, ensuring that the fitness indexes met the required thresholds. Structural Equation Modelling (SEM) with AMOS was applied to analyse relationships among variables. The findings reveal that principals' instructional leadership practices significantly and positively influence both teachers' commitment and students' development. Furthermore, teachers' commitment plays a pivotal role in fostering students' overall growth. These insights offer valuable guidance for educational practitioners in designing, implementing, and evaluating programs to enhance educational quality.

Keyword: Instructional Leadership, Teacher Commitment, Student Development

Introduction

Effective leadership plays a crucial role in shaping the educational landscape, influencing the quality of teaching, teacher commitment, and ultimately, student outcomes. School principals, as key educational leaders, are responsible for providing direction, support, and guidance to teachers and students to enhance instructional practices. The focus on principals'

instructional leadership practices and their impact on teacher commitment and student performance has garnered significant attention in educational research. This study is essential as it has the potential to improve the overall effectiveness of educational institutions.

Instructional leadership involves principals engaging in activities such as setting clear instructional goals, monitoring teaching practices, providing constructive feedback, and fostering a collaborative professional learning environment. These practices are critical not only for teacher development but also for optimizing student achievement (Hallinger & Heck, 1998).

Several studies highlight the importance of principals' instructional leadership in influencing teacher commitment and student outcomes. For instance, a meta-analysis by Leithwood, Seashore Louis, Anderson, and Wahlstrom (2004) found a positive association between strong instructional leadership and student achievement. Similarly, Rozila and Jamalul Lail (2019) examined the role of principals' instructional leadership in relation to teacher commitment in high-performing schools in Seremban District.

Although literature suggests a link between instructional leadership and student achievement, there is a need for a deeper understanding of the specific practices that principals employ and their direct impact on teacher work performance. Examining this relationship is crucial for informing educational policies and practices aimed at improving school leadership effectiveness and, consequently, enhancing the overall quality of education.

This study aims to contribute to the existing body of knowledge by systematically investigating the instructional leadership practices of principals and their influence on teacher commitment and student outcomes. By identifying key leadership practices that positively impact these areas, the research seeks to provide actionable insights for educational leaders, policymakers, and practitioners striving to optimize the educational experience for principals, teachers, and students.

Research Objectives

The purpose of this study is to:-

i. identify the significant influence of the principal's instructional leadership practices on teacher commitment;
ii. identify the significant influence of the principal's instructional leadership practices on student outcomes;
iii. identify the significant influence of teacher commitment on student outcomes.

Research Questions

The research questions are

i. does the principal's instructional leadership practice have a positive and significant influence on teacher commitment?
ii. does the principal's instructional leadership practice have a positive and significant influence on student outcomes?
iii. does teacher commitment have a positive and significant influence on student outcomes?

Research Hypotheses

Ho1: Teacher commitment is not significantly and positively influenced by the principal's instructional leadership practices.

Ho2: Student outcomes are not significantly and positively influenced by the principal's instructional leadership practices.

Ho3: Student outcomes are not significantly and positively influenced by teacher commitment.

Literature Review

Instructional leadership is the practice of school principals that is directly related to improving and enhancing the teaching and learning processes in schools. It has received attention over the past 25 years, starting with studies on effective schools by Edmonds (1979) and Hopkin (2003). Instructional leadership has also contributed to the success of schools throughout the 1980s and early 1990s (Leithwood, Bealey and Causings 1992). Studies conducted by Edmonds (1979), Murphy and Beck (1995), McEwan (1998), and Quinn (2002) demonstrate that instructional leadership successfully produces effective and excellent schools. The skills of an instructional leader enable a principal to influence teachers to carry out their teaching assignments effectively, thereby fostering high commitment among the teachers under their leadership, which ultimately leads to excellence in the school.

The effectiveness of school leadership has been identified as a critical factor in the efforts to excel in education. In the field of school leadership, instructional leadership is believed to enhance the quality of teaching and learning (Leithwood, Seashore Louis, Anderson & Wahlstrom 2004 and Hallinger & Heck 1998). Principals play a role as instructional leaders to influence the performance and work commitment of teachers, which in turn affects student outcomes.

According to Hallinger and Murphy (1985), instructional leadership refers to the behaviors and practices of a principal regarding the activities and processes of teaching and learning that occur in schools. The practice of instructional leadership by principals enables schools to be more effective, especially in terms of student academic achievement. This model presents three dimensions and eleven sub-dimensions (Figure 1).

The Instructional Leadership Model by Hallinger and Murphy (1985)

1. Defining School Goals a. Formulating school goals b. Explaining school goals	2. Managing the instructional program a. Supervising and evaluating instructional program b. Coordinating the curriculum c. Monitoring student progress	3. Promoting a positive school climate a. Protecting Instructional time b. Promoting professional development c. Maintaining learning support d. Providing incentives for teachers e. Enforcing academic standards f. Providing incentives for students.

Figure 1: The Instructional Leadership Model by Hallinger and Murphy (1985)

The dimensions are as follows: the first dimension defines school goals, which includes two sub-dimensions: formulating school goals and clarifying school goals. The second dimension is managing the instructional program, which has three sub-dimensions: supervising and evaluating instruction, coordinating the curriculum, and monitoring student progress. The third dimension is promoting a positive school climate, which comprises six sub-dimensions: generating instructional time, encouraging professional development, maintaining learning support, providing incentives for teachers, enforcing academic standards, and providing incentives for students.

According to Bendikson, Robinson, and Hattie (2012), teachers in schools with high academic achievement evaluate their principals as consistently implementing instructional leadership practices compared to schools with low achievement. This is supported by a study by Nik Mustafa et al. (2015), which found a strong relationship between the principals' instructional leadership and the commitment of teachers at MRSM, Pahang, thereby making MRSM an effective School of Excellence (SBT).

Commitment is also a sense of ownership and the relational bond of individuals with the organization where they work. In the context of this study, organizational commitment is defined as the employees' belief and value in relation to the goals and direction of the organization (acceptance of organizational goals and values), willingness to perform tasks for the organization (readiness to achieve goals), and the desire to remain (the desire to stay) as members and to be loyal to the organization.

Allen and Meyer (1990) and Meyer and Allen (1997) introduced a three-dimensional organizational commitment model. Based on this model, there are three main dimensions of commitment, which consist of affective commitment, continuance commitment, and normative commitment, as shown in Figure 2.2 below:

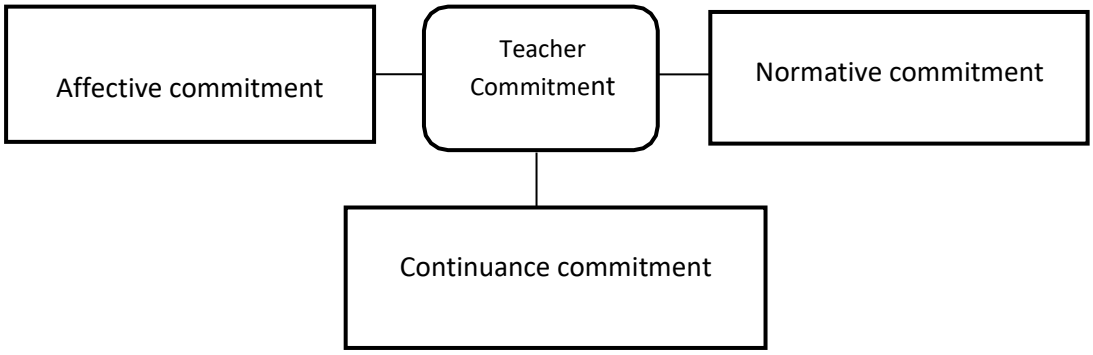

Figure 2. Commitment model Meyer dan Allen (1997)

Meanwhile, Taim and Mohemmed Yusoff (2018) emphasize that students who successfully attend school are more likely to be focused in their learning and improve their academic performance. Student outcomes are an aspect that needs to be emphasized by all types of schools, whether primary, secondary, or higher education, in line with global requirements. The aspect of student outcomes represents a comprehensive assessment that is very suitable for all groups and levels of students. Student outcomes are evaluated from three main aspects: academics, co-curricular activities, and character development.

The Ministry of Education Malaysia outlines six criteria for student success, which are knowledge skills, thinking skills, leadership skills, bilingual proficiency, ethical and spiritual values, and national identity. These are among the aspirations for students in achieving educational excellence in Malaysia.

There are some studies has explored the association between instructional leadership and student achievement. Lethwood et al's (2004) meta-analysis revealed a positive and significant relationship between instructional leadership and student achievement. This findings underscores the importance of school leaders in shaping the teaching and learning environment, thus influencing the overall educational outcomes.

While the connection between instructional leadership and student achievement is well-established, the specific mechanisms through which principals' instructional leadership practices influence teacher work performance require closer examination. Hallinger and Murphy (1985) proposed a model that highlights the mediating role of teacher commitment and job satisfaction in translating instructional leadership into improved teacher performance. This model suggests that when principals effectively engage in instructional leadership practices, they foster positive teacher attitudes, commitment, and satisfaction, which in turn enhance teacher work performance

Research has identified specific instructional leadership practices associated with positive teacher outcome. Among this practices, setting clear instructional goals an expectations is highlighted as fundamental (Shafinaz 2017). When principals articulate a vision for effective teaching, excellence students' outcome and provide a roadmap for achieving it, teachers are more likely to align their practices with this expectations, leading to improve work performance as well as giving a high level of commitments to achieve the target that have been set.

The literature strongly support the notion that effective instructional leadership by principal significantly influence teacher commitment and work performance that effect the students' performance. The identified key practices, including setting clear goals, monitoring and providing feedback and fostering a collaborative learning environment have been consistently associated with positive outcomes toward giving high level of teacher commitment and excellence students' performance.

Methodology

Research Design

This research is conducted quantitatively involving 374 secondary school teachers from schools in the state of Kedah Darul Aman as respondents. The data is analyzed using the Statistical Package for the Social Sciences (SPSS) Version 26.0. Stratified random sampling and simple random sampling methods are used to obtain samples for this study. Data analysis is carried out using Exploratory Factor Analysis (EFA) which refers to three stages (Chua 2009), namely identifying correlations between factors, extracting factors, and rotating factors.

To assess the construct validity of the questionnaire for this study, a confirmatory factor analysis (CFA) was conducted using IBM-SPSS-AMOS version 24. Construct validity is achieved when the fitness indexes for the respective construct meet the established threshold. The fitness indexes indicate the extent to which the items appropriately fit in measuring the latent construct they represent.

Population and Sample

Stratified random sampling is suitable for populations that are heterogeneous or imbalanced (Creswell 2010), as found in the context of this study in Kedah Darul Aman, which has a distribution of samples throughout the state. Simple random sampling is implemented to ensure that each unit of the population has an equal chance of being selected as a sample (Chua 2009).

According to Chua (2014), the recommended sample size for EFA is at least five times the number of items. This study has 60 items (20 + 18 + 22). Therefore, the required sample size is 300 (60 X 5). However, to avoid issues with low questionnaire return rates (Borg, Gall, and Gall 1975), a larger sample size is determined. The researcher selected ten (10) teachers from each of the 50 selected schools as the study sample.

The selection of teacher samples is determined by the school principals based on criteria set by the researcher, which are (i) the teacher must have served under the principal for at least one year, and (ii) the teacher must be confirmed in their position and a permanent teacher. School-related data is obtained from the Planning and Policy Research Division, Ministry of Education Malaysia, the Kedah State Education Department, and the District Education Office. A total of 374 fully completed and analyzable questionnaires were obtained for this study. The 374 samples are sufficient and relevant as they exceed the 300 respondents required for the EFA test.

Research Instruments

The instrument used is a questionnaire with a 10-point Likert scale to collect data on the three variables studied. The instructional leadership instrument used in this study was developed

by Hallinger (2000), translated, and reused by Shafinaz (2017). It consists of 20 items divided into three dimensions: (a) building a school vision and goals with six items; (b) managing teaching and learning programs with eight items; and (c) fostering a school climate with six items.

The teacher commitment instrument is based on the model by Meyer and Allen (2004), and has been translated and used by Lokman (2007), Linggoh (2017), and Zaliza (2019). The questionnaire contains 18 items divided into three dimensions: (a) affective commitment with six items; (b) continuous commitment with six items; and (c) normative commitment with six items.

The student achievement instrument contains 22 items divided into six dimensions: (a) knowledge (4 items); (b) thinking skills (4 items); (c) bilingual skills (3 items); (d) leadership skills (3 items); (e) ethics and spirituality skills (4 items); and (f) national identity skills (4 items). This questionnaire was developed by Mohd Nasir, Mohd Husin, and Mansur (2019) and has been validated for reliability.

Data Collection Procedure

The questionnaires were provided in Google Form to ensure respondents could easily provide feedback on the stated items. Clear and easy-to-understand guidelines were also included with the Google Form for feedback purposes. Cooperation from the relevant authorities was obtained before sharing the Google Form. The school principals provided strong cooperation. Selected teachers were asked to give their feedback via the Google Form link and QR code, which were shared with the principals of the selected schools to pass on to the selected teachers. A total of 374 teachers completed the questionnaires, providing responses that were suitable and relevant for analysis. This number is appropriate for social science survey-based research (Sekaran and Bougie 2010).

Data Analysis

Validity and Reliability

A Measurement Model for Instructional Leadership Practices

Figure 3 illustrates that the first-order measurement model for the principal's instructional leadership practices construct has achieved the required model fit indices at $p < 0.5$. The RMSEA value is 0.050 (< 0.08), CFI is 0.989 (> 0.90), and the ChiSq/df value is 1.948 (< 5.0), confirming that the instructional leadership practices construct has attained construct validity based on Zainudin (2012) and Zainudin et al. (2018).

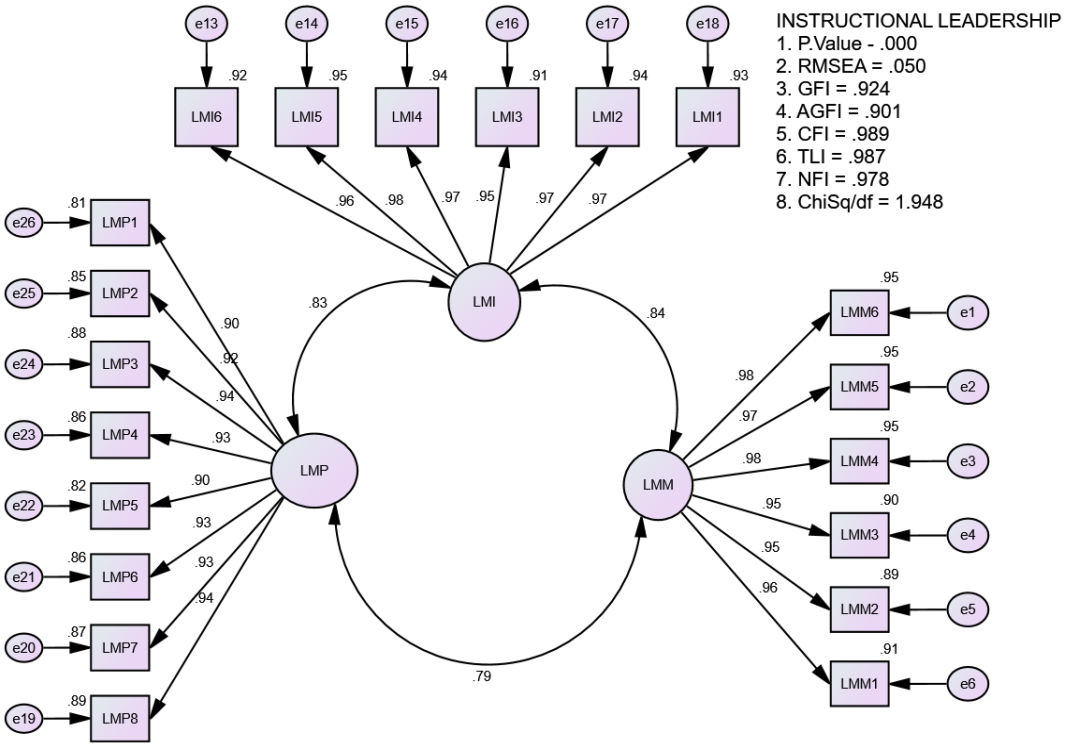

Figure 3: First-Order Measurement Model of Instructional Leadership Practices for Confirmatory Factor Analysis (CFA)

Convergent validity and composite reliability for the instructional leadership practices construct are achieved when the *Average Variance Extracted* (AVE) exceeds 0.50 (Zainudin, 2012; Zainudin et al., 2018) and the *Composite Reliability* (CR) exceeds 0.6.

Table 1 presents the AVE and CR values for the first-order instructional leadership practices construct in the measurement model. The AVE and CR values for each construct are as follows:

- **Defining the school's vision and goals** (AVE = 0.931, CR = 0.988)
- **Cultivating a teaching and learning climate** (AVE = 0.935, CR = 0.988)
- **Managing instructional programs** (AVE = 0.954, CR = 0.979)

All AVE values exceed 0.5 (AVE > 0.5) (Zainudin, 2012; Zainudin et al., 2018), while CR values exceed 0.6 (CR > 0.6) (Zainudin, 2015).

Table 1
CFA Report for the First-Order Measurement Model of the Principal's Instructional Leadership Practices Construct

Construct	Item	Factor Loading	CR	AVE
Defining the School's Vision and Goals	LMM1	0.96	0.988	0.931
	LMM2	0.95		
	LMM3	0.95		
	LMM4	0.98		
	LMM5	0.97		
	LMM6	0.98		
Cultivating a Teaching and Learning Climate	LMI1	0.97	0.988	0.935
	LMI2	0.97		
	LMI3	0.95		
	LMI4	0.97		
	LMI5	0.98		
	LMI6	0.96		
Managing Instructional Programs	LMP1	0.90	0.979	0.954
	LMP2	0.92		
	LMP3	0.94		
	LMP4	0.93		
	LMP5	0.90		
	LMP6	0.93		
	LMP7	0.93		
	LMP8	0.94		

The analysis results confirm that the instructional leadership practices model is a good fit, and all related items effectively measure the three constructs – Defining the school's vision and goals (LMM), Cultivating a teaching and learning climate (LMI), and Managing instructional programs (LMP).

Confirmatory Factor Analysis for the Second-Order Model of Instructional Leadership
The confirmatory factor analysis (CFA) for the second-order model of instructional leadership is detailed in **Figure 4**, which demonstrates a good model fit. The analysis results confirm that the second-order measurement model for instructional leadership practices has successfully met all the required fit indices, with RMSEA = 0.051 (< 0.08), CFI = 0.989 (> 0.90), and ChiSq/df = 1.952 (< 5.0).

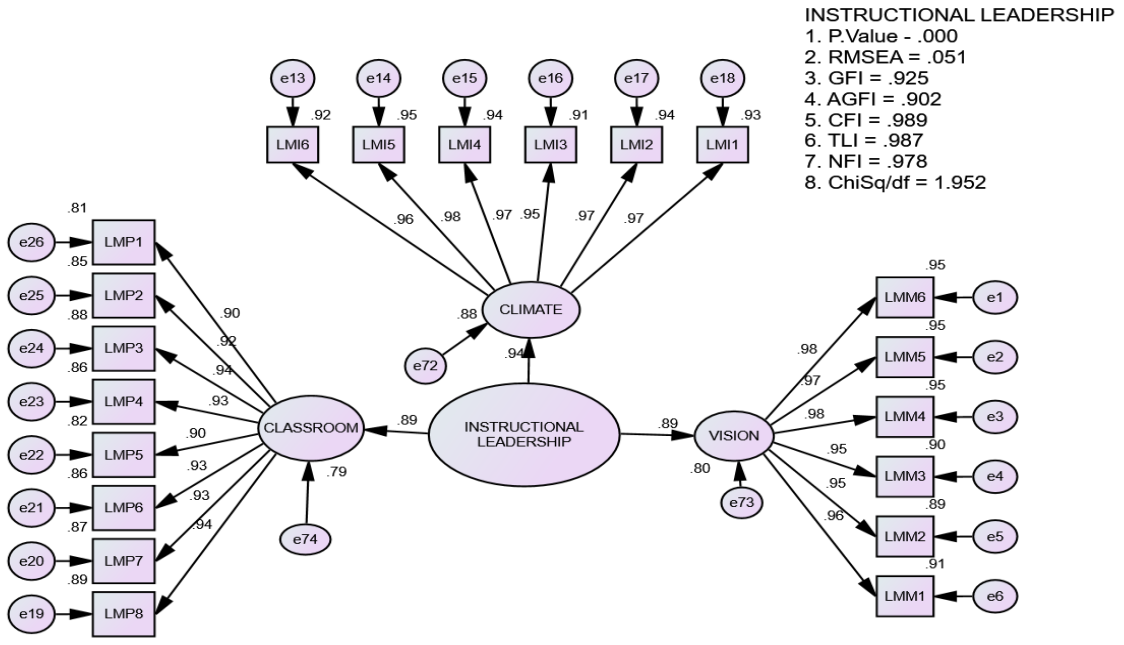

Figure 4: Second-Order Measurement Model for Instructional Leadership Practices (CFA Analysis)

Table 2 presents the *Average Variance Extracted* (AVE) and *Composite Reliability* (CR) values for the second-order instructional leadership practices construct in the measurement model. The analysis findings indicate that the AVE and CR values for the instructional leadership practices construct are **AVE = 0.617** and **CR = 0.93**, where the AVE exceeds 0.5 (AVE > 0.5) and the CR exceeds 0.6 (CR > 0.6), as required. This confirms that the measurement model for instructional leadership practices exhibits a high level of reliability.

Table 2
CFA Report for the Second-Order Measurement Model of Instructional Leadership Practices

Construct	Item	Factor Loading	CR	AVE
Instructional Leadership	LMM	0.89	0.933	0.617
	LMI	0.94		
	LMP	0.89		

Measurement Model for Teacher Commitment

Figure 5 illustrates the results of the first-order measurement model analysis, which has achieved the prescribed goodness-of-fit index values at $p < 0.05$. The RMSEA value is 0.052 (<0.08), the CFI value is 0.989 (>0.9), and the ChiSq/df value is 2.001 (<5.0), confirming that the teacher commitment construct has attained construct validity based on Zainudin (2012) and Zainudin et al. (2018).

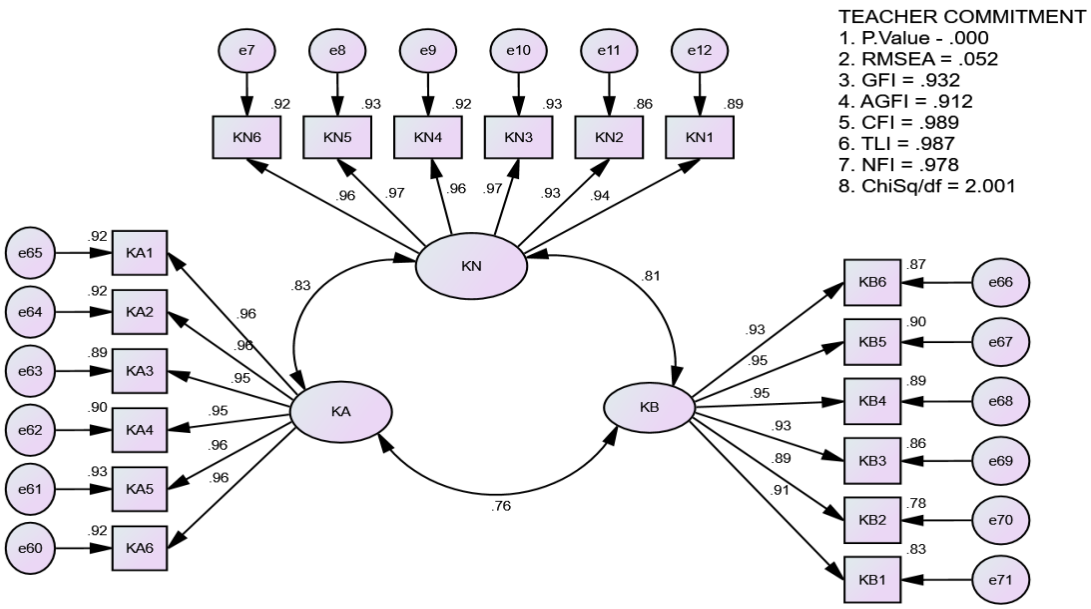

Figure 5: First-Order Measurement Model for Teacher Commitment Construct in CFA

Table 3 presents the AVE and CR values for the first-order teacher commitment construct in the measurement model . The AVE and CR values for each construct are as follows:

- **Affective commitment** (AVE = 0.918, CR = 0.985)
- **Normative commitment** (AVE = 0.91, CR = 0.984)
- **Continuance commitment** (AVE = 0.859, CR =0.973)

All AVE values exceed 0.5 (AVE > 0.5), and CR values exceed 0.6 (CR > 0.6). The results confirm that the teacher commitment model is well-fitted, and all items effectively measure the three constructs (Affective Commitment - KA, Normative Commitment - KN, and Continuance Commitment - KB).

Table 3
CFA Report for First-Order Measurement Model of Teacher Commitment Construct

Construct	Item	Factor Loading	CR	AVE
Affective Commitment	KA1	0.96	0.985	0.918
	KA2	0.96		
	KA3	0.95		
	KA4	0.96		
	KA5	0.96		
	KA6	0.96		
Normative Commitment	KN1	0.94	0.984	0.912
	KN2	0.93		
	KN3	0.97		
	KN4	0.96		
	KN5	0.97		
	KN6	0.96		
	KB1	0.91	0.973	0.859

Construct	Item	Factor Loading	CR	AVE
Continuance Commitment	KB2	0.89		
	KB3	0.93		
	KB4	0.95		
	KB5	0.95		
	KB6	0.93		

Confirmatory Factor Analysis for the Second-Order Model of Teacher Commitment

The confirmatory factor analysis (CFA) for the second-order measurement model of teacher commitment is illustrated in **Figure 6**, which indicates good model fit. The analysis confirms that the second-order measurement model for the teacher commitment construct has met the prescribed goodness-of-fit index values with RMSEA (0.052 < 0.08), CFI (0.989 > 0.9), and ChiSq/df (2.001 < 5.0).

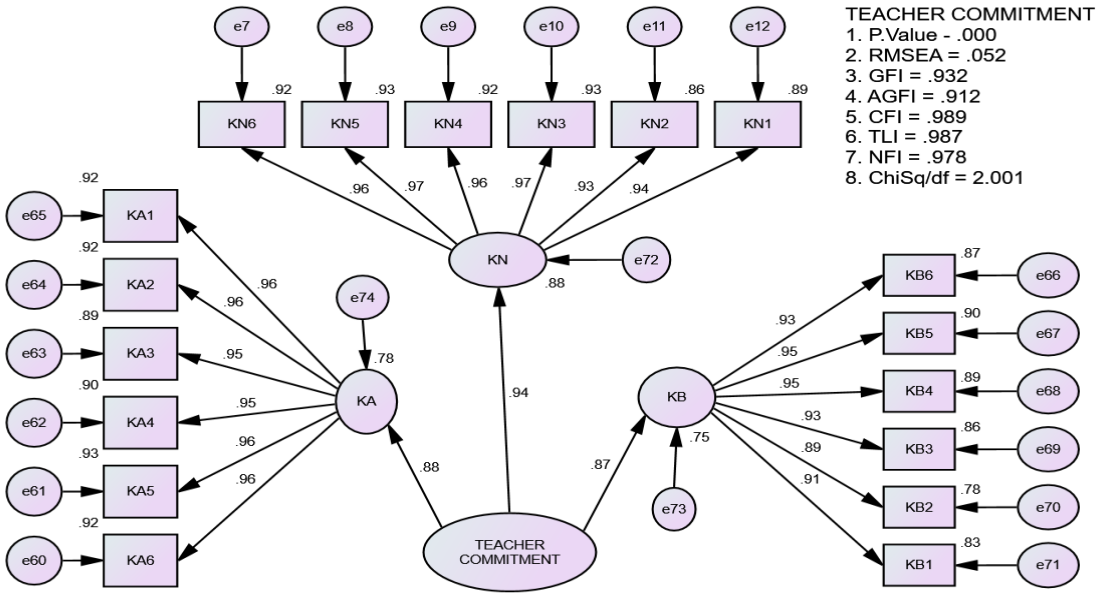

Figure 6: Second-Order Measurement Model for Teacher Commitment Construct in CFA

Table 4 presents the AVE and CR values for the second-order measurement model of teacher commitment. The analysis results indicate that the AVE (0.604) and CR (0.925) values meet the threshold criteria, where AVE > 0.5 and CR > 0.6. This confirms the reliability of the measurement model for the teacher commitment construct.

Table 4
CFA Report for Second-Order Measurement Model of Teacher Commitment Construct

Construct	Item	Factor Loading	CR	AVE
Teacher Commitment	KA	0.88	0.925	0.604
	KN	0.94		
	KB	0.87		

Measurement Model for Student Development

Figure 7 illustrates the first-order measurement model, which assesses six latent constructs: knowledge skills (MP), thinking skills (MKF), leadership skills (MKM), bilingual proficiency (MDB), ethical and spiritual values (MER), and national identity (MIN). These constructs were examined in relation to student development through corresponding measurement items. Data analysis indicates that the measurement model achieved the required model fit indices at **p < 0.005**, with an RMSEA value of **0.036 (<0.08)**, a CFI value of **0.993 (>0.9)**, and a ChiSq/df ratio of **1.472 (<3.0)**.

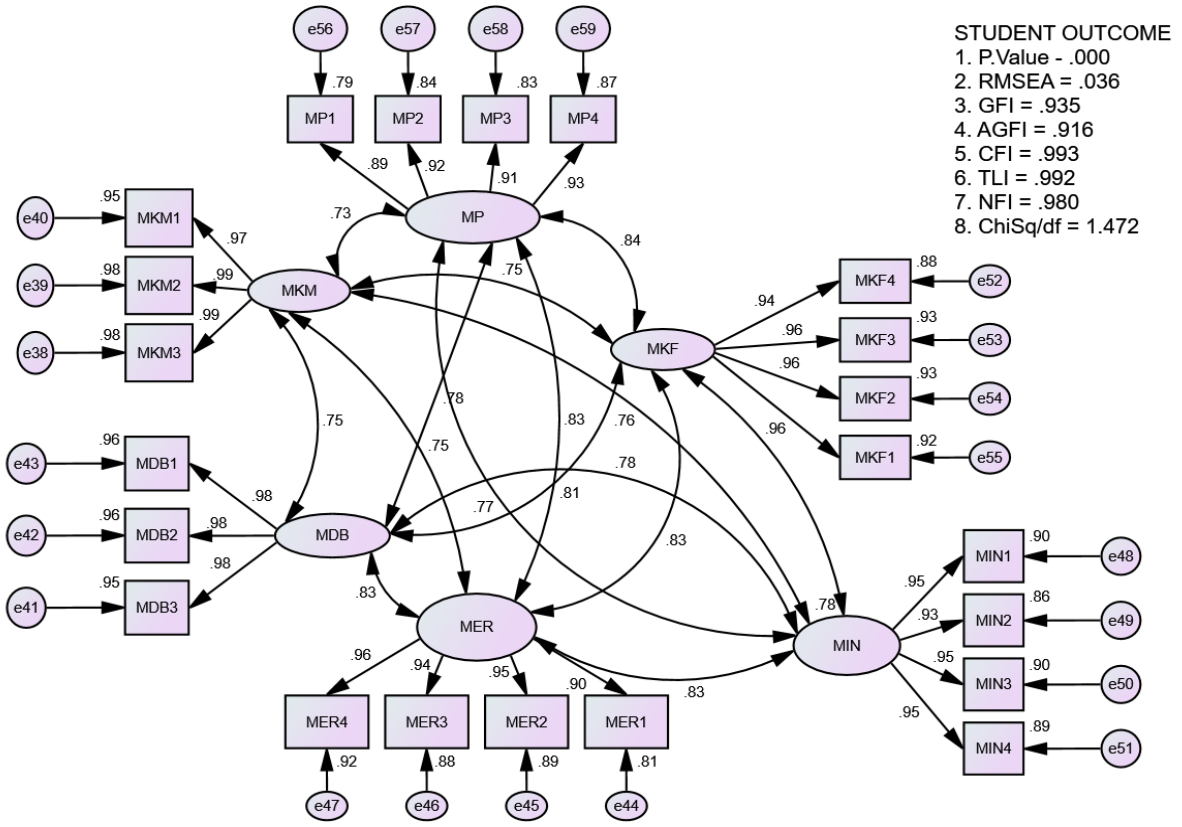

Figure 7: First-Order Measurement Model for Student Development Constructs in CFA

Table 5 presents the **Average Variance Extracted (AVE)** and **Composite Reliability (CR)** values for the first-order constructs of student development in the measurement model. The analysis shows that the AVE and CR values for all constructs exceed the recommended thresholds (**AVE > 0.5, CR > 0.6**), confirming the reliability and validity of the measurement model. The detailed values are as follows:

- **Knowledge Skills**: AVE = **0.833**, CR = **0.952**
- **Thinking Skills**: AVE = **0.912**, CR = **0.978**
- **Leadership Skills**: AVE = **0.725**, CR = **0.989**
- **Bilingual Proficiency**: AVE = **0.720**, CR = **0.986**
- **Ethical and Spiritual Values**: AVE = **0.879**, CR = **0.967**
- **National Identity**: AVE = **0.893**, CR = **0.971**

Table 5
CFA Report for the First-Order Measurement Model of Student Development Constructs

Construct	Item	Factor Loading	CR	AVE
Knowledge Skills	MP1	0.89	**0.952**	**0.833**
	MP2	0.92		
	MP3	0.91		
	MP4	0.93		
Thinking Skills	MKF1	0.96	**0.978**	**0.912**
	MKF2	0.96		
	MKF3	0.96		
	MKF4	0.94		
Leadership Skills	MKM1	0.97	**0.989**	**0.725**
	MKM2	0.99		
	MKM3	0.99		
Bilingual Proficiency	MDB1	0.98	**0.986**	**0.720**
	MDB2	0.98		
	MDB3	0.98		
Ethical and Spiritual Values	MER1	0.90	**0.967**	**0.879**
	MER2	0.95		
	MER3	0.94		
	MER4	0.96		
National Identity	MIN1	0.95	**0.971**	**0.893**
	MIN2	0.93		
	MIN3	0.95		
	MIN4	0.95		

These results confirm that the student development model is well-fitted and effectively measures the six constructs (**MP, MKF, MKM, MDB, MER, MIN**).

Confirmatory Factor Analysis for the Second-Order Model of Student Development
The confirmatory factor analysis (CFA) for the second-order measurement model of student development is illustrated in Figure 8, which indicates good model fit. The analysis confirms that the second-order measurement model for the student development construct has met the prescribed goodness-of-fit index values with RMSEA (0.037 < 0.08), CFI (0.992 > 0.9), and ChiSq/df (1.523 < 5.0).

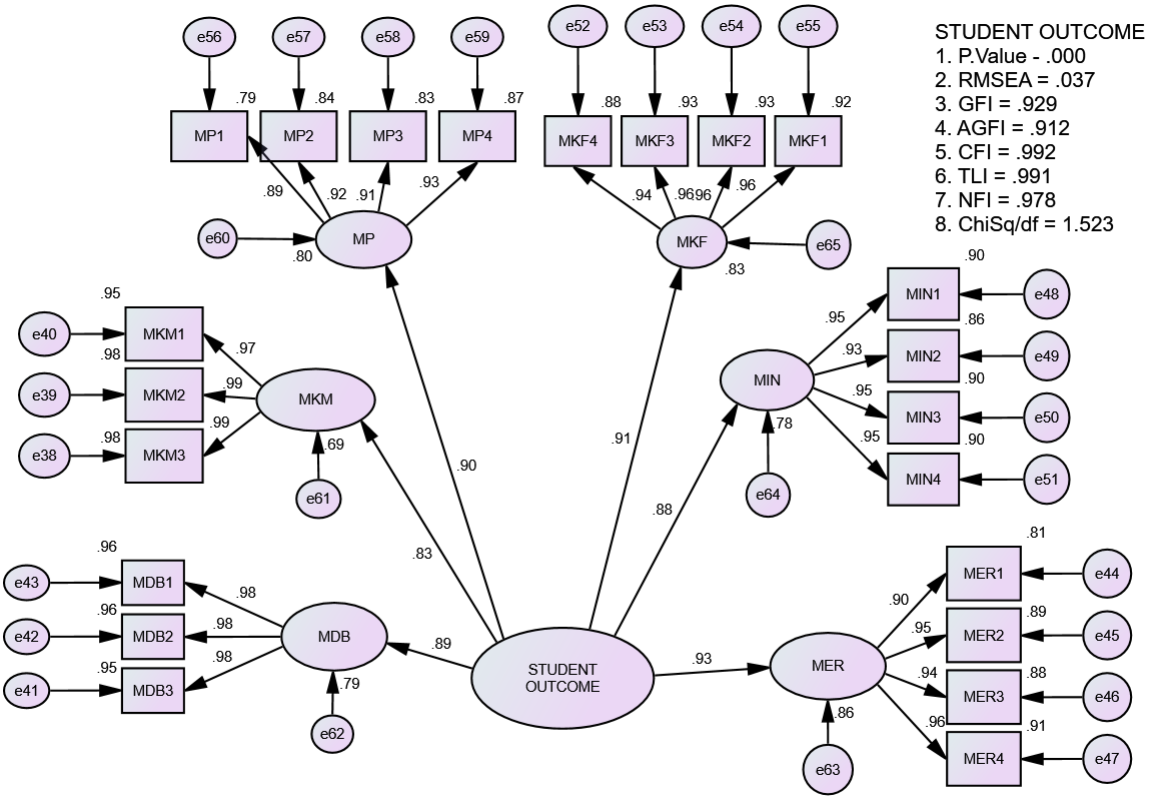

Figure 8: Second-Order Measurement Model for Student Development Construct in CFA

Table 6 shows the AVE and CR values for the second-order construct of student development in the measurement model. The analysis findings indicate that the AVE and CR values for the student development construct (AVE = 0.793, CR = 0.958) meet the required thresholds, with AVE greater than 0.5 (AVE > 0.5) and CR greater than 0.6 (CR > 0.6). This confirms the reliability of the measurement model for student development.

Table 6
CFA Report for the Second-Order Measurement Model of Student Development

Construct	Item	Factor Loading Value	CR	AVE
Student Development	MP	0.90	0.958	0.793
	MKF	0.91		
	MKM	0.83		
	MDB	0.89		
	MER	0.93		
	MIN	0.88		

Measurement Model of the Study for Instructional Leadership Practices, Teacher Commitment, and Student Development Constructs

Figure 9 illustrates the measurement model of the study, which encompasses three latent constructs: instructional leadership practices, teacher commitment, and student development. Data analysis indicates that the measurement model has achieved the required

fit indices at a significance level of p<0.005. The model's fit indices are as follows: RMSEA = 0.053 (<0.08), CFI = 0.988 (>0.9), and ChiSq/df = 2.039 (<5.0).

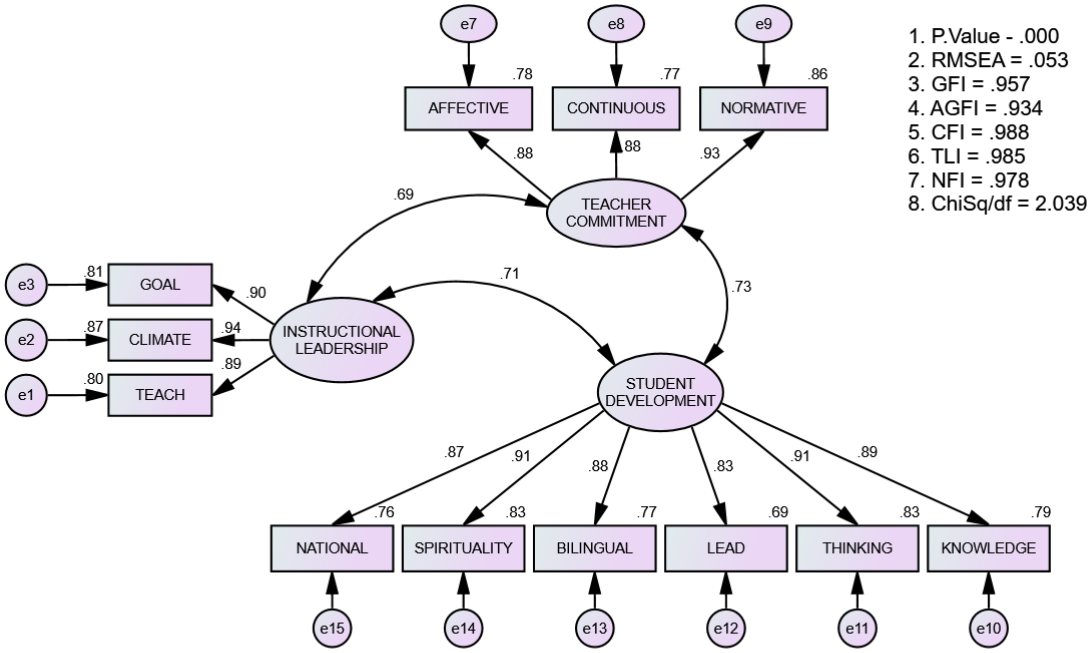

Figure 9: Measurement model for confirmatory factor analysis (CFA) of instructional leadership practices, teacher commitment, and student development constructs.

In summary, based on the Average Variance Extracted (AVE) values exceeding 0.50 (AVE>0.50), ranging from 0.603 to 0.778, and Composite Reliability (CR) values exceeding 0.6 (CR>0.6), ranging from 0.925 to 0.955, as presented in **Table 7**, the reliability of the measurement model in this study is confirmed. The reliability was validated using both AVE and CR criteria.

Table 7
Summary of CFA Report for Each Construct in the Study Model

Construct	Item	Factor Loading	CR	AVE
Instructional Leadership	Goal	0.90	0.935	0.621
	Climate	0.94		
	Teach	0.89		
Teacher Commitment	Affective	0.88	0.925	0.603
	Continuous	0.88		
	Normative	0.93		
Student Development	National	0.87	0.955	0.778
	Spirituality	0.91		
	Bilingual	0.88		

Construct	Item	Factor Loading	CR	AVE
	Lead	0.83		
	Thinking	0.91		
	Knowledge	0.89		

To further validate the construct validity of the proposed research model, **Table 8** summarizes the fit indices for the three categories: absolute fit, incremental fit, and parsimonious fit. The findings confirm that all fit indices meet the required thresholds, indicating the construct validity is achieved. This is evidenced by the model fit indices fulfilling the set standards, as suggested by Zainudin (2011, 2012, 2014, 2015) and Zainudin et al. (2018).

Table 8
Fit Indices for the Measurement Model in This Study

Category	Index Name	Index Value	Study Findings
Absolute Fit	RMSEA	0.053	<0.08 - Achieved required threshold
Incremental Fit	CFI	0.988	>0.9 - Achieved required threshold
Parsimonious Fit	ChiSq/df	2.039	<5.0 - Achieved required threshold

These findings confirm that the measurement model successfully meets the required validity and reliability criteria, ensuring the robustness of the research framework.

Research Findings

The Influence Among Study Variables

To examine the influence among the study variables, a Structural Equation Modeling (SEM) analysis was conducted, and the findings are presented through Figure 8 and Table 9.

Figure 10 illustrates the structural equation model (SEM) used to assess the influence of the study variables in addressing the three research questions by testing hypotheses Ho1 to Ho3.

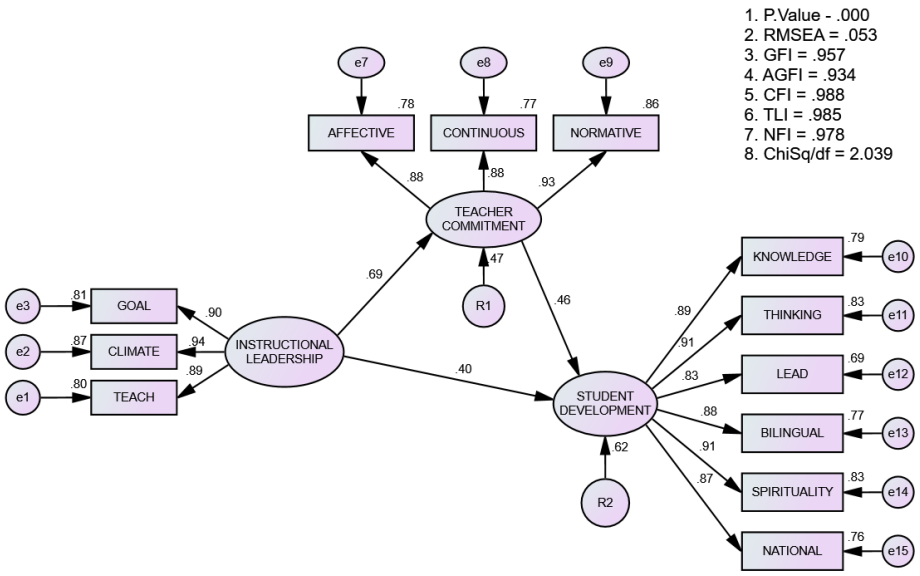

Figure 10: Path Analysis for the Structural Model

Table 9
Summary of Standardized Regression Coefficient Findings (Figure 10)

Exogenous Construct	Involved Construct	R^2	Summary
Teacher Commitment	Instructional Leadership	0.47	Instructional leadership contributes 47% to teacher commitment.
Student Development	Instructional Leadership and Teacher Commitment	0.62	Instructional leadership and teacher commitment contribute 62% to student development.

Table 10 presents the findings for testing Ho1 to Ho3, which analyze the influence of instructional leadership practices on teacher commitment and student outcomes, as well as the influence of teacher commitment on student outcomes using SEM analysis.

Figure 10 and table 9 further demonstrates that instructional leadership practices contribute 47% (R^2=0.47) to teacher commitment. This indicates that 53% of the variance in teacher commitment is attributed to other unidentified factors. Additionally, instructional leadership practices and teacher commitment collectively contribute 62% (R^2=0.62) to student outcomes. This suggests that 38% of the variance in student outcomes is due to other unidentified factors.

Table 10
Regression Path Coefficients and Standardized Path Coefficients Among Constructs in the Study Model

Construct		Construct	β	S.E.	Critical Ratio (CR)	P-value	Findings
TEACHER COMMITMENT	<---	INSTRUCTIONAL LEADERSHIP	0.689	0.052	14.078	***	Significant
STUDENT OUTCOMES	<---	INSTRUCTIONAL LEADERSHIP	0.399	0.052	7.279	***	Significant
STUDENT OUTCOMES	<---	TEACHER COMMITMENT	0.456	0.050	8.170	***	Significant

*** Significant at p<0.001 level; β = Regression Weights

The Influence of Instructional Leadership Practices on Teacher Commitment
Research Question i: Does the principal's instructional leadership practice have a positive and significant influence on teacher commitment?

To answer this research question, the null hypothesis Ho1 was tested, and the results are presented in Table 9, as explained below:

Ho1: Teacher commitment is not significantly and positively influenced by the principal's instructional practices.

Table 9 reveals that instructional leadership practices have a positive and significant influence on teacher commitment, with a regression weight (β) of 0.69 at a significance level of 0.001 (β=0.689, CR=14.078, P<0.001). This indicates that instructional leadership practices significantly impact teacher commitment. A one-unit increase in instructional leadership

practice results in a 0.69-unit increase in teacher commitment. Hence, the null hypothesis Ho1 is rejected based on the observed data.

The Influence of Instructional Leadership Practices on Student Outcomes

Research Question ii: Does the principal's instructional leadership practice have a positive and significant influence on student outcomes?

To answer this research question, the null hypothesis Ho2 was tested, and the results are presented in Table 9, as explained below:

Ho2: Student outcomes are not significantly and positively influenced by the principal's instructional practices.

Table 10 indicates that instructional leadership practices have a positive and significant influence on student outcomes, with a regression weight (β) of 0.399 at a significance level of 0.001 (β=0.399, CR=7.279, P<0.001). This means that instructional leadership significantly affects student outcomes. A one-unit increase in instructional leadership practice results in a 0.399-unit increase in student outcomes. Therefore, the null hypothesis Ho2 is rejected based on the observed data.

The Influence of Teacher Commitment on Student Outcomes

Research Question iii: Does teacher commitment have a positive and significant influence on student outcomes?

To answer this research question, the null hypothesis Ho3 was tested, and the results are presented in Table 9, as explained below:

Ho3: Student outcomes are not significantly and positively influenced by teacher commitment.

Table 10 demonstrates that teacher commitment has a positive and significant influence on student outcomes, with a regression weight (β) of 0.456 at a significance level of 0.001 (β=0.456, CR=8.170, P<0.001). This indicates that teacher commitment significantly impacts student outcomes. A one-unit increase in teacher commitment results in a 0.456-unit increase in student outcomes. Hence, the null hypothesis Ho3 is rejected based on the observed data.

Discussion and Study Implications

The Influence of the Principal's Instructional Leadership Practices on Teacher Commitment and Student Outcomes

The findings of this study confirm that principals' instructional leadership practices contribute significantly to teachers' commitment in schools. Elements of instructional leadership, such as setting school goals and vision, managing teaching programs, and fostering a conducive teaching and learning environment, undoubtedly create a comfortable and supportive atmosphere for teachers to perform their duties (Zaliza, 2019). In turn, this enhances teachers' commitment to their responsibilities, aligning with the study's findings that principals' instructional leadership practices have a significant and positive influence on teachers' commitment.

Apart from teachers' commitment, the principal's instructional leadership style is also believed to contribute to students' academic success. This study demonstrates that principals' instructional leadership practices have a significant and positive impact on students' holistic development. Student development serves as a benchmark for a school's excellence and effectiveness. The findings suggest that school leaders should implement instructional leadership practices to drive their schools toward success. This is because instructional leadership plays a crucial role in enhancing teachers' commitment to performing their duties effectively, which in turn fosters student development as a result of excellent school administration.

The Influence of Teacher Commitment on Student Outcomes

Teachers with a high level of commitment align their personal goals with the school's objectives. Consequently, they strive to complete their tasks efficiently without excuses, thereby reducing disciplinary issues among teachers. High teacher commitment facilitates student achievement, leading to improved school performance. These findings support the notion that teacher commitment positively and significantly influences student outcomes.

Conclusion

In conclusion, this study confirms that the principal's instructional leadership practices serve as a crucial aspect of educational leadership, significantly and positively influencing teacher commitment and student outcomes. A clear and shared vision among all school members has a profound impact, as it enhances teacher commitment to fulfilling their responsibilities in ensuring the school's vision is achieved. Likewise, students will progress in alignment with the principal's vision, ensuring that a successful school fosters outstanding student achievement.

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