

THE RELATIONSHIPS AMONG PRINCIPALS' INSTRUCTIONAL LEADERSHIP, TEACHERS' INSTRUCTIONAL PRACTICES AND PERFORMANCE OF RURAL PUBLIC SECONDARY SCHOOLS IN MALAYSIA

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ABSTRACT

This study investigated the relationships between principals' instructional leadership, teachers' instructional practices and performance of rural public secondary schools in Malaysia. By using multi-stage cluster sampling, 379 teachers were the respondents from rural public secondary schools in Malaysia. The quantitative data collected through a questionnaire survey, was screened and cleaned before the validity and reliability of the questionnaire was determined. The data was subjected to descriptive and inferential analyses. Descriptive analysis indicated that the levels of Principals' Instructional Leadership, Teachers' Instructional Practices and the performance of rural public secondary schools, overall and according to regions were high. The research finds that the overall level of Principals' Instructional Leadership is high (mean = 4.023, SD = 0.313), Teachers' Instructional Practices is high (mean = 3.868, SD = 0.454) and performance of rural public secondary schools was not satisfactory (mean = 5.402, SD = 0.506). Pearson product momentum correlation analyses showed a significant negative relationship between Principals' Instructional Leadership and performance of rural public secondary schools where $r = -0.266$ and $sig = 0.000$ ($p < 0.05$). There is also a significant negative relationship between Teachers' Instructional Practices and performance of rural public secondary schools, where $r = -0.316$ and $sig = 0.000$ ($p < 0.05$). Based on the multiple regression analyses, the dimensions under Principals' Instructional Leadership that significantly predict school performance are managing instructional program and creating a positive school climate. For Teachers' Instructional Practices, all three dimensions: instructional strategies, teaching techniques and instructional materials and tools, are the significant predictors of school performance. The findings of this study support both the Principals' Instructional Leadership theory and contingency theory and further illuminate that Principals' Instructional Leadership and Teachers' Instructional Practices are catalysts in achieving the nation's aspirations for improved performance of rural public secondary schools.

Keywords: Principals' Instructional Leadership, teachers' instructional practices, Rural Public Secondary School Performance

INTRODUCTION

Malaysia struggles to attain an established nation status by the year 2025 and many parts of the country including rural areas are being established to help quicken the development. Developments in rural areas are critical because more than 7% of the rural population in Malaysia is living in deficiency (Ganeswaran, Vogler, 2002). Suppression of deficiency is vital as it is seen as a faltering block towards a nation's development. One of the strategies to eliminate deficiency is through education (World Bank, 2013). Although there were much persistence effort, however, it has been realized that equality of outcome is not achieved through equality of access. The obvious inequality of outcome between rural and urban schools proves that this inequality exists in Malaysia (Panatik et al., 2011).

Instructional leadership means goal orientation that can define clear directions through school's empowered visions and missions and able to motivate others in order to achieve success where the main focus is students' achievements (Hallinger, 2005, Norashikin, 2018). According to Lemoine et al (2014), instructional leadership is the effective leader who sets the direction and establishes a vision to reach academic goals. Effective principals have high expectations for teacher and student performance, articulating performance standards for teaching and learning. As an instructional leader, the principal works with curriculum and instruction; the school leader presents focused and on-going professional development, encourages instructional innovations, utilizes proactive change processes, and frequently monitors and evaluates teachers and student learning. The effective school leader communicates and builds relationships with teachers who become part of the leadership team. Leadership is distributed among team members who are working collaboratively toward the same goal. School leaders establish a safe, orderly, and positive environment and school culture in which learning can occur. Not only principals but teachers too face many challenges in pursuit of school performance especially in rural public secondary schools.

To achieve the nation's aim, the Malaysia Education Blueprint (2013-2025) has focused on the quality of leadership and teaching practices in schools as the domain factors to accomplish the success of the education system, thus boosting schools' performance all over Malaysia be it urban or rural schools, primary or secondary schools (Ministry of Education, 2013). To respond to the country's goal, the Malaysia Education Blueprint is outlined from 2013-2025 to achieve the achievement planned in the system of education. The focus has been shifted to the leadership quality and teaching practices in schools which are the main factors in enhancing schools' performance all over Malaysia either urban or rural schools, primary or secondary schools (Malhoit, 2005; Kim and Sheridan, 2015).

BACKGROUND OF STUDY

There is limited research related to rural public secondary schools in Malaysia. Malhoit (2005), in his research entitled "Providing rural students with a high-quality education", highlights some strategies that can be put in place in order to make rural public secondary schools become quality schools. One strategy is that rural public secondary schools should be led by effective school leaders; principals with instructional leadership. Educational researchers have come to a consensus that this factor is the most crucial one that rural public secondary schools should have. Without it, there will never be good rural public secondary schools. Hallinger (2005) found that principals are able to contribute to school effectiveness and students' achievements through instructional practices that can influence schools and classrooms and that the administrative roles of the principals are irrelevant with present educational development. Hallinger (2005) stressed that the biggest effect instructional leadership principals have upon students' achievements is when the instructional leadership focusses on three dimensions that is defining school goals, managing instructional programs and creating a positive conducive school climate. School teachers and administrators are being pressured more than ever before and held accountable for the performance of all segments of populations within their schools (Mitchell, Kensler, & Tschannen-Moran, 2015; Jennifer Karzmars, 2018). School administrators are expected to demonstrate effective leadership and instructional leadership skills (Gülcan, 2012; Jennifer Karzmars, 2018). Principals in recent educational settings are practicing leadership approaches and strategies beyond traditional transformative and facilitator leadership that has been used in the past (Gulcan, 2012; Jennifer Karzmars, 2018). Mitchell et al. (2015) found a need to extend their work by examining the correlation with instructional leadership, academic press, and student achievement (Kazmar, 2018). With the intensive scrutiny of schools and accountability, teachers and administrators are being challenged to meet the role of instructional leader and the diverse needs of students measured by student achievement requirements of state assessments (Huff et al., 2011; Mitchell et al., 2015; Kazmar, 2018).

To achieve the nation's aim, the Malaysia Education Blueprint (2013-2025) has focused on the quality of leadership and teaching practices in schools as the domain factors to accomplish the success of the education system, thus boosting schools' performance all over Malaysia be it urban or rural schools, primary or secondary schools (Ministry of Education, 2013). Essential players in improving school effectiveness are teachers as they have specific strength to produce excellent especially when the teaching and process goes on (Malhoit, 2005). Teaching practices which have good quality are able to steer the school towards good performance in addition to good education. Through a quantitative method, this study aims to highlight the level of teachers' instructional practices and their influences on rural public secondary school performance. This study hopes to contribute towards the influence of teachers' instructional practices which can lead to good academic achievement of students along with contouring schools into excellent ones for future government programs to be implemented successfully.

It was not known if and to what extent teachers' perceptions of their principals' instructional leadership and teachers' instructional practices were correlated with performance in rural public secondary schools. Previous studies have attempted to explain the relationships among the variables of instructional leadership, instructional practices, and performance, but have failed to fully correlate their relationships. Mitchell et al. (2015) suggested future research was needed to extend the relationships between the climate of high expectations of teachers' instructional practices and instructional leadership with achievement. With new focuses on closing achievement gaps and school improvement, the correlation between school climate and instructional leadership along with performance must be further researched (Allen et al., 2015). Future research was needed to extend the work of Mitchell et al. (2015) by examining these variables in other contexts, such as incorporating the views of teachers and having individual student data access.

PROBLEM STATEMENT

In Malaysia, there was a gap in the results obtained by rural secondary schools between 2017 and 2018. As indicated in Figure 1.1, the GPN for rural secondary schools in 2017 was 5.22 while the National Average Grade (GPN) was 4.90. Rural secondary schools in Malaysia did not do well as their results 5.22 exceeded the National Average Grade (GPN) of 4.90. The urban schools scored 4.75 which was better than the National Average. The performance gap between rural and urban schools in 2017 was 0.47 while the gap in 2018 was 0.43. This data clearly revealed a problem in academic equity between rural and urban secondary schools and therefore, this study was needed to highlight issues involving principals' instructional leadership, teachers' instructional practices and performance of rural public secondary schools.

Overall, as long as the right policy can be put in place, we are certain that the quality of Malaysian rural schools can be improved and therefore, the gap exists between these schools and their urban counterparts can be minimized or possibly closed. Over the years, there have not been numerous studies that have looked at the correlation of Principals instructional leadership of rural public secondary schools and school performance. The aim of this study is to investigate the influence of principals' instructional leadership on school performance in rural public secondary schools.

From the problem statement above, this study aims to look into the correlation between principals' instructional leadership and performance of rural public secondary schools', teachers' instructional practices and performance of rural public secondary schools in Malaysia. The research also attempts to investigate the levels of all the variables, the relationship between instructional practices of teachers and performance of rural public secondary schools, the relationship between instructional leadership of principals' and performance of rural public secondary schools and the dimensions of principals' instructional leadership and teachers' instructional practices that contributed towards school performance.

LITERATURE REVIEW

This study involves two main independent variables: Principals Instructional Leadership and Teachers’ Instructional Practices in the classroom and also the dependent variable performance of rural public secondary schools. The theoretical framework for this study is as follows:

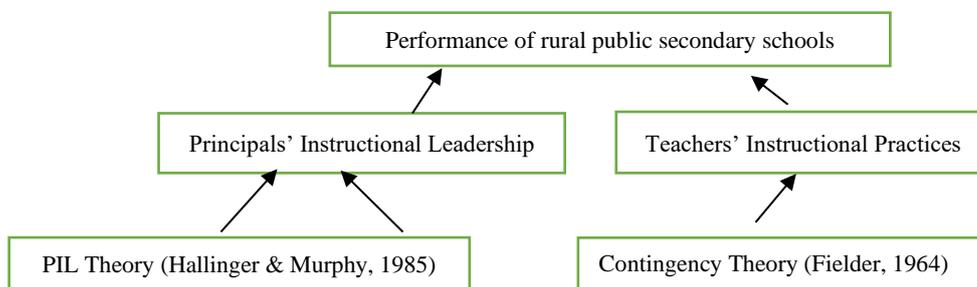


Figure 1: Theoretical Framework of the study

In this study, under pinning this research are Principals’ Instructional Leadership Theory to examine the performance of rural public secondary schools and used Contingency Theory for Teachers’ Instructional Practices and Principals’ Instructional Leadership.

The conceptual framework for this study is as follows:

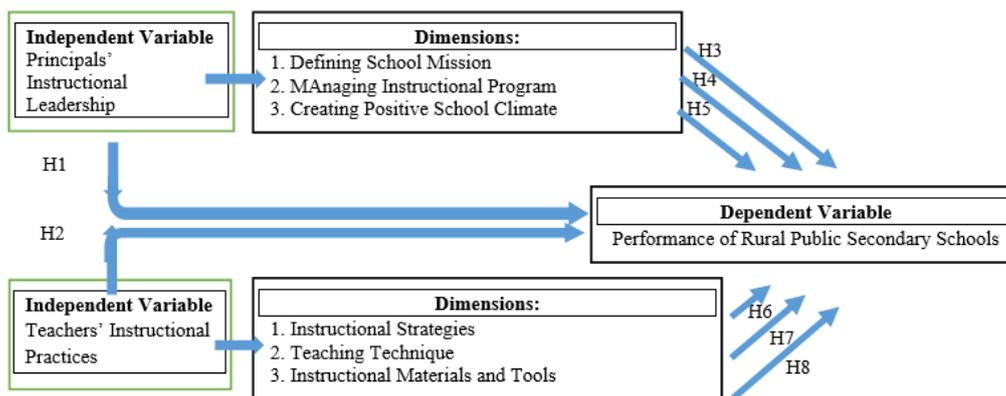


Figure 2: Conceptual Framework for this study

For the purpose of this study, a conceptual framework (Figure 2) was designed to capture the nature and scope of instructional leadership as practised by principals, instructional practices by teachers and performance of rural public secondary schools. Figure 1 shows the relationship between two variables ie independent variables (IV) namely Principals’ Instructional Leadership (PIL) and Teachers’ Instructional Practices (TIP). Next, this study will see between the dimensions which can be the predictor factor for performance of rural public secondary schools (GPS). Based on the conceptual framework above the focus of this literature is on all the dimensions, teaching practices in the classroom and previous studies on the relationship of these two variables. This study measures the relationships between principals’ instructional leadership and performance of rural public secondary schools. This study also measures the relationships between teachers’ instructional practices and performance of rural public secondary schools. In addition, the researcher examines the teacher demographic variables as well. Therefore, this study examines the relationship between Principals’ instructional leadership and Teachers’ instructional practices on performance of rural public secondary schools in Malaysia.

This conceptual framework begins with principals’ instructional leadership practices and roles and teachers’ instructional practices. The phase involve all the three dimensions of principals’ instructional leadership, the three dimensions of teachers’ instructional practices and the outcome, the performance of rural public secondary schools. Based on the conceptual framework, there are two implications. One implication is that there is a significant relationship between principals’ instructional leadership and performance of rural public secondary schools and the second implication is that there is a significant relationship between teachers’ instructional practices and performance of rural public secondary schools. The conceptual framework shows the connection between instructional leadership practices of principals which can lead to influence students’ learning and teachers’ instructional practices on performance of rural public secondary schools.

The researcher used the SPM Examination Results as school performance. The SPM Examination 2017 results announcement made by the Director General of Education Ministry of Malaysia Datuk Dr Amin Bin Senin on the 15 March 2018 revealed some findings. SPM examination results are reported based on the candidate's achievement and performance of subjects. Candidate achievement refers to the degree to which candidates dominate the learning in all subjects tested. The index is used to show the achievements of candidates across the country is the National Average Grade (GPN). Smaller National Average Grade (GPN) value indicates better performance. The performance of the subject refers to the degree to which candidates dominate the knowledge, skills and values measured in each subject. Index used to reflect the performance of the subjects is the average Grade Subjects (GPMP). The smaller value of GPMP also showed better performance. Achievements of the Candidates for the year 2017 was better than in 2016. The National Average Grade (GPN) for 2017 was 4.90 compared to 5.05 for the year 2016 with an increment of 0.15. Achievements of the candidates based on the location of the candidates' achievements in urban and rural areas was also encouraging. The achievements of candidates in the urban areas increased by 0.14 namely 4.75 in 2017 compared to 4.89 in 2016. Unfortunately, the achievements of the candidates in the rural areas had increased by 0.14 i.e. 5.22 in 2017 compared to 5.36 in 2016. Increase in candidate's achievement showed an improvement in rural area equivalent to increase in candidate achievement in the urban areas. Differences in achievements between candidates in the urban and rural areas remained 0.47 in the year 2017 is the same as in 2016. But the result is below the National Average Grade (GPN) for the year 2018 i.e. 4.89.

Table 1: Candidates' achievements based on location for the year 2018, 2017 and 2016

Year	National Average Grade (GPN)	Urban Average Grade	Rural Average Grade	Difference
2018	4.89	4.75	5.18	0.43
2017	4.90	4.75	5.22	0.47
2016	5.05	4.89	5.36	0.47
Difference		0.14	0.14	

Achievements of the candidates based on the location of the gap between the performances of the candidates in the urban and rural narrowed by 0.04 in the year 2018 compared to the year 2017. This is due to the increased performance of the candidates in the rural areas of the candidate's achievements in 0.04 while urbans remain the same.

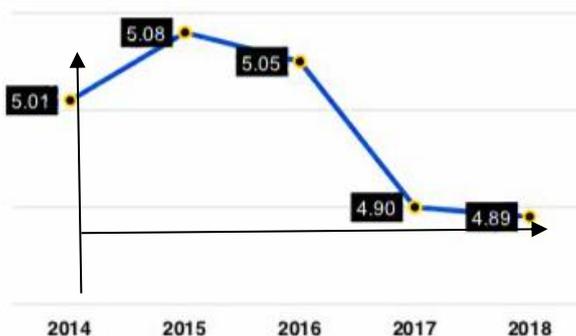


Figure 3: National Average Grade (GPN) 2014-2018

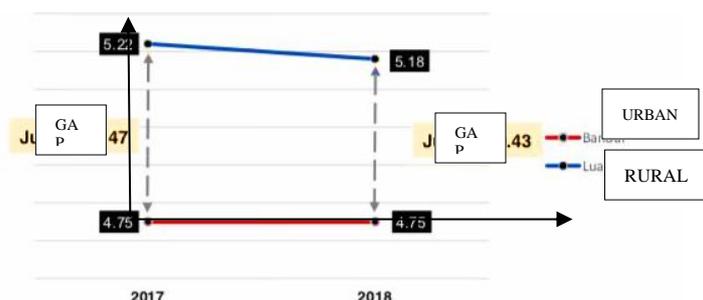


Figure 4: Gap of Candidates Achievements

There is a gap in the results obtained by rurals compared to urbans. Urbans are better and their Average Grade result 4.75 reached way above the National Average Grade (GPN) of 4.89. Rurals did not do well as their results 5.88 are way beyond the National Average Grade (GPN) of 4.89. What was the set back and what went wrong in the rural educational system?

Thus, it is timely that a study is undertaken to investigate the relationship between correlation of Principals' instructional leadership and school performance of rural public secondary schools. The findings from the study would benefit various departments in the ministry and schools that deal with the facilitating education for the students to rope in school performance. In consequence, this will help them to increase Principals' instructional leadership and gain better school performance of rural public secondary schools.

RESEARCH METHODOLOGY

This study has used two different instruments to obtain quantitative data. It uses the quantitative method of data collection; the survey method. To collect quantitative data, the PIMRS questionnaire (Hallinger & Murphy, 2012) was used. A quantitative method research design was used for this study. This study focuses on the issues and challenges faced by Principals’ practising instructional leadership and teachers in practicing instructional roles in rural public secondary schools in Malaysia. The quantitative method research employed and data collected through a survey method using ‘The Principal Instructional Management Rating Scale (PIMRS) adapted from Hallinger (2008) and a survey instrument was used to measure teachers’ instructional practices and Gred Purata Sekolah (GPS) or Average Grade Score by the grades obtained in the rural public secondary school SPM results were taken as school performance. Data was analysed using descriptive and inferential statistics with SPSS IBM Version 25.0 software. This study look into the correlation between principals’ instructional leadership and performance of rural public secondary schools’, teachers’ instructional practices and performance of rural public secondary schools in Malaysia. The research also attempts to investigate the levels of all the variables, the relationship between instructional practices of teachers and performance of rural public secondary schools, the relationship between instructional leadership of principals’ and performance of rural public secondary schools and the dimensions of principals’ instructional leadership and teachers’ instructional practices that contributed towards school performance. 379 out of 22979 teachers were randomly selected as respondents. SPSS was used and data analysis was carried out using descriptive statistics, Pearson Product Moment Correlation Analysis and Multiple Regression Analysis.

POPULATION, DATA COLLECTION AND SAMPLING

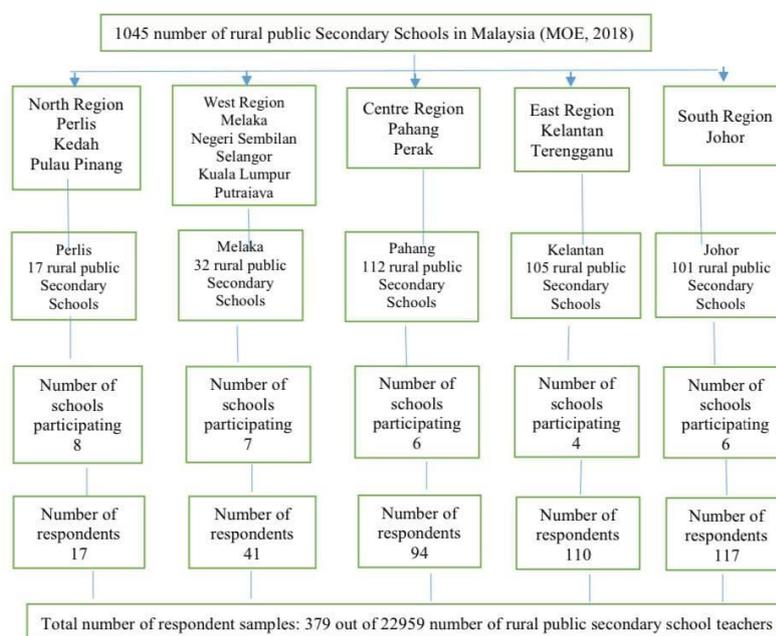


Figure 5: Sampling method

The population was 22959 and the sample size was 379 based on Krejcie and Morgan (1970). Sampling method was Multi-stage Cluster Sampling. The state selection was randomly selected. All schools were contacted through emails and 31 schools responded. In addition, the schools responded were also based on regions. This is to enable selected teachers or respondents as not only represented the district but also represented the region. Number of respondents identified by using a formula

$$\frac{\text{Total number of respondents in the region}}{\text{Total number of respondents in Malaysia}} \times \text{Sample size from Krejcie and Morgan's Table}$$

Figure 6: Krejcie and Morgan’s Table

The respondents selected by using stratified random sampling comprising of 379 teachers (32.7% male, 67.3% female) attending secondary schools in five states; Perlis, Kelantan, Pahang, Johor and Malacca, in Malaysia. All respondents were full time teachers with an average of 10 years in service and an average of 123 teachers have been working under their present principals for 1 or 2 years.

Table 3: Number of sample size from each state

States representing Malaysia	Number of Samples
Pahang	94
Kelantan	110
Perlis	17
Johor	117
Malacca	41
Total	379

Source. E-Operasi Statistics State Education Department for the year 2018 Morgan and Krejcie’s (1970) sampling determination table.

The sample was representative of a rural public secondary school teacher demography to the extent that it did not represent any one single demographic group (e.g. gender, age groups etc.) extensively.

INSTRUMENTS

The respondents’ survey instrument was evaluated using Likert scale developed by Rensis Likert 1903, an American social psychologist who is primarily known for developing the 5-point Likert scale, a psychometric scale that allows people to respond to questions of interest, in order to measure people's attitudes (such as personality and attitude tests).It is a five item scale that requires respondents to answer questions pertaining to them. The scale is a measure of the degree to which situations in one’s life are appraised as agree or disagree. Respondents responded to each item using a five-point Likert-type scale from 1 (never) to 5 (very often).

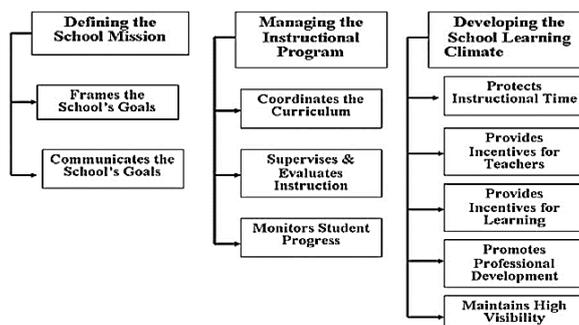


Figure 7: PIMRS Framework of the Principals’ Instructional Leadership. (Hallinger, 1985)

The Principal Instructional Management Rating Scale (PIMRS) consists of three dimensions of principal instructional leadership practices. This model was developed based on information gathered from principals, teachers and administrators using a questionnaire. They also used secondary data from school narratives. From the synthesis of the data collected, they were able to create an instrument of instructional management with 3 dimensions, 10 job descriptors and 59 items.

Principals instructional leadership survey (PIMRS)

The respondents were asked to indicate their responses to the five principals’ instructional leadership factors such as Defining school mission, Managing Instructional Program and Creating a Positive School Climate that could have affected their schools SPM performance.

Table 4: Reliability Coefficient for Each Variable (N=379) for Principals’ Instructional Leadership

Variable	Item No.	Item Deleted	Cronbach’s Alpha
Principal Instructional Leadership	59	0	0.891
Defining school mission	12	0	0.888
Managing Instructional Program	15	0	0.853
Creating a Positive School Climate	32	0	0.907

Teachers’ instructional practices survey (IPS)

The participants were required to do ranking of their best five teachers’ instructional practices factors which are Instructional Strategies, Teaching Techniques and Instructional Materials and Tools that could have influenced their school’s performance. Instructional Practice Survey (IPS) Measuring Scale 3 dimensions 40 items (Vogler 2002)

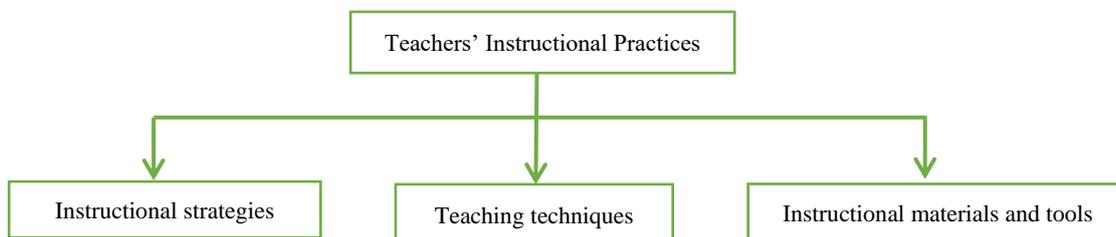


Figure 8: IPS Survey Instrument (Vogler, 2002)

Table 5: Reliability Coefficient for Each Dimension (N=379) for Teacher’s Instructional Practices

Variables	Item No.	Deleted Items	Cronbach’s Alpha
Instructional Strategies	20	0	0.904
Teaching Techniques	7	0	0.915
Instructional Materials and Tools	13	0	0.854

*Value after item deletion

SCORES

The SPM GPS 2018 were from the State Education Departments.

RESULTS

The results of this study are discussed based on the research questions stipulated.

Table 6: Gender of Teacher Respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	124	32.7	32.7
	Female	255	67.3	100.0
Total	379	100.0	100.0	

Research question 1: What is the level of Principals’ instructional leadership of rural public secondary schools?

Based on Table 7, overall, the Principals’ Instructional Leadership is at high level (Mean=4.023). All the dimensions of the Principals’ Instructional Leadership are also at high level. Standard deviation is .313.

Table 7 Mean Score and Standard Deviation of the Principals’ Instructional Leadership (N=379)

Variable Principals’ Instructional Leadership	Mean	Standard Deviation	Level
Overall Principals’ Instructional Leadership	4.023	.313	High
Dimensions			
Defining school mission	4.116	.435	High
Managing Instructional Program	4.028	.355	High
Creating a Positive School Climate	3.985	.342	High

Note: Mean 0 to 2.39 as Low; 2.40 to 3.69 as Moderate; more than 3.70 as High Source. Hallinger (2003).

Research Question 2: What is the level of teachers’ instructional practices of rural public secondary schools?

Based on Table 8, overall, the Teacher’s Instructional Practices are at high level (Mean=3.87). All the dimensions of the Teacher’s Instructional Practices are also at high level 3.87. Standard deviation is .45435.

Table 8: Mean Score and Standard Deviation of the Teachers Instructional Practices

Dimensions	Mean	Standard Deviation	Level
Instructional Materials and Tools	3.84	.46321	High
Teaching Techniques	3.88	.49160	High
Instructional Strategies	3.91	.55598	High
Overall Teachers’ Instructional Practices	3.87	.45435	High

Note : (Mean 0 to 2.39 as Low; 2.40 to 3.69 as Moderate; more than 3.70 as High)

Research question 3: What is the level of performance of rural public secondary schools?

Table 9: Descriptive Statistics GPS

	N	Mean	Std.Deviation
GPS_rec	379	5.402	.506
Valid N (listwise)	379		

The Descriptive Statistics table shows that the mean score for the school performance indicated by GPS is 5.402 with a wide dispersion as the SD is .506. This indicates that there is a wide range of GPS among rural public secondary school performance. The level of the school performance of rural public secondary schools GPS is 5.402. The higher value of GPS indicates rural schools’ lower performance than GPN which is 4.89. Hence, the results indicate that the GPS of the rural schools is unsatisfactory. The mean score for overall GPS for rural schools does not meet the target.

Research question 4: Is there a significant relationship between Principals’ Instructional Leadership and school performance of rural public secondary schools?

A correlation test that was conducted in order to address research question 4.

Hypothesis 1 H1: There is no significant relationship between principals’ instructional leadership and school performance of rural public secondary schools.

Table 10: Correlation test of Principal Instructional Leadership and GPS

	Principle Instructional Leadership	GPS
Pearson Correlation	1	-0.266
Significant (2-tailed)		0.000
N		380

** . Correlation is significant at the 0.05 level (2-tailed).

Table 10 shows that there is a significant negative relationship between Principals’ Instructional Leadership and GPS ($r=-0.266$; $p < 0.05$). Therefore, this indicates that the increase in Principal Instructional Leadership will lead to a decrease in GPS score. The smaller the GPS value the better the schools perform. Thus, the null hypothesis is rejected.

The results of the correlation proved that there is a significant relationship between principals' instructional leadership and school performance.

The hypothesis is that there is no significant relationship correlated with principals' instructional leadership and school performance of rural public secondary schools is thus, rejected.

Research question 5: Is there a significant relationship between teachers’ instructional practices and school performance of rural public secondary schools?

A correlation test that was conducted in order to address research question 5 whether there is a significant interrelation between teachers’ instructional practices on the performance of rural public secondary schools. Spearman correlation is often used to evaluate relationships involving ordinal variables.

Table 11: Academic Correlation Test Teachers' Instructional Practices and School Performance of Rural Public Secondary Schools.

Correlations		GPS_rec	TIP 2	PIL 2
Spearman's rho	Correlation Coefficient	1.000	.238**	.271**
	Sig. (2-tailed)	.	.000	.000
	N	379	379	379
GPS_rec	Correlation Coefficient	.238**	1.000	.667**
	Sig. (2-tailed)	.000	.	.000
	N	379	379	379
TIP 2	Correlation Coefficient	.238**	1.000	.667**
	Sig. (2-tailed)	.000	.	.000
	N	379	379	379

** . Correlation is significant at the 0.01 level (2-tailed).

Table 11 shows the correlation test of Teachers' Instructional Practices. The test results indicates a significant positive relationship between Teachers' Instructional Practices and with school performance of rural public secondary schools (H1: Research Question 2).

Hypothesis 2: There is a significant relationship between teachers' instructional practices with school performance of rural public secondary schools.

The Correlations table indicate that the correlation value is .238. A weak linear relationship was indicated when the value of r is positive and approaches 1. The value of r also suggest that the points are grouped together in a line that slopes positively.

Research question 6: Which dimension/dimensions of Principals' Instructional Leadership contribute significantly towards school performance of rural public secondary schools?

To answer this research question 6, Multiple Regression was used. An alpha level (p) of .05 was set for this analysis. Based on Table 12 the Coefficients output showed that the degrees of freedom (df) is at (9.800) while the group means are statistically significantly different because of the value in the "Sig. (2-tailed)" row is less than 0.05.

Table 12: ANOVAa

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	25.814	2	12.907	69.201	.000b
Residual	70.130	378	.187		
Total	95.944	380			

a. Predictors: (Constant), Principals Instructional Leadership

b. Dependent Variable: School Performance

Table 13: Model Summary PIL

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.519 ^a	.423	.418	.48130

a. Predictors: (Constant), developing the schools learning climate program, defining schools' mission, managing the instructional program

b. Dependent variable: GPS

Table 13 shows that 42% from the change in variance for GPS relates to the variables of Principals' Instructional Leadership. With the result (F = 69.201; p < 0.05), that there is significant contribution by Principals Instructional Leadership towards School Performance of Rural Public Secondary Schools.

Table 14: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.964	.328		2.943	.003		
Principals Instructional Leadership	.694	.071	.496	9.800	.000		1.002
a. Defining schools mission	.109	.072	.093	1.513	.131		1.001
b. Managing the instructional program	.357	.105	.249	3.424	.001		1.003
c. Developing the schools learning climate	.227	.097	.154	2.333	.020		1.000

a. Dependent Variable: School Performance

As shown in Table 14 above, for the independent variable (Principal Instructional Leadership), the probability of the t statistic (9.80) for the b coefficient is .000 which is equal to the level of significance of 0.05. It can be concluded that there is a statistically

significant relationship between Principal Instructional Leadership and School Performance. The results of the analyses showed that both independent variables, Principals Instructional Leadership ($\beta=0.496$; $t=9.800$; $p < 0.05$) is significantly correlated to school performance of Rural Public Secondary Schools. The results show that managing the instructional program ($\beta=0.249$; $t=3.424$; $p < 0.05$) made the largest contribution to schools performance and developing the schools learning climate ($\beta=0.154$; $t=2.333$; $p < 0.05$) is the second largest contributor relationship towards schools performance. The smallest contributor was defining schools' mission ($\beta=0.093$; $t=1.513$; $p > 0.05$) indicating that was no significant contribution.

The data from the principals' instructional leadership Survey yielded the following results. As shown in Table above, for the independent variable (principals' instructional leadership), the probability of the t statistic (9.80) for the b coefficient is .000 which is equal to the level of significance of 0.05. It can be concluded that there is a statistically significant relationship between principals' instructional leadership and School Performance. This means that when principals' instructional leadership goes up by 1 standard deviation, School Performance of Rural Public Secondary Schools goes up by 0.496 standard deviation. The results of the analyses showed that independent variable, principals' instructional leadership is significantly correlated to school performance of Rural Public Secondary Schools. Principals' instructional leadership made a statistically significant contribution ($\beta = .496$).

Table 14 shows that 42 % from the change in variance for GPS is connected with the variables of dimensions of Principals' instructional leadership. With the result ($F = 69.201$; $p < 0.05$), that there is significant contribution by dimensions of Principals' Instructional Leadership towards Rural Public Secondary School Performance.

Accordingly, the corresponding hypotheses that emerged from Research Questions 6 are as follows. The following were the hypotheses;

Hypothesis 3 H3: Defining school mission predicts performance of rural public secondary schools.

The results show that the smallest contributor was defining schools mission ($\beta=0.093$; $t=1.513$; $p > 0.05$) indicating that was no significant contribution. Thus, the hypothesis that there is a significant relationship between Defining school missions towards performance of rural public secondary school was rejected.

Hypothesis 4 H4: Managing instructional program predicts performance of rural public secondary schools.

The results show that managing the instructional program ($\beta=0.249$; $t=3.424$; $p < 0.05$) made the largest contribution with to performance of rural public secondary schools. Thus, the hypothesis that there is a significant relationship between managing the instructional program towards performance of rural public secondary school was accepted.

Hypothesis 5 H5: Creating a School Learning Climate Program predicts performance of rural public secondary schools.

The results also show that developing the schools learning climate ($\beta=0.154$; $t=2.333$; $p < 0.05$) is the second largest contribution towards performance of rural public secondary schools. Thus, the hypothesis that there is a significant relationship between creating a School Learning Climate Program towards performance of rural public secondary school was accepted.

Research Question 7: Which dimension/dimensions of teachers' instructional practices contribute significantly towards the performance of rural public secondary schools?

To answer this research question 7, the results are based on the tables below.

Table 15: Model Summary TIP

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.642 ^a	.534	.521	.54130

a. Predictors: (Constant), Teachers' Instructional Practices

b. Dependent variable: GPS

The model summary Table 15 indicates the R (.642), R square (.534) and Adjusted R² (.521). This means that 53% of the variance in performance of school was jointly explained by Teachers' Instructional Practices. So, the measures were considered strong predictors of school performance indicating practical significance in addition to statistical significance found. According to Cohen (1988), an R square value of greater than .26 is considered as having a large effect. So, with TIP having the value of R square (.534), it can be considered as having a large effect on the rural public secondary school performance.

Table 16: Anova TIP

ANOVAa					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	30.542	2	15.127	53.121	.000b
Residual	65.113	378	.242		
Total	95.655	380			

a. Predictors: (Constant)Teachers' Instructional Practices

b. Dependent Variable: School Performance

Table 16 above shows that 53% from the change in variance for GPS relates to the variable of Teachers' Instructional Practices. With the result (F = 53.121; p < 0.05), that there is significant contribution by Teachers' Instructional Practices towards Performance of Rural Public Secondary Schools.

Table 17: Correlation Test Teachers' Instructional Practices and School Performance of Rural Public Secondary Schools.

Model	Coefficients						Collinearity Statistics	
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Tolerance	VIF
	B	Std. Error	Beta					
1 (Constant)	.964	.328			2.943	.003		
Teachers' Instructional Practices	.274	.039	.346		6.964	.000		1.002
Instructional Strategies	.219	.096	.201		2.290	.026	.309	1.003
Teaching Techniques	.121	.087	.118		1.387	.012	.331	1.002
Instructional Material and Tools	.024	.065	.027		.369	.035	.457	1.001

a. Dependent Variable: GPS rec

The model summary Table indicates that the R (.324), R square (.105) and Adjusted R Square (.098). This means that 10% of the variance in school performance was jointly explained by Instructional Material and Tools, Teaching Techniques and Instructional Strategies. Cohen (1994), concluded that, R=0.10 indicates a small effect size, R=0.25 indicates a medium effect size and R=0.40 indicates a large effect size.

Table 18: Correlation Test Teachers' Instructional Practices and School Performance of Rural Public Secondary Schools.

GPS rec	TIP 2
GPS rec Correlation Coefficient 1.000 Spearman's	.219**
Sig. (2-tailed)	.000
N	379

** . Correlation is significant at the 0.01 level (2-tailed).

Table 19: Collinearity Diagnostics

Collinearity Diagnostics							
Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Instructional Strategies	Teaching Techniques	Instructional Material and Tools
1	1	3.981	1.000	.00	.00	.00	.00
2	2	.011	19.459	.89	.01	.02	.20
3	3	.006	25.912	.10	.10	.27	.78
4	4	.003	36.760	.01	.89	.71	.02

a. Dependent Variable GPS rec

As shown in Table 17 above, for the independent variable (Teachers Instructional Practices), the probability of the t statistic (6.96), p = .000 which is lower than 0.05 or for the b coefficient is .000 which is equal to the level of significance of 0.05. It can be concluded that there is a statistically significant relationship between Teachers Instructional Practices and Performance of rural public secondary school. The results of the analyses showed that Teachers' Instructional Practices are significantly correlated to

performance of Rural Public Secondary Schools. The results show that Teachers' Instructional Practices made a statistically significant contribution with a $\beta=.346$. As shown in Table above, for the independent variable (Teachers Instructional Practices), the probability of the t statistic (6.96) for the b coefficient is .000 which is equal to the level of significance of 0.05. It can be concluded that there is a statistically significant relationship between Teachers Instructional Practices and Performance of rural public secondary schools. In addition, when teachers' instructional practices go up by 1 standard deviation, Performance of Rural Public Secondary Schools goes up by 0.346 standard deviation. The results of the analyses showed that both independent variables, Teachers' Instructional Practices are significantly correlated to performance of Rural Public Secondary Schools. The results show that Teachers' Instructional Practices made a statistically significant contribution ($\beta = .346$). In addition, the results show that instructional strategies contribute the most significant relationship towards schools' performance ($\beta=0.201$; $t=2.290$; $p < 0.05$). This is followed by teaching techniques which contributed ($\beta = 0.118$; $t=1.387$; $p < 0.05$) and instructional material and tools ($\beta=0.027$; $t=.369$; $p < 0.05$). In sum, all the three dimensions made a statistically significant contribution to GPS. Dimensions of teachers' instructional practices towards school performance of public secondary schools in rural areas are shown as per results of the analysis. The dimension of Instructional Strategies is significantly correlated to School Performance of Rural Public Secondary schools. Of these three variables, frequency of Instructional Strategies made the largest unique contribution ($\beta = .201$) while Teaching Techniques made a small contribution ($\beta = .118$) and Instructional Material and Tools made a small contribution ($\beta = .027$) significance of 0.05. This is an indication that there is a significant relationship statistically between Teachers Instructional Practices and School Performance. This means that when teachers' instructional practices goes up positively by 1 standard deviation, School Performance of Rural Public Secondary Schools goes up positively by 0.307 standard deviation. Analysis of the results indicated that independent variable, Teachers' Instructional Practices is significantly correlated to school performance of Rural Public Secondary Schools. Teachers' Instructional Practices made a statistically significant contribution ($\beta = .307$).

Accordingly, the corresponding hypotheses that emerged from Research Questions 7 are as follows:

Hypothesis 6 H6: Instructional strategies predicts performance of rural public secondary schools.

The results show that instructional strategies contribute the most significant and the strongest predictor of the performance of rural public secondary schools ($\beta=0.201$; $t=2.290$; $p < 0.05$). Thus, the hypothesis is accepted.

Hypothesis 7 H7: Teaching strategies predicts performance of rural public secondary schools.

Teaching techniques contributed ($\beta = 0.118$; $t=1.387$; $p < 0.05$). Thus, the hypothesis is accepted.

Hypothesis 8 H8: Instructional materials and tools predicts performance of rural public secondary schools.

The instructional material and tools contributed ($\beta=0.027$; $t=.369$; $p < 0.05$). Thus, the hypothesis is accepted. In sum, all the three dimensions made a statistically significant contribution to GPS, which means that all three dimensions are predictors of the rural public secondary school performance.

DISCUSSION

This study points towards the challenges and issues of rural public secondary schools in Malaysia, the instructional leadership of the principals and the teachers' instructional practices. Finding of the study shows that emphasis is evident in the importance of principals' instructional roles, leadership skills and instructional practices of teachers in managing rural public secondary schools. This study supports the need to have a continued investigation and discussion on principals' instructional leadership in rural public secondary schools in Malaysia and its effect upon students' learning and school academic achievement. This study shows that most of the principals do perform or practised their instructional roles and teachers too practised their best instructional practices.

This study contributes to the theory of principals' instructional leadership by Hallinger and Murphy (1985) in terms of managing the instructional program and developing a positive school learning climate, however, it must be noted that according to the findings of this study, defining school mission, does not contribute to the performance of rural public secondary school in Malaysia.

Contingency theory supports the idea that there are different styles of leadership and most important that there is no one leadership style that fits all situations. Therefore, the effectiveness of an organization like a school is dependent on its internal characteristics which could be the school's environmental conditions.

Reaching out to the rural community to enhance performance of rural public secondary school could be carried out by incorporating rural education in the Rural Development Policy. The *Jabatan Kemajuan Orang Asli (JAKOA)* or The Orang Asli Development Department should incorporate education programs to reach these rural community to further enhance performance of secondary schools, and to make the school performance improve. Hence narrowing the gap in the academic performance.

The robust roles of School Improvement Partner Plus or SIP+ and School Improvement Specialist Coach Plus or SISC+ officers in rural public secondary school classrooms must be enforced and reached out. The teacher program led by the School Improvement Specialist Coaches Plus (SISC+) which has been suggested as an in-situ Continuous Professional Development (CPD) measure to improve teaching and learning in Malaysian schools should cover rural public secondary schools. Another suggestion is the Professional Learning Community which is a good method and must be further practised to foster collaborative learning among teacher colleagues within a rural public secondary school in order to increase the level of teachers' instructional practices in all regions.

The dimensions of principals' instructional leadership, managing instructional program and creating a positive climate predict the performance of rural public secondary schools. The one dimension that did not predict the rural school performance was defining school mission. Defining school mission includes practices such as framing the school goals and communicating the school goals. This research question indicates all three dimensions of teachers' instructional practice are strong predictors of rural public secondary school performance.

Concerning the relationship between principals' instructional leadership and performance of rural public secondary schools, the smaller the GPS value for the performance of rural public secondary schools, the better the schools perform. This finding showed a significantly negative relationship between principals' instructional leadership and performance of rural public secondary schools. This graph indicates that the increase in teacher instructional practices will lead to a decrease in GPS score. The smaller the GPS value the better the schools perform.

LIMITATION

The stratified random sampling technique (teachers' respondents in five states in Malaysia) requires replication of this study in other states prior to generalizing these results to all teacher population.

MAHIDAH'S MODEL (2020)

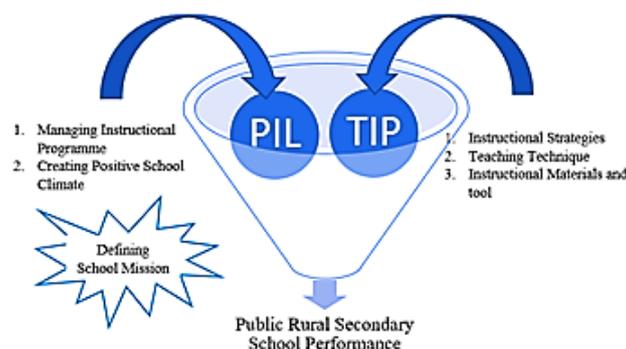


Figure 9: Mahidah Model (2020)

Figure 7 represents the findings as a model of the dynamics of PIL and TIP within the context of rural public secondary schools in Malaysia. This model, Mahidah's Model (2020) explains the firm integration of the three variables, principals' instructional leadership, teachers' instructional practices and performance of rural public secondary schools. This model highlights the five dimensions that impact school performance without the inclusion of Defining School Mission. Hence, it is an important contribution for further research and therefore policy makers and administrators in the Malaysian Education Ministry can apply this model for targeting improvements of rural public secondary school performance

CONCLUSION

Various extensive funding has been put forward by the Government of Malaysia programs in education sectors from independence till date. As proven by this study, teaching and learning process are related to principal quality which is developed among the schools. School Leaders and teachers with good skills are needed urgently to increase the learning and teaching quality which leads to an improved school performance. In addition, the researcher found that principals are equipped with good instructional leadership and engage these practices, in enhancing good performance of the school in rural areas. Furthermore, this study also has found that significant relationship exists among principals' practices of instruction and school performance. Researcher also discovered the current levels of principals' instructional leadership in rural secondary schools. Principals are regarded as valuable possessions that establish and increase the future of nation's children. Therefore, quality of principals directly relates to the education quality of the nation (Hanushek and Rivkin, 2007). This study has proved that principal's instructional leadership are able to improve schools' performance Hence, steps should be taken by schools for principals to come up with planning in instructional leadership that encourage teamwork in schools. The findings also indicated that instructional leadership had a significant positive influence on the performance of schools. The multiple regression indicated that the most influential predicting dimension was Managing Instructional Programs. To enhance practices of instruction, principals need to consider creating a positive school climate in school which encourages positive learning. Principals' instructional leadership acts as a key player to stimulate, supervise and monitor teaching and learning in schools which will bring improvement to student learning and school performance. Principals' instructional leadership which can help to achieve results include knowledge and responsibility sharing and instructional leadership practices act as key areas to stimulate, supervise and monitor teaching and learning in schools which will bring improvement to student learning, thus school performance. Furthermore, review of past studies indicate that it needs to be aligned with learning and teaching instructional practices of good quality.

In regards to system in Malaysia Education, the researcher found that teachers are equipped with good instructional practices and engage these practices, in enhancing good performance of the school in rural areas. Furthermore, this study also has found that significant relationship exists among teachers' practices of instruction and school performance. Researcher also disclosed the current levels of teachers' instructional practices in rural secondary schools. Teachers are regarded as valuable possessions that establish and increase the future of nation's children. Therefore, quality of teachers directly relates to the education quality of the nation (Hanushek and Rivkin, 2007). This study has proved that teachers instructional practice are able to improve schools' performance Hence, steps should be taken by schools for teachers to come up with planning in instructional practices that encourage teamwork in schools. The findings also indicated that instructional practices have a significant positive influence on the performance of schools However, a stepwise multiple regression indicated that the predicting dimension was Instructional Strategies of teachers' instructional practice. To enhance practices of instruction, teachers need to consider creating a climate in school which encourages positive learning. Overall, teachers' instructional practices and school performance have positive significant relationship with each other. Teachers' instructional practice which can help to achieve results include knowledge and responsibility sharing, new teaching techniques discussion which will bring improvement to student learning in Malaysia.

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