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THE IMPACT OF LEADERSHIP STYLE ON MRSM PERFORMANCE MODERATED BY TACIT KNOWLEDGE

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ABSTRACT

Leadership is significant to organization performance especially in school. In Malaysia government school, Ministry of Education (MOE) designing with the level of efficiency of leaders in school to achieve mission. In Maktab Rendah Sains MARA (MRSM), a study applied to define which leadership style that give impact to organizational performance and MRSM objectives. However, distributed leadership is a form leadership that is foremost in the current educational revelation to future success. To this research, distributed leads to an unstainable performance of MRSM. The main data of the study were collected through questionnaire from 4823 MRSM teachers in Malaysia. The SPPS approach was used to evaluate the data and subsequently to solve hypotheses and achieve research goal. To inquire support to one of the hypotheses interviews to principal of MRSM was used through semi structure interview. This article comprises recommendations on distributed leadership implemented in MRSM towards performance moderated by tacit knowledge.

Keywords: Leadership, Distributed Leadership, Performance, Tacit Knowledge

1.0 INTRODUCTION

Malaysia education system goals is to produce balance human capital in physical, emotion, social and spiritual as act to hold national vision and mission. School is the formal education organization developing for school interaction such as school management, Teachers, non-academic, parents and students. The main factor is leaders as the managers to develop excellent culture. Systematic leadership or guideline in MRSM can contribute significantly to effective organization performance especially academic performance. Nevertheless, tacit knowledge perceives that under climate of distributed leadership,

creating sharing and knowledge will be achieved and maintain (Harris, 2014) stated that distributed leadership exercised through formal positions, informal connection, and actions.

Since 1966 till 2022, MRSM has produced 171,216 students in Malaysia. In MARA, education sector based on Transformation Framework 2.0 which embedding values such as a strategic improving and high human capital. Furthermore, main objective in education is to gain continuous effort based in MARA Education Philosophy: Gateway to Holistic Education,1010 – 2020) which generally to 53 MRSM throughout Malaysia.

Towards in designing the leadership style especially in distributed leadership values to gain hight impact performance and quality education with MRSM's under-development and leadership style to unstainable performance of a school. According to Leithwood et al. (1999), Fullwood et al (2013) leadership is the vital impact accomplishing mission and goal..

2.0 LITERATURE REVIEW

Leadership has been recognized the main focus in the field of organizational behaviour in which it is one of the dynamic effects during individual and organizational interactions scholars and researchers' studies (Yukl, 1989; Wan et al., 2011; Song et al., 2012) reviewed and examined leadership practices as the best practices. Since Malaysia literature or leadership styles and organizational performance is not being enriched, there is an urge for the researcher to perform a robust and rigorous research by examining the leadership of leadership style and organizational performance among academic leaders in education service environment. In MRSM, leadership style and employee performance studied to find the significant roles towards school performance. The new paradigm era is New Leadership Approach (source: Fang) has been introduced in the 1980's till present; transformational leadership, transactional leadership, and distributed leadership. Distributed leadership is the most popular leadership style.

Distributed leadership required to be implemented in Malaysia' education system because of leaders create collaboration and interaction to increase students' achievement. Distributed leadership is shared leadership practice for each person in school (Harris, 2012).

Distributed leadership is commonly practice in Malaysia. In year 2009, a research paper "Distributed Leadership" presented in proceedings Seminar National Management and Educational Leadership 16th organized by Aminuddin Baki (IAB). The exploration of Spillane et al. (2001); Muijs and Harris (2003) found many studies are required that contribute to school performance. This study is clearly in the aim and to find the relationship between distributed leadership and school performance. In conclusion, distributed leadership must reinforce the significant impact on the positive achievement on school outcome.

3.0 METHODOLOGY

The study is a quantitative and qualitative that used data to find the leadership between variables. In the quantitative, questionnaire structure is to collect data and interview a tool for qualitative. Data collection from questionnaire will be analysed using statistic. Pilot study had carried out to ensure reliability of the questionnaire. Questionnaire is based on Mohd Majid Konting (2005) that stated sampling testing the population. Questionnaire measure variables from wide sampling size.

Data were gathered through personal administered and email or online system. The accuracy to collect information can be increase if the respondent stated unnamed. This is based on pilot study to ensure questionnaire reliability and validity. Questionnaire disseminated to the teachers of 53 MRSM throughout Malaysia in 2021. The total of responses received were 351 teachers. For this analysis, only a sample size of N = 351 was used which resulted in a responses rate.

For qualitative approach in supporting the main finding of quantitative method, the information gathered from semi – structured interview protocol session through video calls. It is because of COVID 19 situation throughout the world.

Conceptual Framework

The instrument for this study is adapted from Harris (2014) in which the independent variable is distributed leadership and dependent variable is school performance that has been used to examine the relationship between these variable and tacit knowledge as the moderating variable.

Distributed leadership give the great coordination of leadership to school performance. It is aiming demonstration leaders' impact and school when to identify the right path and variables through which leadership influences students' achievement. Hypotheses by Straus and Sacks (2008) examines the relationship between leadership and school effectiveness.

On the other hand, distributed leadership found to be significant on tacit knowledge. Ogbanna and Harris (2000) perceived that under the climate of distributed leadership, creating and sharing, tacit knowledge will be achieved and maintain. These hypotheses, the distributed leadership and tacit knowledge as discussed also in various research.

Therefore, this study expects the following hypotheses:

H1: Distributed leadership has a significant effect on school performance.

H2: Distributed leadership has a significant effect on tacit knowledge.

Sample

This study examined 53 MRSM which covered six (6) different program, Premier, IGCSE, Technical, Middle Year Program (MYP), BITARA and Ulul Albab. It involves principal and teachers of MRSM.

The frequency and percentage of each demographic profile include position, years of holding position, years of service and years of services with current principal. Out of 483 respondents, 10 of them was eliminated due to outliers.

In this study, position distribution was slightly higher for teacher. Out of 473 respondents, 82.7% respondents were teacher, compared to head department (8.5%) and vice principal (8.5%). The largest group of respondents (30.9%) reported that they hold the position between 11 – 15 years, followed by 6 to 10 (23.9%) and 1 – 5 years (23.3%). Most of them also have been service. Majority of respondents also reported that they are in service with the current principal for 1 – 2 years (76.1%). Data also revealed from 11.3 % principal involve in the semi – structured interview. In the area of North Region in Malaysia.

4.0 DATA ANALYSIS & FINDINGS

Write As stated in in previous chapter, three tests were performed for data screening. The tests were missing data, response bias and outliers' identification. The results of the tests are discussed in the following subsections.

Missing Data

Hair et al. (2006) described missing data as "information not available for a case about whom other information is available". Missing data for this study was reduced by checking for errors in all the variables at the point of time they were collected. For the surveys, any unanswered questions were referred to the respondent. To ensure that all the data were cleaned, frequency distribution and missing value analysis for each variable were conducted. There was no missing data reported.

Response Bias

Non-response bias occurs in statistical surveys if the answers of respondents differ from the potential answers of those who did not answer. For purposes of this research, non-response bias is defined as a bias that exists in survey results when respondents to a survey are different from those who did not respond in terms of demographic or attitudinal variables, or other variables relevant to the survey topic (DDS Research, Inc., 2004). According to Ellis, Endo and Armer (1970) it is a function of: (a) the proportion of non-respondents in the total sample and (b) the extent to which there is a systematic

discrepancy between respondents and non-respondents on variables relevant to the inquiry. The presence of non-response bias is a threat to the external validity or generalizability of research findings to the target population of a study (Linder, Murphy, & Briers, 2001). A well-designed survey and a research-based administration method, following generally acceptable protocols and procedures as well as reporting them in the research analysis, are the first steps in the attempt to increase response rates and control for non-response bias (Dillman, 2000; Linder, Murphy & Briers, 2001; Porter, 2004b).

Approach used to test nonresponse bias is using independent sample t-test analysis. For this study, respondents from all over of MRSM were selected. Mean scores for all variables; were then computed for all respondent from each state. The mean scores were compared to examine the differences in each group of respondents. Out of 483 respondents, 250 respondents were coded as early response group (received within four weeks) while the remaining 233 were coded as late response group (received after the four weeks). The results are shown in Table 1. It is found that there were no differences in the responses in all variables (p>0.05). Hence, the data used in this study is free from bias.

Table 1 *Results of Independent Samples t-Tests for Response Bias between Early and Late Response Groups (N=483)*

Variable	Mean		t	Sig.
	Early (N=250)	Late (N=233)		
Distributed Leadership	4.2977	4.2215	1.469	.458
Tacit Knowledge	4.4391	4.3796	1.081	.347
Performance	4.1781	4.1406	.739	.541

The results of the independent sample t-tests indicate that there was no significant difference (p>0.05) in mean scores for the two groups of respondents. Therefore, it can be said that there was no serious response bias for all variables (Coakes & Steed, 2003; Pallant, 2010). In short, the results of chi-square tests and independent sample t-tests did not indicate any significant differences between the two groups of respondents. Therefore, it can be reasonably concluded that the two groups were from the same population.

Outliers Identification

The third test of data screening was the identification of outliers. Outliers are the cases that have data values that are very different from the data values for most cases in the data set. Outliers are important because they can change the results of our data analysis. Whether we include or exclude outliers from a data analysis depends on the reason why the case is an outlier and the purpose of the analysis. This study employed the Mahalanobis D2 to detect outliers.

Tests On Multivariate Assumptions

After screening the data, tests to meet four assumptions of multivariate analyses were conducted. The tests were normality, linearity, homoscedasticity, and multicollinearity (Hair et al., 2006). The results of the tests are discussed in the following subsections.

Normality

Statistical Approach

The normality of distribution of data was examined by the skewness and kurtosis values for each variable. Skewness values present the symmetry of the distribution score and a skew variable's mean will not be at the centre of this distribution; while kurtosis confer information about the 'peakness' of distribution which can be either too peaked (with short and thick tail) or too flat (with long and thin tail) (Tabachnick & Fidell, 2007).

Normal distribution is considered when value of skewness and kurtosis is at zero (0). Positive skewness value will have a cluster of cases to the left at a low value and negative skewness will have the score cluster or pile at the right side with a long-left tail (Tabachnick & Fidell, 2007). Kurtosis with values of below zero (0) will indicate a relative flat distribution known as "playkurtic" and the kurtosis values above zero (0) indicate a peak distribution or "leptokurtic". T is recommended by researchers that samples be large enough to prevent under-estimation of variance. Seldom will perfect normality assumption be achieved. However, Hair et al. (2006) recommended the rejection of the normality assumptions at absolute values of ± 3.29 at p<0.001 significant level, ± 2.58 at p<0.01 significant level and ± 1.96 at p<0.05 significant level.

To assess the normality of the variables, the above suggestions were applied and noticeably none of the variables fell outside the ± 3.29 at p<0.001 probability range level. This was expected as the sample size was 473. Table 2 is a summary of the kurtosis and skewness for all the variables. The data shows the variables were normally distributed. Therefore, in conclusion, all the variables do not deviate the normality test requirement.

Table 2: Skewness and Kurtosis for the Variables

Construct	Mean	Std Deviation	Skewness	Kurtosis
Distributed Leadership	4.2885	.51821	-.762	.357
Tacit Knowledge	4.4268	.56916	-.841	.221
Performance	4.1776	.53826	-.465	-.005

Visual Approach

The other step in analysing the data for this study is to examine the normality of the data by assessing the shape of distribution. A test was conducted to determine variable are done through visual inspections. An informal approach to testing normality is to compare a histogram of the sample data to a normal probability curve. The empirical distribution of the data (the histogram) should be bell-shaped and resemble the normal distribution. Figures 1 to 3 show the histogram for all variables studied. It can be observed that all figures were very well shaped and within the normal curve distribution. Hence, it is suggested that all variables were normally distributed.
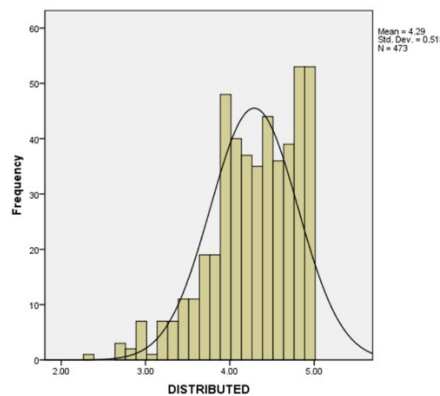

Figure 3: Histogram of Distributed Leadership

Figure 3 represents the histogram of tacit knowledge. It can be observed in the figure that the histogram was very well shaped and within the normal curve distribution at the mean = 4.43 and sd = 0.57.
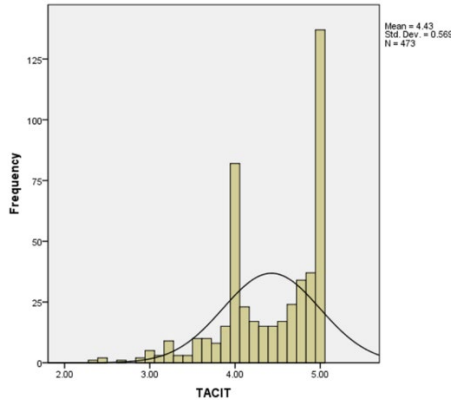

Figure 2: Histogram of Tacit Knowledge

Figure 2 represents the histogram of performance. It can be observed in the figure that the histogram was very well shaped and within the normal curve distribution at the mean = 4.18 and sd = 0.54.
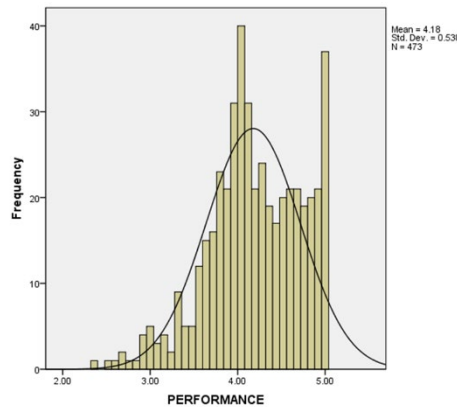

Figure 3: Histogram of Performance

5.0 DISCUSSION

EFFECT ON LEADERSHIP STYLE ON PERFORMANCE

Result is summarized in Table 3. It was indicated in Table 3 that all leadership style successfully explained 69.5 percent of school performance (R^2=0.695, F=95.652, $p<0.01$). From all dimensions, five of them was found to have the significant effect on performance.

H_1 : **Distributed leadership has a significant effect on school performance.**

Distributed leadership is represented by Mission, Vision, Goal (MVG), Shared Responsibility (SR), Shared Culture (SC) and Leadership Practices (LP). Result of linear regression found that all four dimensions has the significant effect on school performance as follows: MVG (B = 0.119, t = 2.774, $p<0.01$); SR (B = 0.240, t = 3.962, $p<0.01$); SC (B = 0.200, t = 3.892, $p<0.01$) and LP (B = 0.319, t = 6.418, $p<0.01$). Hence, this study has successfully supported H_1a, H_1b, H_1c and H_1d.

H₂   :   Distributed Leadership has the significant effect on Tacit Knowledge

H_2 posits that distributed leadership has the significant effect on tacit knowledge. Two dimensions of distributed leadership showed the significant effect on tacit knowledge. The dimensions were SR (B = 0.445, t = 5.935, p<0.05) and LP (B = 0.494. t = 8.026, p<0.01). Hence, this study has supported H6b and H6d.

Table 3: *Effect of Leadership Style on School Performance*

	B	t	Sig.
(H₁a) Mission, Vision, Goal	.119	2.774	.006
(H₁b) Shared Responsibility	.240	3.962	.000
(H₁c) Shared Culture	.200	3.832	.000
(H₁d) Leadership Practices	.319	6.418	.000
R²	0.695		
F	95.652		
Sig.	0.000		

Table 4: *Effect of Leadership Style on Tacit Knowledge*

	B	t	Sig.
(H₂b) Idealize Influence	-.076	-.981	.327
(H₂c) Inspirational Motivation	-.013	-.191	.848
(H2d) Individual Consideration	-.060	-1.208	.228
R²	0.583		
F	58.492		
Sig.	0.000		

6.0 CONCLUSION

The purpose of the study is to examine distributed leadership on MRSM performance moderated by tacit knowledge. Findings of the study will be the guide to Bahagian Pendidikan Menengah (BPM) to build leadership capacity in principals of MRSM. BPM must generate courses based on leadership style dimension so that they able to enhance their leadership style especially tact knowledge as the moderator. Principal as leaders able to define which leadership style implemented. Principals were suggested to develop leadership style in the dimensions of distributed leadership in which performance of MRSM required a better culture and environment based on situation. First, this research contributes to which leaders and teachers at all levels should attend training as done in NPQEL in Ministry of Education. Before to be a leader in MRSM especially understanding in the development of distributed. Participants as becoming leaders, must develop expertise in needs to lead change and improvement. It will be beneficial to the participants and especially for MRSM and BPM. Second, establish a give impact novice principal training practically. Finally, further research has to be done on how distributed leadership skills developing throughout the years in MRSM system..

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