

The Effect of Mobile Leadership towards Teachers' Communication, Daily Job Performance and Motivation in Malaysia

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Abstract

The purpose of this paper is to examine the effect of mobile leadership (ML) towards teachers' communication, daily job performance and motivation in Malaysia. A quasi-experimental method was applied in this study. The total of 186 respondents were employed as samples. The sampling technique used in this study was a simple random sampling by using a random table number. They were divided into two groups (experimental group and control group). Overall the result showed that ML contribute a significant effect towards teachers' communication, daily job performance and motivation. The analysis showed a positive relationship between communication and teachers' daily job performance through experimental group (ML). The analysis also showed a positive relationship between communication and teachers' motivation through experimental group (ML). Further research will be taken into consideration to expand the potential of mobile leadership in educational management.

Keywords: Mobile Leadership, Teacher, Communication, Daily Job Performance, Motivation

Introduction

Mobile technology plays an important role in our daily life especially in the digital age nowadays. This is due to mobile technology provides a platform for individual to enhance and develop one's management skills for an organization (Cousins & Robey, 2015). Enhancing the skills of workers is one of the ways to retain skilled workers in the labour shortage environment from time to time (McIntosh & Luecke, 2011). Skilled workers will be able to achieve the targeted goals with the guidance and guidelines given by the management (Burton, 2012).

Since technology evolves so rapidly, new leadership skills should be explored and used among the workers as modern technology can lead to new, creative and innovative ideas in the leadership and management of the organization. This is due to new technologies provide

unique opportunities to workers where an individual can play one's role easily and focus on the important leadership abilities. Therefore, organizations can create a culture of learning and improving the collective capabilities and productivity (Parsons, 2013).

Tomlinson (2015) believes that mobile technology could not only revolutionize teaching and learning, but also provide assistance in the leadership of the school in the 21st century. Mobile technology has the ability to allow teachers involved to get in touch with each other in the work environment by using available images and sounds features. Besides, mobile technology also provides network to peers who stay nearby or long distance to accomplish important tasks through the use of video, audio and pictures features to collaborate and complete the assigned tasks in a more cohesive manner instead of just sending messages to check and know the one's work progress. Teachers are able to build up stronger ties and explore each other's strengths with the help of the new technology.

The mobile technology can be described as "genie in the hand" as it allows teachers to search the required information (Tomlinson, 2015). It also has a great potential to allow the school management to carry out its administrative work in the more effective and controllable manner. It is appropriate for effective communication and interaction (Irshad Hussain and Muhammad Aslam Adeeb, 2009). School administrators can monitor teachers' attendance, performance and progress of the work continuously by giving guidance or advices (Mohd Yusri Ibrahim, Che Hasniza Che Noh & Siti Zaimah Ibrahim, 2013; Mohd Yusri Ibrahim, 2014). The mobile technologies and applications allow teachers to provide feedback, issue a reminder related to the activities and assignments and interact with the administrators, peers, students or parents easily (Blau & Presser, 2013).

Problem Statement

School leaders are seldom communicate with school teachers (Ariffin Ba'ada, 2001; Vishalache Balakrishnan, 2005), due to their heavy workloads (Muhammad Javed Sawati & Saeed Anwar, 2013). School leaders also adopt the one-way type of communication with the school teachers, even though thoughts and ideas have been delivered to the teachers via text messages clearly and effectively, however this does not necessarily guarantee the messages can be understood as they are intended (Clampitt, 2001). Most researchers (Mohd Yusri Ibrahim & Wan Ismail Wan Abdullah, 2015; Mohd Yusri Ibrahim, 2014) reported that school leaders are very busy in the Malaysia. Burkhauser, Gates, Hamilton and Ikemoto (2012) elaborated that school leaders spend most of their time in analysing data, conducting classroom observations, building up the culture and relationships within the school community, forming leadership team and promoting professional development of the teachers. Thus, researchers want to study whether mobile leadership can contribute positive to the teachers' communication.

Recently, the topic of teachers' absenteeism has been raised by the Ministry of Education in Malaysia as the school leaders have difficulty in tracking the attendance of school teachers. According to the Borneo Post Online (2011) reported that the results of monitoring

released by the Ministry of Education in Malaysia show that 117 and 157 teachers in Sabah were absent from duty in February and May 2010 respectively. Therefore, school leaders must constantly monitor the teachers' attendance closely and perhaps by using mobile application in future.

Based on the previous studies (Nik Badrul Hisham Nik Ismail & Mastura Mahfar, 2015; Siti Sarwati Johar, 2006; Norhannan Ramli & Jamaliah Abdul Hamid, 2006; Abdul Said Ambotang, 2003), teachers' motivation is at a low level. A very weak correlation is showed between the leadership style of the school leaders and teachers' motivation. Hence, it is advisable that the school leaders should look at ways to boost up teachers' motivation by employing the mobile leadership.

The findings of a past research (Noraini Hayati Ahmad, 2008) reveal that a weak relationship exists between the communication style of the school leaders and teachers' motivation. Eres dan Atanososka (2011) claimed that the inexistence of school leaders will bring negative effect towards school teachers especially teachers are unsatisfied with the situation, culture and communication in the existing environment (Roberge, 2013). Therefore, researcher is trying to study the relationship between communication and teachers' motivation. Meanwhile, the relationship between the communication and teachers' daily job performance is to be examined.

In this study, researcher would like to recommend mobile leadership among teachers which includes the aspect of communication, daily job performance and motivation. In this context, study is conducted to examine the effect of mobile leadership (ML) to improve communication, daily job performance and the teachers' motivation.

Research Hypotheses

- H₀₁:** There is no significant effect of Experimental Group (ML) contribute to communication among teachers compared with Control Group.
- H₀₂:** There is no significant effect of Experimental Group (ML) contribute to teachers' daily job performance compared with Control Group.
- H₀₃:** There is no significant effect of Experimental Group (ML) contribute to teachers' motivation compared with Control Group.
- H₀₄:** There is no significant relationship between communication and teachers' daily job performance through Experimental Group (ML)
- H₀₅:** There is no significant relationship between communication and teachers' motivation through Experimental Group (ML).

Literature Review

Uses and Gratifications Theory

According to Cheung and Lee (2009), the theory shows that media plays an active role in the communication process. Furthermore, the level of social and interpersonal relations can also

be maintained in the presence of a virtual community. Based on uses and gratification theory (1974), an individual who uses technology is to satisfy one's social and psychological needs (Rubin, 2002). This theory has been disclosed and discussed where the user will select the media that will meet one's needs and enable one to become someone who is more knowledgeable or relaxing oneself with detour and social interaction (Severin & Tankard, 2000; McQuail, 2010). Through the assistance of mobile technology, teachers and school leaders can use it as a communication tool which meets their needs (Rubin in Haridakis & Whitmore, 2006).

McClelland Achievement Motivation Theory

Based on McClelland (1961), achievement motivation theory emphasizes three motivators; they are achievement, power and affiliation. To apply this theory in the context of education field, school leaders need to know that every teacher is under the classification of each motivator. By doing so, administrators can ensure good management by providing appropriate motivation. McClelland (1978) in Abdul Rahman Aziz (1997) describes the actively self-involvement in performing task, an individual's motivation will increase. In addition, an individual who has a desire to overcome obstacles is willing to try something good and achievable. Hence, a teacher who is concerned about one's career future would endeavour oneself achieve the assigned work-related tasks, ultimately achievement motivation will be enhanced. Thus, the daily job performance issue such as teacher absenteeism is highly likely to be overcome.

Technology Acceptance Model

According to Nair and Mukunda Das (2012), technology acceptance model is the most widely used model to explain the use of the new system and other information technology. Technology acceptance model based on the Theory of Action (Fishbein and Ajzen, 1974), is a simple model to use information technology in which claims that the adoption and use of information technology overall is based on users' trust as perceived usefulness and perceived ease of system, which is a great impact factor for one's attitude towards using and behavioural intention to use it. Thus, through this model, school leaders can communicate with the teachers and monitor the teachers' daily job performance, especially the attendance of teachers in schools with ease and greater convenience. In addition, school leaders can also boost teachers' motivation. In this study, mobile leadership will act as the main medium in assisting school leaders to improve the smoothness of communication and daily job performance and alleviated teachers' motivation.

Methodology

Research Design

In designing and conducting the study, researchers involved two groups, the Experimental Group (ML) and the Control Group (CG), who practised different leadership methods. An appropriate study design is deployed; namely the quasi-experimental. Quasi-experimental research requires a special method to answer the stated question (Ghazali & Sufean, 2016). Therefore, modifications have been made to Experimental Group is to see the impact of mobile

leadership towards teacher. Quasi-experimental method was performed in this study was to compare teachers' communication, daily job performance and motivation of teachers to the Experimental and Control Group. Pre-test in this study was to obtain an initial overview of teachers' communication, daily job performance and motivation before the ML applied among teachers. In contrast, the post-test was conducted to identify teachers' communication, daily job performance and motivation after the ML has applied.

Population and Sample

The study's total population was 351 teachers being deployed comprising of two schools located in Penang and Selangor states respectively, in Malaysia. Selection is made based on the respective schools' population where both schools face the same problem that affects the class relief until influence the teachers' daily job performance. The sample size was 186 teachers from population based on Krejcie and Morgan (1970). Both schools' environment is supported by the same type of internet network. Principals of both schools adopted the one-way communication as per the research observation mentioned earlier in the preceding paragraph (pre-interview) and result shows that communication and teachers' motivation are low. This situation has led the researchers chose the two schools as the research targets.

Sampling Method

The sampling method used in this study is simple random sampling. The researchers chose this method because it is less biased sampling procedures in the process of selecting a sample and generate representative research findings. Researchers used a random number table when selecting the sample. Because the study population were 351 teachers, then the researchers labelled the teachers with numbers from one to 351.

The study sample size was 186 teachers. Therefore, the first number in a table of random numbers will be chosen as the starting point. Each number consisted of six digits and each of the last three digits will be used. For the random numbers which is more than 186 numbers will not be used. This is because total only 351 teachers were being involved. Researchers chose the appropriate number based on the random number table that identified 100 respondents from school A and school B respectively to this study.

The two groups comprised of 93 teachers from both schools of A and B respectively. The samples selected were same with Fraenkel, Wallen and Hyun (2012) research study that the minimum number of samples for experimental studies design is 30 people. Thus, the number of samples formed in this study is suitable for carrying out the experimental research. Rational of using the simple random sampling method was aimed to ensure that the teachers selected in both schools for this study have the same possibility to be used as samples for comparison purpose according to the different methods of leadership (Noraini, 2013).

Instrument

Instrument being used in this research is a list of questionnaires containing 40 questions

relating to the study that was distributed to respondents to obtain the necessary feedbacks in this study. The questionnaires consisted of four parts: 6 questions on demographic information, 5 questions on communication, 13 questions on teachers' daily job performance and 16 questions on teachers' motivation. This set of questionnaires carried the score made with reference to five Likert scale ranging from 1 (Strongly Disagree) to 5 (strongly agree).

Pilot Study

A pilot study is conducted to test the reliability of the structured instrument and ensure the instrument is fit to the situation and understood by the respondents. According to Rasid Mail and Raman Noordin (2015), reliability refers to the ability of certain indicators or variables to be relied consistently. The concept of the validity of a study is closely related to the concept of measurement. Based on Mohd Salleh and Zaidatun (2001), the maximum value for the reliability coefficient is 1. If the value of the coefficient is less than 0.6, then the instrument is considered to have low reliability value.

To ensure the reliability of the structured instrument to meet the standard, researchers conducted a pilot study on 30 teachers. Results from the analysis showed that the Cronbach's Alpha reliability coefficient was found is high at 0.915. Therefore, the researchers found that the developed questionnaire is appropriate to implement in the actual study.

Research Procedure

In the early stages, the researchers will briefed the principals and teachers related to Mobile Leadership. In the briefing, principals and teachers were briefed to carry out the progress by using mobile apps which known as Humanity 2.0. The briefing related to the study is to increase the understanding of principals and teachers in the study.

In the pre-test until post-test, the researchers will give the necessary assistance to the school to carry out this study efficiently and effectively. Therefore, briefings about the pre-test and post-test were given to the principals and teachers. The purpose of briefing made to overcome the impact of the threat of the demand characteristics (Mokhtar, 2011).

After the briefings, the pilot study was conducted to determine the validity and reliability of the questionnaire. According to Polit, Beck and Hungler (2001), a pilot study is a small version of the study or research experiments conducted by researchers in preparation to begin the actual study.

To conduct the pre-test, the researchers distributed questionnaires to both groups and the respondent are given 15 minutes to answer the questionnaire. After the pre-test is complete, the researchers collected questionnaires back from the respondent. The post-test will be performed to both groups after eight weeks of leadership methods applied. At last, the data was collected for analysis purposes.

Result

A total of 186 teachers have answered to the questionnaires. The analysis of the results have showed in the table as follow.

Table 1

The result of ANCOVA Test for Pre-test Communication between Control Group and Experimental Group (N=186)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Pre-test	99.057	1	99.057	709.463	.000
Group	9.894	1	9.894	70.866	.000
Error	25.551	183	.140		

a. R Squared = .817 (Adjusted R Squared =.815)

The result of the analysis by using ANCOVA test in Table 1, showed that there were significant effect towards the dependent variables $F(1,183) = 70.866, p < .05$) with an effect size of .815 which is considered to have major implications (Cohen, 1988) , So, H_{01} stating that there were no significant effects of Experimental Group (ML) contribute to communication among teachers compared with Control Group rejected. The effect of this leadership methods of variance accounted for 81.7% of the communication of teachers ($R^2 = .817$).

Table 2

The result of ANCOVA Test for Pre-test Daily Job Performance between Control Group and Experimental Group (N=186)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Pre-test	80.609	1	80.609	946.015	.000
Group	4.396	1	4.396	51.591	.000
Error	15.593	183	.085		

a. R Squared = .859 (Adjusted R Squared =.857)

The result of the analysis by using ANCOVA test in Table 2, showed that there were significant effect towards the dependent variables $F(1,183) = 51.591, p < .05$) with an effect size of .857 which is considered to have major implications (Cohen, 1988) , So, H_{02} stating that there were no significant effects of Experimental Group (ML) contribute to teachers' daily job performance compared with Control Group rejected. The effect of this leadership methods of variance accounted for 85.9% of teachers' daily job performance ($R^2 = .859$).

Table 3

The result of ANCOVA Test for Pre-test Motivation between Control Group and Experimental Group (N=186)

Source	Type III Sum of Square	df	Mean Square	F	Sig.
Pre-test	26.358	1	26.358	320.975	.000
Group	1.198	1	1.198	14.583	.000
Error	15.027	183	.082		

a. R Squared = .701 (Adjusted R Squared = .697)

The result of the analysis by using ANCOVA test in Table 3, showed that there were significant effect towards the dependent variables $F(1,183) = 14.583, p < .05$ with an effect size of .697 which is considered to have major implications (Cohen, 1988), So, H_{03} stating that there were no significant effects of Experimental Group (ML) contribute to teachers' motivation compared with Control Group rejected. The effect of this leadership methods of variance accounted for 70.1% of teachers' motivation ($R^2 = .701$).

Table 4

The Correlation between Communication and Teachers' Daily Job Performance through Experimental Group (ML)

		Communication	Daily Job Performance
Communication	Pearson	1.000	.860**
	Correlation		.000
	Sig. (2-tailed)	186	186
	N		
Daily Job Performance	Pearson	.860**	1.000
	Correlation	.000	
	Sig. (2-tailed)	186	186
	N		

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

Table 4 showed the correlation of Pearson to the relationship between communication and daily job performance among teachers through Experimental Group (ML). The analysis showed a significant positive relationship between communication and daily job performance among teachers through ML. The correlation coefficient obtained was 0.860 indicates a very strong relationship between communication and daily job performance among teachers through ML ($p < 0.05$). Therefore, the level of communication and teachers' daily job performance will increase. Thus, H_{04} is rejected.

Table 5

The Correlation between Communication and Teachers' Motivation through Experimental Group (ML)

		Communication	Motivation
Communication	Pearson	1.000	.624**
	Correlation		.000
	Sig. (2-tailed)	186	186
	N		
Motivation	Pearson	.624**	1.000
	Correlation	.000	
	Sig. (2-tailed)	186	186
	N		

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

Table 5 showed the correlation of Pearson to the relationship between communication and motivation among teachers through Experimental Group (ML). The analysis showed a significant positive relationship between communication and motivation among teachers through ML. The correlation coefficient obtained was 0.624 indicates a very strong relationship between communication and motivation among teachers through ML ($p < 0.05$). Therefore, the level of communication and teachers' motivation will increase. Thus, H_{05} is rejected.

Discussion

Hypothesis 1(H_{01}) had been rejected by showing the results that a positive effect significant on communication declared by the teachers, have been increase in ML compared with CG. The findings of the study by Mohd Yusri Ibrahim (2014) has the similarity who said e-leadership contributes to communication between team significantly by using mobile technology. Meanwhile, the findings Purvanova & Bono (2009) showed that transformational leadership has a significant impact on the team by using computer mediated communication. In addition, the results of the study (Mohd Yusri Ibrahim and Wan Ismail Wan Abdullah, 2015; Mohd Yusri Ibrahim, 2015) also showed that virtual leadership contributed significantly to communication between groups by using mobile technology.

Hypothesis 2(H_{02}) also had been rejected because the results showed that a positive effect significant on daily job performance. The result of Kambeya study (2008) showed that one-way communication delivered by school leaders will affect teachers' job performance.

Hypothesis 3(H_{03}) had been declined. The results showed that a positive effect significant on teachers' motivation. Eyal and Roth (2011) found that transformational leadership contribute effect on teachers' motivation. Thoonen, Slegers, Oort, Peetsma and Geijssel (2011) reported that transformational leadership practices have a positive impact on motivation. The study of Kambeya (2008) showed that good communication skills delivered by school leaders will increase teachers' motivation.

Hypothesis 4(H₀₄) had been rejected. The results showed that significant positive relationship between communication and daily job performance among teachers through ML. The findings Mohd Yusri Ibrahim (2015) showed the communication between groups is the mediator of the relationship between virtual leadership and job performance.

Hypothesis 5(H₀₅) had been declined. The results showed that significant positive relationship between communication and teachers' motivation through ML. The findings of Siti Marwati Johar (2006) showed teachers' motivation is at a moderate level. The relationship between leadership style and teachers' motivation is positive and significant. The results of Norhannan Jamaliah Ramli and Abdul Hamid (2006) revealed teachers' motivation is at quite satisfactory. Established a significant relationship between the teachers' motivation with the leadership style of women. In addition, the findings of Nik Ismail Nik Badrul Hisham and Mastura Mahfar (2015) showed teachers' motivation is at a moderate level. The results also showed leadership style has a significant relationship with teachers' motivation in SMK daily, Kluang, Johor.

Conclusion

The main purpose of the study is to examine the effect of mobile leadership towards teachers' communication, daily job performance and motivation. The result overall showed that mobile leadership contribute positively effect to teachers' communication, daily job performance and motivation. Meanwhile, there is a significant positive relationship between communication and teachers' motivation through ML. At the same time, significant positive relationship between communication and teachers' motivation through ML revealed. As a conclusion, mobile leadership is similarity with the concept of e-leadership or virtual leadership which bring the meaning of leadership by integrated the used of mobile technology in arranging the task among the workers, making decision and solving an organization's problem. This will be a new concept which is quite suitable to be implemented in the educational management by school leaders. It is not only can enhance the effectiveness of teachers' communication, daily job performance and motivation, but also can be recommend mobile leadership into National Professional Qualification for Educational Leaders (NPQEL) in the future.

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