School culture as predictors of primary schools' performance

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Abstract

This study is an attempt to explore the level of school culture and its prediction towards school performance as perceived by teachers. The data was collected using survey questionnaire. Organizational Culture Assessment Instrument (OCAI) developed by Cameron and Quinn (2006) was used to measure school culture. A total of 324 questionnaires were distributed to 36 primary schools in the state of Selangor, Perak, Johor and Pahang in Peninsular Malaysia. Subsequently, the data was analysed using descriptive analysis and multiple regression. The result shows that teachers in National schools (Mean=4.11; SD=0.54) and National Type Tamil schools (Mean=4.10; SD=0.56) perceive that the level of school culture in their schools is significantly higher than National Type Chinese schools (Mean=4.11: SD=0.54). In addition, clan culture is perceived as most practiced culture in National (Mean=4.26; SD=0.53) and National Type Tamil schools (Mean=4.34; SD=0.57). While, hierarchy culture is perceived as the most practiced culture in National Type Chinese schools (Mean=3.88; SD=0.50). There is a similarity between these schools in terms of culture practice where the adhocracy culture become the least culture practiced in these schools. Apart from that, the result also showed that teachers perceived school culture significantly predict the school performance. Hence, it is noted that emphasis in school culture is vital to have an environment, which supports the school performance in the long run. This study would be very helpful for all the relevant stakeholders to identify primary school culture as well as its contribution towards school performance to take any action for school improvement.

Keywords: Malaysian Primary Schools, School Culture, School Performance, Teacher's Perception

Introduction

School performance is crucial in strengthening student's academic performance. Nevertheless, improving school performance becomes a never-ending challenge for Malaysian schools. Although the Malaysian education system transforms gradually to a more promising system

lately, but it is still not meeting the international standard (Ministry of Education Malaysia, 2013). This can be evidenced via international assessments such as Trends in International Mathematics and Science Study (TIMSS), Programme for International Student Assessment (PISA) and Progress in International Reading Literacy Study.

To address this issue, Ministry of Education has undertaken many efforts to bring positive changes in the performance of schools. One of the ministry effort is introduction of a new programme called School Performance Development Programme (*Program Peningkatan Prestasi Sekolah*) which was launched in 2012. The main objective of this programme is to assist under performing schools to improve their performance. In this programme, school principals are given more autonomy to govern their schools in improving school performance. Following the launch of this programme, the school performance was monitored throughout the year 2013-2016 (

Table 1).
The school performance in

Table 1 is measured by using the band system where the schools are ranked based on school's average grade point in UPSR and schools self-rating scores using Standard Kualiti Pendidikan Malaysia (SKPM) 2010. The result from this measurement indicates that the number of schools in band 1 and band 2 increased approximately 3.1% from 36.8% to 39.9% (Ministry of Education Malaysia, 2016). In the meantime, the number of schools in band 6 and band 7 also reduced (

Table 1).

Table 1 Primary school band 2013-2016

Band		Ye	ear	
	2013	2014	2015	2016
1	324	363	469	494
2	2352	2518	3039	3334
3	3273	3232	3049	2972
4	1343	1236	946	778
5	319	271	151	96
6	70	65	48	30
7	15	10	7	2

Note. From Annual Report 2015: Malaysia Education Blueprint 2013-2025 (p.83), by Ministry of Education Malaysia, 2016, Ministry of Education Malaysia (https://www.moe.gov.my/muat-turun/penerbitan-dan-jurnal/pppm-2013-2025-pendidikan-prasekolah-hingga-lepas-menengah/3927-kpm-annual-report-2015/file). Copyright 2016 by Ministry of Education Malaysia.

Based on the result in

Table 1, it is quite obvious that the ranking of primary schools improved in 2016 compared to the previous years. However, the students' performance in UPSR examination still not showing any dramatic improvement. The national average for UPSR still below 70% for past few years (Ministry of Education, 2015). Basically, the students' performance in national examination (i.e. UPSR) determines the performance of the school. Hence, it become

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a need to identify the factors that lead to student's poor performance although many primary schools are listed in band 1 and band 2 ranking.

Literature review

It has been identified from previous studies that organizational culture have a positive relationship towards organizational performance (Kruger et al., 2007; Deshpande & Farley, 2004; Shepherd et al., 2009; Hitt et. al., 2011; Wang et al., 2012; Papadimitriou & Kargas 2012; Miron, 2014). From the literature world, it has been recognised that culture typically linked to organizational performance. A positive and healthy culture is needed in order to have better organizational performance. As such, school culture may have positive relationship towards school performance. Therefore, exploring school culture in predicting school performance in this study may confirm the assumption that this factor contributes to school performance.

School culture is an important factor that influences student achievement (Kruger et al., 2007). Engels et al. (2008) stated that a positive school culture often enhances staff development and student learning. Generally, in schools, culture refers to the way the teachers think and behave towards the schools. This is supported by Maslowski (2006) who defines the school culture as "the basic assumptions, norms and values and cultural artifacts of a school that are shared by school members. Therefore, research on school culture is widely been conducted in this modernization education world.

Furthermore, positive school culture is also quite significant for promoting teacher's commitment. Stronger organizational commitment is strongly related to higher productivity whereas weaker organizational commitment is lead to lower productivity (Davis & Ward, 1995). The lower productivity mentioned here indicates the poor performance of the organization. The same concept is applicable in education field. If teachers are less committed, they tend to have poor involvement in school activities which indirectly affect the student achievement.

Wan Hanum Suraya Wan Mohamed & Jamal Nordin Yunus (2013) investigated the level of school culture in secondary schools in Perak. The results showed that the mean score for teacher interaction with students and shared planning is at its lowest level. This shows a negative school culture since the teachers do their work on their own with individual decision making. In order to have school success, a strong positive school culture is needed which emphasised collaborative learning and strong relationship among teachers and students. Collaborative school culture is quite beneficial for teaching and learning for both students and teachers (Parwazalam Abdul Rauf et al., 2014).

With regards to that, Kavitha Selvaraja and Zaidatol Akmaliah Lope Pihie (2015) stated that Tamil primary schools in Kuala Langat District practising clan culture where the teachers maintain collaboration and collegiality in schools. The same study also indicate that teachers are not keen on adhocracy culture which plays an important role in enhancing performance according to previous literature (Deshpande & Farley, 2004; Slater et al., 2011; Papadimitriou & Kargas, 2012; Ercan Ergun & Yunus Emre Tasgit, 2013). Thus, the study recommended to understand the level of school culture in other Malaysian schools and how it can be applied to enhance the school performance.

Conversely, Miron (2014) reported that school culture has no influence on student performance in the study of determining the association between school principal actions, school climate, school culture and performance. The study identified that not only the principals actions influence the performance, even the gender play the role in determining the performance. The result of the study indicated that female principals are good in reducing the impact of student discipline on school performance. This result is something that needs to be

further investigated. This is because basically, school performance is determined based on student performance. Hence, how the culture which influences the performance of an organization in many studies shows no influence on student performance?

The argument above can be supported by other studies as well. This is because positive school culture is not only influences school performance, but it also assists to develop teachers' professional growth. For example, Kabler (2013) identified that a strong school culture with good teamwork and collegiality will foster teacher leadership where the leadership style in turn will assist to promote student success. Positive school is not only influences school performance and teacher development, it also promotes student mental health. This has been concluded in the study conducted by Jessiman et al. (2022) in three UK secondary schools.

Among the studies related to organizational culture, most of studies used Organizational Cultures Typology Model developed by Cameron and Quinn (2006) (Figure 2) to measure the culture. This model is very useful in determining the culture of an organization to support its mission and goals. This model is widely used in the study of prediction of organizational effectiveness as well as performance by identifying the culture type. Cameron and Quinn designed the model such a way where it is suitable for practical operation and easily understood. Hence, this study attempts to use Organizational Culture Assessment Instrument (OCAI) developed by Cameron and Quinn (2006) to measure school culture.

Figure 1 Organizational Cultures Typology Model



Note. Adapted from Diagnosing and Changing Organizational Culture (p. 35), by K. S. Cameron, and R. E. Quinn, 2006, Jossey Bass. Copyright 2006 by Jossey-Bass

Cameron and Quinn (2006) claimed that organizational culture can be divided into four (4) types of culture i.e clan culture, adhocracy culture, market culture and hierarchy culture. Each culture has its own core values. However, an organization can still have all type of culture. But normally one type culture supersedes another type of culture and reveals it core values. If an organization does not have a dominant culture, that means the people around is unclear about their organization culture or practicing all culture equally (Cameron and Quinn, 1999).

Clan culture focuses more on internal environment which is maintaining trust and good relationship. Hierarchy culture still focusses internally but their focus is more towards stability and control. Normally, structured processes and rules are often demonstrated in hierarchy culture. In adhocracy culture, people accept the changes quite fast and adjust their selves on time. While, the main focus on market culture is competitiveness. The emphasis is given to external environment in order to improve the organizational effectiveness.

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The effect of culture type on organizational performances has been studied by Deshpande and Farley (2004) where the results show that both market and adhocracy culture have positive association with performance whereas clan and hierarchy culture have negative association. A similar result reported in studies conducted thereafter (Slater et al., 2011, Papadimitriou & Kargas, 2012 and Ercan Ergun & Yunus Emre Tasgit, 2013). Papadimitriou and Kargas (2012) classified culture into two categories that is extrovert and introvert culture. Extrovert culture refers to adhocracy and market culture whereas introvert culture refers to clan and hierarchy culture. The researchers claimed that extrovert culture displays greater performance financially compared to introvert culture. Among the extrovert cultures, adhocracy culture contributes to highest performance level as it shows external focus and more flexibility.

In between Aan Khurosani (2013) and Belias and Koustelios (2014) also studied organizational culture using Cameroon and Quinn (1999) model. Aan Khurosani (2013) revealed that adhocracy culture supports leader's creativity, learning commitment and the strength of cohesive freedom value whereas Belias and Koustelios (2014) indicated hierarchy culture contributes to low level of satisfaction among the employees, mainly regarding their rewards. This proves a change in organizational culture provides a significant impact to the overall organization.

The Organizational Cultures Typology Model developed by Cameron and Quinn (2006) has also been used in school settings. Yaakob Daud et al. (2015) has utilized this model to identify the type of school culture in schools in the state of Kedah in Malaysia. The outcome of the study shows that hierarchy culture is widely practiced in schools regardless of high performing and low performing schools and recommended further studies to be conducted.

For the purpose of this study, culture is measured using Organizational Culture Assessment Instrument (OCAI) developed by Cameron and Quinn (2006) where the culture is divided based on the control and flexibility as well internal and external focus. This OCAI describes the 4 type of culture that is clan, hierarchy, market and adhocracy culture. The details of this instrument has been described in chapter 2 and 3.

The main purpose of this study is as below.

- 1. To determine the level of school culture in regards to type of primary schools based on teachers' perception.
- 2. To determine the difference in the level of school culture in regards to type of primary schools based on teachers' perception.
- 3. To determine if school culture predicts schools performance based on teachers perception.

By carrying out this study, the following research questions will be answered.

- 1. What is the level of school culture in regards to type of primary schools based on teachers perception?
- 2. Is there any significant difference in the level of school culture in regards to type of primary schools based on teachers' perception?
- 3. Is school culture predicts school performance based on teachers' perception?

This study is quite significant in Malaysian education system. This is because there is no any research has been conducted to identify the level of school culture by school type till today. Hence, the results of this study will reveal the level of school culture among primary schools. This will indirectly assist the schools to analyse what level of school culture can produce better student outcomes that can compete globally. Knowledge obtained from this study would become a foundation for further research which helps to improve Malaysian Education system. This is because the outcome of this study may stimulate other researchers to explore the level of school culture in other Malaysian schools. Examining school culture is

very important because each school has a different school culture and if we are able to identify them, then it is very easy to improve its performance.

Materials and methods

The sample chosen for this study were the primary schools' teachers in the state of Selangor, Perak, Johor and Pahang in Peninsular Malaysia. A total of 324 primary schools' teachers were involved in this study. The 324 teachers were further break down into 27 teachers by state and school type using disproportionate stratified random sampling.

Table 2 *Sample size by state and school type*

State	Number of Teachers			
_	SK	SJKC	SJKT	Total
Johor	27	27	27	81
Pahang	27	27	27	81
Perak	27	27	27	81
Selangor	27	27	27	81
Total	108	108	108	324

The data was collected using survey questionnaire. Around 324 questionnaires were distributed to teachers via email with the permission from school headmaster. Around 230 teachers were responded to the questionnaires completely with response rate of 71%.

School culture was measured by using items adapted from Organizational Culture Assessment Instrument (OCAI) developed by Cameron and Quinn (2006). There are 24 items to measure the school culture and each culture consists of 6 items. The highest score reported in a particular culture indicates that the school practicing that culture. The original format of this instrument was modified from ipsative scale to five-point Likert scale from level 1 (strongly disagree) to level 5 (strongly agree). This is because, in ipsative rating scale, respondents were given 100 points and were instructed to divide the points between the options available. In this case, the teachers are compelled to recognise the dominant school culture exists in their schools. Whereas the likert scale format allows flexibility to teachers to choose the "neutral" answer when they are not sure about the culture exist in the schools (Cameron & Quinn, 2005). This is to eliminate the incomplete questionnaire.

OCAI is a widely used instrument and it shows high validity. Cameron and Freeman (1991) formed evidence for the validity of the OCAI in their study of organizational culture in 334 institutions of higher education. The empirical evidence suggests that the OCAI measures what it claims to measure. In addition, OCAI instrument is also utilized in Shaw (2018) study where the study explores the relationship among the behavioral agility of school leadership teams, school culture, and school performance. The instrument was used after examining its high validity and reliability through other previous studies. For this study, the questionnaire was translated into Malay as the language is being used for official business in Malaysian schools. Upon the translation, the questionnaire was sent to experts in MPWS Rich Publication Sdn. Bhd. in Kajang for its validity verification. In addition, the questionnaire was validated by the members of my supervisory committee as well as panel of experts.

Moreover, Giti Ashraf et al. (2013) also have used OCAI instrument in their recent study which is investigating the relationship between organizational culture and organizational innovativeness in Privates Universities in Iran. The cronbach alpha was calculated to measure

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the internal consistency of the instrument based on the 50 participants via SPSS software. The alpha for all organizational culture types shows the values from .70 to .90. This considers acceptable and good internal consistency according to George and Mallery (2003) rules of thumb. Many studies can be cited here (Peterson et al., 1991). So far, sufficient evidences have been provided regarding the reliability of the OCAI. It is the most commonly used instrument in social science research.

For this study, to assess the reliability of the instrument again, a pilot test was conducted. For this purpose, teachers from a school nearby University Putra Malaysia were selected as pilot respondents. The questionnaire were distributed to teachers via email with the permission from school headmaster. Twenty five (25) teachers were responded to the questionnaire completely. This sample size is considered appropriate for this pilot study as previous studies prove that 30 representatives from population is an appropriate minimum sample size required for a pilot study (Isaac & Micheal, 1995; Hill, 1998; Johanson, & Brooks, 2009).

After the pilot study, the items were evaluated to check its reliability using SPSS. The questionnaire has good internal consistency, with a Cronbach alpha coefficient reported as .97. In addition, after the pilot study, the teachers were asked for their feedback on the questionnaire for further improvement. Teachers commented that the questionnaire is quite long. However, the items are quite straight forward.

Besides, school performance is measured using the school academic performance in UPSR examination where the performance measured using Average School Grade or Gred Purata Sekolah (GPS). The GPS data for 3 years was obtained from Examination Board of Ministry of Education (MOE). For data analysis purpose, the average GPS for 3 years was calculated.

In this study, statistical analysis of the data was carried out using SPSS version 25. First of all, Exploratory Data Analysis (EDA) was carried out to check for errors, missing values and outliers. No errors and missing values were reported. There are only very few outliers with not extreme scores were reported. According to Pallant (2005), detection of outliers in larger samples is common and correction action is not needed. Thereafter, normality test was carried out and found that the data was distributed normally. The level of school culture practised by primary schools was determined based on the mean score obtained from descriptive analysis. Whilst, the prediction between school culture and school performance was determined using multiple regression analysis.

Result

The section presents the result of (a) school culture practice and (b) its prediction towards school performance. Before the data analysis, the data were screened for outliers and influential cases using the residual statistics such as cook's distance, leverage and mahalanobis distances. This is because a single outlier or influential case may produce a dramatic effect on the result of the outcome.

Level of school culture

School culture in National Schools

Table 3 shows the level of school culture in National schools. There are four (4) types of cultures. All the types of culture scores high level with mean score around 4.0. The clan culture shows the highest mean score (Mean=4.26; SD=0.53) and the adhocracy culture shows the lowest mean score (Mean=3.95; SD=0.62). In the meantime, Market culture (Mean=4.06; SD=0.51) and Hierarchy culture (Mean=4.15; SD=0.48) also scores high level with the mean

score as mentioned. Overall, high level of school culture is reported with mean score 4.11 and SD=0.54.

This result shows that teachers in National schools (Sekolah Kebangsaan) perceived that their school possess a high level of culture and the most practiced culture is clan culture while the least practiced culture is adhocracy culture.

Table 3 Mean and standard deviations for school culture for National Schools (Sekolah Kebangsaan, SK)

Culture Type	Number of Items	Mean	Standard Deviation	Level
Clan	6	4.26	0.53	High
Adhocracy	6	3.95	0.62	High
Market	6	4.06	0.51	High
Hierarchy	6	4.15	0.48	High
Overall		4.11	0.54	High

Note. 1.00-2.33 = Low; 2.34-3.67 = Moderate; 3.68-5.00 = High

School culture in National Type Chinese schools

Table 4 shows the results of school culture for National Type Chinese schools. Three (3) culture types score high level and one (1) culture type scores moderate level. The culture type that recorded high level are clan (Mean=3.84; SD=0.73), market (Mean=3.74; SD=0.59) and hierarchy (Mean=3.88; SD=0.50). Adhocracy culture (Mean=3.64; SD=0.64) scores moderate level. Overall, high level of school culture (Mean=3.78; SD=0.62) is reported.

This result shows that teachers in National Type Chinese schools perceived that their school possess high culture. On top of that, the most practiced culture in their school is hierarchy culture while the least practiced culture is adhocracy culture based on teacher's perception.

Table 4 Mean and standard deviations for school culture for National Type Chinese schools (Sekolah Jenis Kebangsaan Cina, SJKC)

(Beneficial Ventis Heading Statist Citica, SUITE)					
Culture Type	Number of Items	Mean	Standard Deviation	Level	
Clan	6	3.84	0.73	High	
Adhocracy	6	3.64	0.64	Moderate	
Market	6	3.74	0.59	High	
Hierarchy	6	3.88	0.50	High	
Overall		3.78	0.62	High	

Note. 1.00-2.33 = Low; 2.34-3.67 = Moderate; 3.68-5.00 = High

School culture in National Type Tamil Schools

The result of analysis of school culture for National Type Tamil Schools is shown in Table 5. All the cultures, clan (Mean=4.34; SD=0.57), adhocracy (Mean=3.91; SD=0.60), market (Mean=4.02; SD=0.52) and hierarchy culture (Mean=4.13; SD=0.53) scores high level.

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Among these cultures, Clan culture is reported the highest mean score and Adhocracy culture reported the lowest mean score. Overall, high level of school culture (Mean=4.10; SD=0.56) is reported in National Type Tamil schools.

This result shows that teachers in National Type Tamil schools perceived that the school possess high level of school culture and the most practiced culture in their school is clan culture while the least practiced culture is adhocracy culture.

Table 5 Mean and standard deviations for school culture for National Type Tamil schools (Sekolah Jenis Kebangsaan Tamil, SJKT)

Culture Type	Number of Items	Mean	Standard Deviation	Level
Clan	6	4.34	0.57	High
Adhocracy	6	3.91	0.60	High
Market	6	4.02	0.52	High
Hierarchy	6	4.13	0.53	High
Overall		4.10	0.56	High

Note. 1.00-2.33 = Low; 2.34-3.67 = Moderate; 3.68-5.00 = High

School culture by school type

From this study, it has been noted that the teachers in all primary schools perceived that their school possesses a high level of school culture. The mean score for National schools (mean = 4.11; SD = 0.54), National Type Chinese schools (mean = 3.78; SD = 0.62) and National Type Tamil schools (mean = 4.10; 0.56) are as mentioned.

The mean score reported statistical significant difference at the p<.05 level in school culture for all three type of schools, F(2, 227)=16.637. The post-hoc test showed that the level of school culture in National schools (mean = 4.11; SD = 0.54) is significantly higher than the level of school culture in National Type Chinese schools (mean = 3.78; SD = 0.62). The test also shows that the level of school culture is higher in National Type Tamil schools (mean = 4.10; SD = 0.56) compared to National Type Chinese schools (mean = 3.78; SD = 0.62).

This result means that teachers in National schools and National Type Tamil schools perceive that the level of school culture in their schools is significantly higher than National Type Chinese schools.

Table 6 Level of school culture by school type

No.	School Type	Mean	Standard Deviation	Culture that reported highest mean score	Culture that reported lowest mean score
1	National Schools	4.11	0.54	Clan	Adhocracy
2	National Type Chinese Schools	3.78	0.62	Hierarchy	Adhocracy
3	National Type Tamil Schools	4.10	0.56	Clan	Adhocracy

Note. .00-2.33 = Low; 2.34-3.67 = Moderate; 3.68-5.00 = High; F=16.637, p=.000

Table 7 *Post hoc result for school culture by school type*

School Type	Mean Difference	p
SK and SJKC	0.33	.000
SK and SJKT	0.01	.997
SJKC and SJKT	0.33	.000

Note. p<.05

School culture and school performance

Table 8 shows the regression analysis of school culture towards school performance.

Table 8 Result of Regression analysis

	7 0			
Variable	b	β	t	p
School Culture	156	222	-2.294	.023

The results showed that teachers in Malaysian primary schools perceived school culture ($\beta = 0.22$) significantly predict the school performance.

Discussion

Level of school culture

School culture in National schools

National schools practiced high level of school culture based on teachers' perception. In the meantime, teachers perceived that the clan culture is the most practiced culture whereas adhocracy is the least practiced culture.

This means that the teachers perceive that their schools practiced strong culture whereby consistent effort and clear focus are observed. As a whole, National schools possess a culture with the combination of all culture types. Yet, the clan culture and adhocracy culture recorded as most and least practiced culture respectively. This result is comparable with the result obtained by Kavitha Selvaraja and Zaidatol Akmaliah Lope Pihie (2015) who reported that clan culture and adhocracy culture is the most and least practiced culture respectively in National Type Tamil schools in Kuala Langat.

In clan culture environment, staff, in this case, teachers socialise as family members and collaborative decision is preferred for any occasion (Cameron and Quinn, 2006). This culture helps to produce good relationship-building behaviours among teachers. In addition, the school headmaster in clan culture acts as mentor to coach the teachers to bring out their best for school success. Nevertheless, some weaknesses still can be observed in clan culture. For an instance, in an occasion where collaborative decision is preferred, time is needed to gain input from all the teachers and also to come up with a mutual agreement. It could be challenging to deal with all the teachers' opinion and may end up with uncomfortable decision.

From the result for adhocracy culture, it is noted that teachers in National schools are keen to try new things and welcome new opportunities. Nevertheless, they are not willing to take risk to obtain the things they wanted. Having interest alone in getting new ideas for school is not sufficient. The teachers should be open minded to take the risk for the school benefit. Risk taking is not only good for school as whole. It also helps teachers to strengthen their self-development and professional growth.

School culture in National Type Chinese schools

National Type Chinese schools practiced high level of school culture based on teachers' perception. In the meantime, teachers perceived that the hierarchy culture is the most practiced culture whereas adhocracy culture is the least practiced culture.

This means that the teachers perceive that their schools practiced strong culture with hierarchy culture seen as most practiced culture. A strong culture is always seen as driving force for continuing success (Cameron and Quinn, 2006). This result is comparable with the result obtained by Henok Beyene Tesfatsion (2011) who reported that hierarchy culture found to be the strongest culture in St. Mary's University College. Besides, Yaakob Daud et al., (2015) also reported the similar result in High Performance and Low Performance schools in Kedah.

This result indicates that teachers in National Type Chinese schools feel that their schools still strictly hold on formal rules and regulations despite moving towards school management change. In a nutshell, these schools are still emphasizing the bureaucracy culture. Apart from that, the lowest mean score on adhocracy culture indicates that teachers in National Type Chinese schools do not feel their schools give priority to the innovative atmosphere within the school compound.

Henok Beyene Tesfatsion (2011) reported that hierarchy culture has negative relationship with job satisfaction. However, the lower job satisfaction may not lead to lower performance of the employee (Lund, 2003). The same goes to school performance. This is because hierarchy culture permits stable environment whereby all the tasks and teachers are under control. The ultimate decision is made by headmasters alone guided by school rules and regulations. Teachers have to act uniformly to fulfill the school management needs.

Therefore, the suitable culture for each organization depends on the respective organization itself. Anyway, this result is quite surprising as there is a common assumption among Malaysians that Chinese community possess entrepreneurial thinking where they look for new opportunities. However, the adhocracy culture observed as least practiced culture in National Type Chinese schools based on teacher's perception.

School culture in National Type Tamil schools

Teachers in National Type Tamil schools perceived that their schools practiced high level of school culture. In the meantime, teachers perceived that the clan culture is the most practiced culture whereas adhocracy culture is the least practiced culture. This result is consistent with the result obtained by Kavitha Selvaraja and Zaidatol Akmaliah Lope Pihie (2015) who reported that clan culture and adhocracy culture is the most and least practiced culture respectively in National Type Tamil schools in Kuala Langat.

This result means that teachers in National Type Tamil schools perceived that they mingle as family members. They share the same belief to achieve a common goal. Besides, the schools' interest on adhocracy culture illustrates that teachers do not take any risk for school innovation improvement. The teachers are quite comfortable with their family-oriented culture that restrict them to move forward to change for school development. That's what claimed by Yaakob Daud et al. (2015) who reported that teachers in high performance and low performance schools in Kedah preferred clan culture even though hierarchy culture reported as a dominant culture in their schools.

School culture by school type

As a summary, the result shows that teachers in all primary schools perceived that their schools practiced high level of school culture. On top of that, clan culture is perceived as the most practiced culture in both National and National Type Tamil schools while hierarchy culture is perceived as the most practiced culture in National Type Chinese schools. In the meantime, adhocracy culture is the least practiced culture in all schools.

The result obtained in National schools and National Type Tamil schools is consistent with the result obtained by Kavitha Selvaraja & Zaidatol Akmaliah Lope Pihie (2015) who reported that clan culture and adhocracy culture is the most and least practiced culture respectively in the schools in their study. In addition, Yaakob Daud et al. (2015) reported that clan culture is the most preferred culture of the teachers in five years to come. As reported, it is confirmed that teachers in these schools practice clan culture which maintain good collaboration and collegiality in schools.

The clan culture sounds pleasing atmosphere to work with. However, literature confirmed that introvert culture like clan culture might not produce greater performance for an organization (Deshpande and Farley, 2004; Slater et al., 2011; Papadimitriou & Kargas, 2012).

Whilst, National Type Chinese schools reported hierarchy culture as the most practiced culture. This means that the teachers perceived that their schools still hold into their formal rules and regulations. The collaborative culture is less visible in National Type Chinese schools. This is what has been highlighted as challenges in the study conducted by Ghavifekr et al., (2014). The outcome of this study revealed that teachers in National Type Chinese schools possess poor collaboration and it is quite challenging to create collegiality among teachers as expressed by the headmasters.

In addition, seemingly all schools do not emphasized adhocracy culture. This means that teachers perceived that they do not bring any new ideas to improve the school performance. Adhocracy culture allows supportive working atmosphere where teachers can act independently without the need to depend on headmasters all the time (Aan Khurosani, 2013). Moreover, schools with a supportive culture who promptly respond to the changes in external world produce better student achievement than schools that do not respond to the external environment (MacNeil et al., 2009).

Therefore, teachers need to have risk-taking attitude in order to obtain new insights from external world apart from school compound. They need to observe other organizations on how they improve their performance. The teachers should think and act out of the box. Thus, a change in culture is recommended.

School culture and school performance

From this result, it was discovered that school culture predicts school performance in primary schools. Hence, the headmasters need to analyse the culture practiced within their schools and do the necessary change for the school betterment. As improvement of culture requires great effort and longer time, the headmasters may seek support and guidance from Ministry of Education.

There is no culture type is considered as a best culture. A culture which is effective in one school, become ineffective in another school. Hence, a suitable culture for each school very much depends on the internal and external factors surrounding the schools.

Conclusion, implications, recommendations and future studies

Conclusion

Overall, the level of school culture found to be at high level in all primary schools. Among the schools, National schools and National Type Tamil schools practising clan culture whereas National Type Chinese schools practising hierarchy culture. There is a similarity between these schools in terms of culture practice where the adhocracy culture become the least culture practiced in these schools. This means that teachers in National schools and National Type Tamil schools perceive that their schools maintain good collaboration and collegiality within their schools. Teachers in National Type Chinese schools still struggle to have good collaboration among teachers as highlighted by Ghavifekr et al., (2014).

In addition, it was found that school culture significantly predicts the school performance. Hence, it is noted that emphasis in school culture is vital to have an environment, which supports the school performance in the long run. Therefore, it can be argued that there is no culture considered as perfect culture. Each culture type has its own benefits. Thus, it is school's responsibility to recognise the culture, which improve their processes. A blend of all culture may also produce awesome performance depends on other surrounding factors such as teacher's commitment, parental involvement and so on.

Implication to practice

The findings revealed the level of school culture for each school type. Through this finding, the stakeholders such as educational policy makers, headmasters and teachers will be able to know the existing level of school culture practiced in Malaysian primary schools. In addition, the prediction between school culture and school performance between Malaysian primary schools has not been investigated till today. This information would be very helpful for these stakeholders to identify their school culture as well as its contribution towards school performance to take any action for improvement.

Implication to theory

This study gives a better view for Organizational Cultures Typology Model (Cameron and Quinn, 2006) as the model was used to make comparison of school culture among the Malaysian primary schools. This study becomes a guide for other educational researchers in utilising and modifying the Organizational Cultures Typology Model (Cameron and Quinn, 2006) as the instrument originally designed to measure organizational culture in business settings.

Recommendations

In a nutshell, this study helps to reveal the existing level of school culture in primary schools and its prediction towards school performance. The relevant stakeholders such as Headmasters, State Education Department, Ministry of Education as well as Educational Policy Makers may use this study as a guide to propose any improvement action plan for these schools. Below are recommendations proposed by considering the findings of this study.

This study shows that different culture type of was recorded for each school type. For
instance, clan culture was recorded in National and National Type Tamil schools whereas
hierarchy culture was recorded in National Type Chinese schools. Therefore, ministry
should have a look on the gap exist on the differences in culture type between school

- types. These differences among schools may affect ministry's aim to provide equitable education throughout all school types in Malaysia.
- 2. The prediction of school culture towards school performance in different school type is not investigated till today in Malaysia. Therefore, this study is one of the important studies in determining the relationship between school culture and school performance in Malaysian educational settings. This study in a way hinted the school headmasters to work together with their teachers to re-look into their school culture. The schools may reanalyse the entire school culture and make a shift to the most favoured culture for their school betterment.

Future studies

It cannot be denied that this study becomes a basis for future studies to analyse the relationship between school culture and school performance. A similar study can be conducted in secondary schools with different research approaches for better generalization. In between, the current study measures school culture based on teachers perceptions. Hence, there is a need to consider headmaster's view in evaluating school culture towards performance. This is because how the headmaster sees the school culture may not be same as how the teachers see the environment. Thus, a future research which consider the headmaster's perception may add more value to this study.

In addition, the current study is only limited to school culture and school performance. In future, other variables such as socio-economic status, parental involvement, teacher's commitment, leadership and so on that potentially affect the school performance can be studied. This is because past studies have confirmed that these variables influence the school performance (Preeti Singh & Garima Choudhary, 2015; Kimaro & Machumu, 2015; Mustafa Altun, 2017).

Furthermore, this research is a quantitative survey research. Quantitative research always involves large samples and the conclusion can be generalised to other settings. However, the depth of the quantitative study is not ample detailed and it only describes the existing situation. In order to explore the existing situation on why and how such situation exist, we need a qualitative research. Therefore, it is recommended to conduct a qualitative research to examine the challenges face by schools to implement innovativeness which improve the school performance. Individual teacher's perception on school environment can be identified through qualitative research.

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