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Conceptualizing and Validating the Malaysian Vocational College Leaders' Strategic Leadership Inventory (MVCLSLI)

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ABSTRACT

The main purpose of the study is to explore, conceptualizing and validating the Malaysian Vocational College Leaders' Strategic Leadership Inventory (MVCLSLI). The study employed a survey approach, and the data were collected using adapted five-point Likert scale survey questionnaire. Data were collected from 65 vocational colleges throughout Malaysia. A total of 500 school leaders (208 males and 209 females) participated in the study. The data were analyzed using descriptive statistics, and Structural Equation Modeling. The findings of the study revealed that the Malaysian Vocational College leaders possess high-level of strategic leadership practices. It also indicated that the Malaysian Vocational College leaders possessed seven out of nine characteristics of strategic leadership. Thus, MVCLSLI constitutes a seven-factor model comprised strategic orientation, strategic alignment, strategic intervention, restlessness, absorptive capacity, adaptive capacity, and wisdom. This present study initiated the development of the strategic leadership practices model in the Malaysian educational context.

Keywords: Strategic leadership; Malaysian Vocational College leaders; descriptive statistics; structural equation modeling, Education.

Introduction and background

Great ancient philosophers such as Plato, Socrates, Aristotle, Plutarch and Caesar, who play their big individual roles during the Greek civilization, have touched the notion of leadership in their work of creations (Bass, 1981). In the modern era, however, the scholars have long debated the concept of leadership. Particularly in schools, the traditions and beliefs of leadership are that school leadership is considered vital to the successful functioning of a school. With that notion, school leaders are equipped with necessary precondition skills and knowledge for effective school management endeavors. Thus, leadership research has been categorized as one of the main element in the field of educational leadership and management along with practices, theory and policy (Bush, 2010).

The scholars alleged that research in leadership had not able to fulfill the gap of leadership practices in schools over the spanning decades. As was declared by Hallinger and Heck (1996), not more than 40 studies addressed the relationship between school leadership and student academic achievement from 1980 to 1995. In terms of quantitative research, Marzano et. al (2005) reported that out of 5,000 studies for the past 35 years, only 69 examined the relationship between school leadership and the academic achievement of students. It was also reported that the research done on school leadership is quite ambiguous or perceived as such because it provides little specific guidance on school leadership (Donmoyer, 1985). Based on the above arguments, this study hopes to

explore the level of the current standard of the strategic leadership practices of Malaysian Vocational College Leaders and simultaneously developing the Malaysian Vocational College Leaders' Strategic Leadership Inventory (MVCSLI). Hence, this will ultimately enrich the literature of strategic leadership practices in Malaysia's system of education.

Conceptualizing and Re-Framing Strategic Leadership Practices in Education

An orthodox perspective of leadership development argued that leaders tend first to focus on current administrative and managerial issues rather than concentrating on developing strategic and futures activity for the schools. However, Davies and Davies (2009) contended that parallel view of leadership development is to improve the current school and concurrently building strategic capability within the school. This demonstrates that strategic leadership is a substantial element in building successful schools. Apparently Davies and Davies (2004) propose a model of strategic leadership which comprise five organizational capabilities (task elements of a strategic leader) and four individual characteristics (attributes that the leaders display) of a strategic leader.

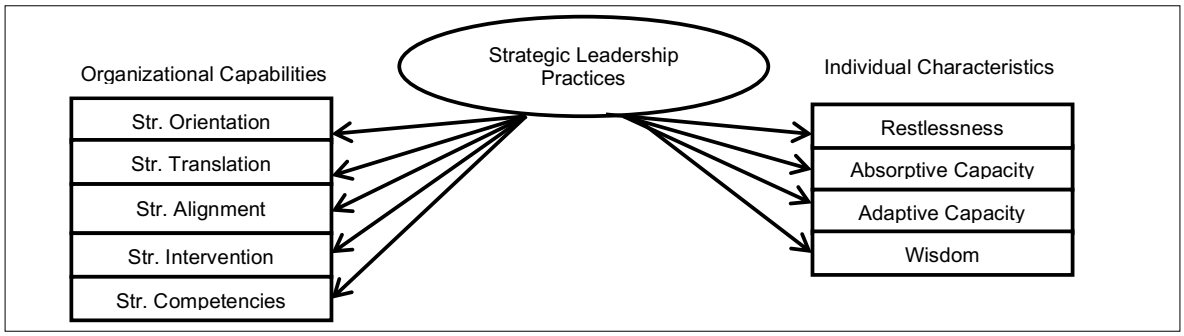
Organizational Capabilities

Strategic orientation involves direction-setting framework by the leader for the future of the organization. Hitt et. al (2010) assert that strategically orientated leader reflects his perception towards the environment and reacts to the environmental conditions. Among the practices of the strategically oriented leader are engaging in innovative activities, undertaking risky ventures and competes proactively (Gupta et. al, 2006). Further, Davies (2002) suggests a four-stage approach to translating strategy into action where the first stage is articulation of strategies followed by building a shared understanding and this can be achieved through shared experiences and images. Thirdly, leaders need to create through dialogue a common understanding of the future where it involves the process of enhancing participation to understand the necessity for change. The last stage of translating strategy into action ***(strategic translation)*** is to define desired outcomes and the plans for achieving those results, and it involves a long-term effort by all. Davies and Davies (2009) emphasize the process of aligning people with strategies which involve strategic conversations that built participation and motivation and ultimately improved school's strategic capability. Developing strategic conversations and dialogue involves discussions about school issues and the trends that face the school over the next few years (Van der Heijden, 1996; Davies, 2002). These conversations enable people to develop a strategic perspective of what the school might become. The rationale for strategic participation is to build involvement among the staffs of the school to commit to the strategic direction of the school. Strategic motivation is also a result of strategic conversations. It is the process of developing a strategic cause in which individuals are motivated to contribute leads to an improved commitment and effort. Combining the process of strategic conversations, strategic participations, and strategic motivation, school leaders, can build strategic capabilities among school staffs to ensure ***strategic alignment*** is equivalent to the strategic plan of the school. As for ***strategic intervention***, leaders are expected to lead change (Kotter, 1995) in the organization, but, however, the actual leadership challenge is to know when to carry out a significant strategic change (Parikh, 1994). Leaders can only make changes when individuals in the organization are ready for such changes and transformation. Such judgment is manifested in not only knowing what and how but also knowing when (Boal and Hooijberg, 2001). ***Strategic competencies*** are needed to develop a school and to maintain its sustainability. For example, developing strategic competencies would be the fundamental understanding of teaching and learning rather than the ability to deliver the latest curriculum. This ability will enable the school to

survive new challenges by reconfiguring existing skills and resources rather than having to seek new ones.

Individual Characteristics

Senge (1990) describes ***restlessness*** as 'creative tension' and is the result of positively seeing the future and accepting current reality. Strategic leaders can visualize the strategic leap of what organization wants to make and have the ability to live with the current scenario of the organizational culture. Cohen and Levinthal (1990) and Hambrick (1989) define ***absorptive capacity*** as the ability to absorb new information, assimilate, learn and importantly apply the changes. Boal and Hooijberg (2001, p. 517) also argue that leaders 'have a unique ability to change or reinforce existing action patterns' within the organization. Thus, strategic leaders should create an organizational context where learning is a dynamic process.



Source: *Davies and Davies (2006; 2009).*

Figure 1: Proposed Strategic Leadership Practices Model of Malaysian Vocational College Leaders' Strategic Leadership Inventory (MVCLSLI)

Black and Boal (1996) and Hambrick (1989) define ***adaptive capacity*** as the ability to change. Sanders (1998, p.5) supports this view by emphasizing that leader's ability to change and to learn is through asserting 'mastering chaos, complexity and change' requires new ways of 'seeing and thinking'. ***Wisdom*** is defined as the capacity to take the right action at the right time. Robert Sternberg in his presentation at the 2002 International Thinking Skills Conference argued that the elements of wisdom comprised of successful intelligence (practical intelligence, analytical intelligence and emotional intelligence), balancing of interests, timeframes, and responses to the environment, mindful infusion of values, and applying knowledge for the common good. By combining all the variables involved as explained above, all nine (9) strategic leadership practices proposed by Davies and Davies (2006; 2009) is depicted in **Figure 1**.

Objectives and Research Questions of the Study

Due to the paucity of school's leadership studies, we are attempting to explore and examine the level of strategic leadership practices of the Malaysian Vocational College leaders. In addressing this objective, the study used a nine-factor model of strategic leadership practices by Davies and Davies (2006; 2009). Consequently, the second objective is to develop and validate the authenticity of Malaysian Vocational College Leaders' Strategic Leadership Inventory (MVCLSLI). Based on the research objectives above, the research questions are formulated such as what is the level of the strategic leadership practices of the Malaysian Vocational Colleges leaders? Moreover, does the

Malaysian Vocational College Leaders' Strategic Leadership Inventory (MVCLSLI) is valid and reliable?

Methodology

Research Design, Sampling and Instrumentation

This particular study embarked on the quantitative approach in explaining the phenomenon of interest (i.e. strategic leadership practices in vocational colleges). A survey method was deployed to gather information about the strategic leadership practices of the Malaysian Vocational College Leaders. Also, the research was confirmatory in nature whereby the analyzes require testing the validity and reliability of the MVCLSLI model. Thus, a quantitative method is the most appropriate technique to be employed in this particular study (Mujis, 2011). Out of 80 vocational colleges throughout Malaysia, 65 vocational colleges took part in the study as it provided a statistical basis for a representative sample of the entire population (Fink, 1995). A total of 500 survey questionnaires were randomly distributed to achieve a minimum of 95% confidence interval and ±5% margin of error (Ferguson, 1981; Vockell and Asher, 1995). The samples of this study are among the leadership groups of the vocational colleges (such as the Directors, the Deputy Directors, the Head of Departments and the Head of Units). The researcher personally contacted the representatives from all vocational colleges to ensure proper completion of the survey questionnaire. Completed questionnaires were returned via mail using the envelopes provided. The instrument used in this research was adapted and adopted from Hairuddin (2012) based on Davies and Davies (2004, 2006, 2009) using a 5-point Likert scale. A 5-point Likert scale compromise between offering enough choice (e.g. if only two or three options were used, it tends to measure only direction rather than the strength of opinions) and making things manageable for respondents (Johns, 2010). Strategic leadership uses a 5-point Likert scale anchored by 1=very untrue of me, 2=untrue of me, 3=neutral, 4=true of me; and 5=very true of me. The instruments comprised of 47 items in the Malay Language. Back-translation of the survey questionnaire verified the original translation (Brislin et al., 1973). The survey questionnaire comprised demographic questions and 47 multiple-item questions that measure the strategic leadership practices. The study underwent two (2) stages of content validation and content refinement (Bourque & Clark, 1992). Firstly, leadership experts screened the items searching for ambiguities, unclear wordings, leading (and misleading) questions and biases. Secondly, the study selected a group of 225 leadership groups from 15 vocational colleges out of the sampling frame to respond to the survey questionnaires.

Statistical Analysis Method

The study employed SPSS 21 and the Analysis of Moment Structures (AMOS 21.0). AMOS 21.0 software employed the Maximum Likelihood Estimation (MLE) in generating estimates of the full-fledged SEM and analysis of the covariance matrices. The hypothesized model is estimated by Covariance Based SEM, which is a powerful multivariate technique for analyzing a measurement model. Confirmatory Factor Analysis (CFA) is utilized to validate the MVCLSLI model in terms of convergent validity (Worthington & Whittaker, 2006). Convergent validity measures the extent to which items of a particular construct share a common proportion of variance (Hair et al., 2010). Three (3) statistical measures are involved in determining convergent validity, i.e. standardized factor loadings, average variance extracted (AVE), and construct reliability (Hair et al., 2010). Standardized factor loading signifies the correlation between the constructs and the items. Meanwhile, AVE measures convergence among a set of items within a construct. It is computed as an average percentage of variance explained among the items of a

construct (Hair et al., 2010). Composite reliability (CR) refers to the measure of internal consistency of the items that represent a latent construct. The adopted cut-off values of the three (3) statistical measures are as follows, standardized factor loadings and AVE should be above .50 respectively while CR should be above .70 (Hair et al., 2010). Once the estimates of the model were established, the study applied a set of measures to evaluate the goodness of fit of the MVCLSLI model.

Results

Results for Research Question 1: The level of Strategic Leadership Practices Among the Malaysian Vocational College Leaders

The level of strategic leadership practices are measured by its mean and standard deviation. The highest score was restlessness (*M = 4.221, SD = .4403*), followed by wisdom (*M = 4.207, SD = .4142*), strategic orientation (*M = 4.184, SD = .4578*), adaptive capacity (*M = 4.176, .4312*), and absorptive capacity (*M = 4.129, SD = .4366*), strategic competencies (*M = 4.089, SD = .4360*), strategic alignment (*M = 4.045, SD = .4719*), strategic translation (*M = 4.002, SD = .4653*) and the lowest score was strategic intervention (*M = 3.930, SD = .4716*). Table 2 depicts the details of the level of the strategic leadership practices among the Malaysian Vocational College leaders.

Table 2:
Level of Strategic Leadership Practices among the Malaysian Vocational College Leaders

Construct Measured	No of items	Mean	SD	Level
Strategic Orientation	5	4.184	.4578	High
Strategic Translation	5	4.002	.4653	High
Strategic Alignment	5	4.045	.4719	High
Strategic Intervention	4	3.930	.4716	High
Strategic Competence	5	4.089	.4360	High
Restlessness	5	4.221	.4403	High
Absorptive	5	4.129	.4366	High
Adaptive	5	4.176	.4312	High
Wisdom	8	4.207	.4142	High

Level = Low (1 – 1.66), Moderate (1.67 – 3.33), High (3.34 – 5.00)

Results for Research Question 2: The development of the Malaysian Vocational College Leaders' Strategic Leadership Inventory (MVCLSLI)

Assessment of the Measurement Model. Confirmatory Factor Analysis (CFA) is utilized in this study to assess the measurement model. Maximum Likelihood (ML) estimator is used and it is considered relatively robust to violation of normality assumptions (Bollen, 1989). Segars and Grover (1993) emphasize that the measurement model should be initially evaluated by examining at least three (3) best overall model fit indices particularly chi-square (χ^2), degree of freedom (∂f), normed chi-square ($\chi^2/(\partial f)$, Comparative Fit of Index (CFI), Goodness of Fit Index (GFI), Tucker-Lewis Index (TLI) and Root Mean Square of Error Approximation (RMSEA) (Hair et al., 2010). The CFI, GFI, and TLI values should equal or exceed 0.90 while RMSEA value should be equal or lower than 0.08 to obtain an acceptable model fit (Schumacker and Lomax, 2010). Finally,

Hayduk (1988) suggests that normed chi-square ($\chi^2/\partial f$) should not exceed 3.0. Although the study hypothesized that all 47 items were perfectly loaded under strategic leadership but the initial result exhibited the other way around whereby the fit indices statistics were not fulfilled and therefore, the model did not fit the data (CFI = .878; GFI = .848; TLI = .861) and warrants the measurement model to be revised.

Figure 2 depicts the revised 21 items from the seven-factor measurement model. All items for *Translation* and *Competencies* were dropped and hence the two constructs were eliminated from the revised measurement model of the MVCLSLI. Out of five items of *Orientation*, three items were dropped. One item was dropped for *Alignment,* and *Intervention* respectively. Similarly, two items were dropped for *Restlessness*, *Absorptive*, and *Adaptive*. Lastly, five (5) items were dropped for *Wisdom*. In total, 26 items out of 47 were dropped to achieve better model fit. The overall re-specified model showed a substantially improved and encouraging goodness of fit. Thus, indicating adequate fit between the covariance matrix of the observed data and the implied covariance matrix of the model. The normed $\chi^2/\partial f$ = 2.284 and the RMSEA value = .062 falls within the acceptable range of ≤ 3 and ≤ .08 respectively, which reflected better good fit of the revised model. Other good fit indices were also found to hold adequate values. The GFI = .903, CFI = .930 and TLI = .944 were above the threshold value of ≥. 90. Table 3 compares the result of the fit indices of the generated model, the revised model against the recommend threshold values.

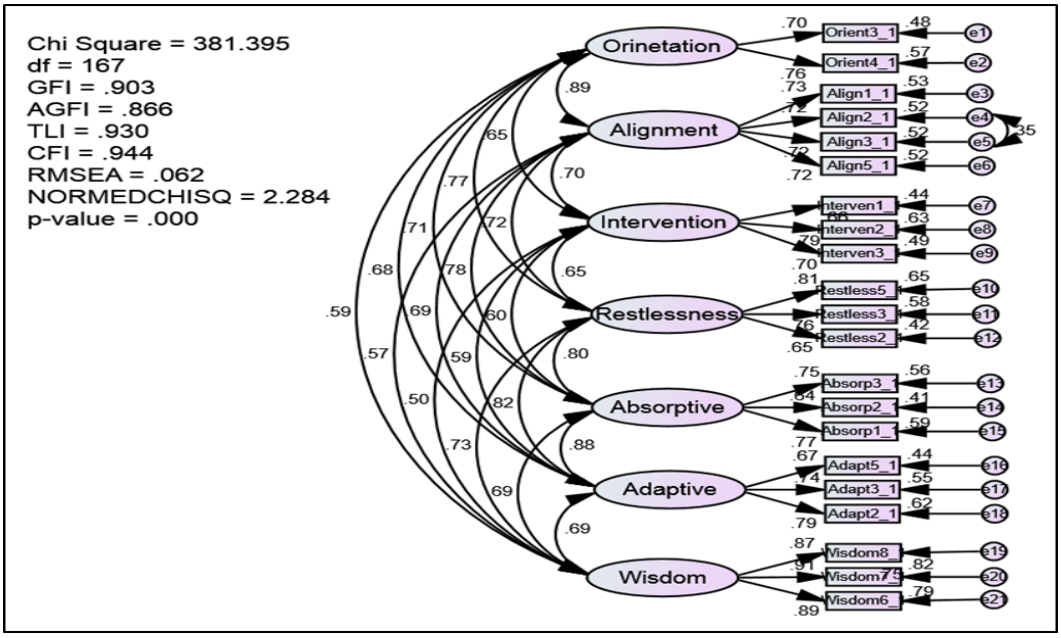


Figure 2: The Revised Measurement Model of the MVCLSLI

Note.

Orientation = Strategic Orientation, *Alignment* = Strategic Alignment and *Intervention* = Strategic Intervention, *Restlessness* = Restlessness, *Absorptive* = Absorptive Capacity, *Adaptive* = Adaptive Capacity and *Wisdom* = Wisdom.

Table 3:
Summary of the Fit Indices of the MVCLSLI Measurement Model

Fit Indices	Accepted fit	Generated Model	Revised Model
Chi-square	Insignificant	2557.176	*381.395*
p value*	$.001 \leq p \leq .05$	.000	*.000*
CMIN/DF	≤ 3	2.959	*2.284*
CFI	$\geq .90$	.878	*.930*
TLI	$\geq .90$	.861	*.944*
GFI	$\geq .90$	.848	*.903*
RMSEA	$\leq .08$	.076	*.062*

*Source: Kline, 2010; Schumacker & Lomax, 2004; Hair et. al, 2010; Hu & Bentler, 1995; Byrne, 2010. * Statistically significant at .05.*

Further analysis was conducted to examine the convergent validity of the MVCLSLI measurement model. As exhibited, Table 4 summarizes the internal reliability, the factor loadings, the average variance extracted (AVE) and the composite reliability (CR) of the revised MVCLSLI measurement model.

Table 4:
Summary of the Convergent Validity of the Revised MVCLSLI Measurement Model

Construct	Item	Internal Reliability (Cronbach Alpha)	Factor Loading	AVE[a]	CR[b]
Orientation	Orient3_1	.721	.695	.527	.690
	Orient4_1		.756		
Alignment	Align1_1	.862	.727	.523	.814
	Align2_1		.721		
	Align3_1		.723		
	Align5_1		.722		
Intervention	Interven1_1	.799	.664	.519	.763
	Interven2_1		.794		
	Interven3_1		.697		
Restlessness	Restless5_1	.826	.807	.551	.785
	Restless3_1		.761		
	Restless2_1		.649		
Absorptive	Absorptive3_1	.805	.746	.520	.764
	Absorptive2_1		.644		
	Absorptive1_1		.767		
Adaptive	Adaptive5_1	.705	.667	.538	.777
	Adaptive3_1		.743		
	Adaptive2_1		.786		
Wisdom	Wisdom8_1	.929	.866	.788	.918
	Wisdom7_1		.908		
	Wisdom6_1		.888		

Note.

a. *Composite reliability (CR) = (square of the summation of the factor loadings)/{(square of the summation of the factor loadings) + (square of the summation of the error variances)}*
b. *Average Variance Extracted (AVE) = (summation of the square of the factor loadings)/{(summation of the square of the factor loadings) + (summation of the error variances)}*

By referring to Table 4, all constructs exhibit AVE values ≥ .5 and CR values ≥ .7 respectively and, therefore, the revised MVCLSLI measurement model exhibited the evidence of convergent validity. Also, it is pertinent for the study to look at the discriminant validity of MVCLSLI measurement model. A measurement model is is said to be valid if low correlations are established between the measure of interest and the measure of other constructs. Empirically, the square root of the average variance extracted must be greater than its correlations with all other constructs (Fornell & Larcker, 1981). Table 5 summarizes the discriminant validity of the revised MVCLSLI measurement model.

Table 5

Summary of the Discriminant Validity of the Revised MVCLSLI Measurement Model

Construct	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Orientation	.726						
(2) Alignment	.796	.723					
(3) Intervention	.423	.487	.720				
(4) Restlessness	.585	.514	.423	.742			
(5) Absorptive	.501	.601	.365	.646	.721		
(6) Adaptive	.465	.477	.348	.672	.773	.733	
(7) Wisdom	.347	.319	.250	.537	.473	.475	.888

Note.

* *Diagonals represent the square root of the AVE extracted while the other entries represent the squared correlations.*

Based on Table 5, all constructs fulfilled the discriminant validity except for squared correlations values of Orientation – Alignment and Absorptive – Adaptive. Further analysis, is to explore the second-order factor of the MVCLSLI that possibly substantiate the strategic leadership practices of the Malaysian Vocational College Leaders.

The Second-Order Factor of MVCLSLI

The results for the second-order measurement model are shown in Figure 3. The model produced the χ^2 (182) = 496.795, p < .001. Overall, the model was adequately fit with CFI of .918, TLI of .905 and RMSEA values of .071 which surpass the cut-off points respectively. Also, the value of normed chi-square ($\chi^2/\partial f$ = 2.730) is within the proposed range. Therefore, the existence of the second-order factor would allow researchers to justify a rather strong relationship that showcased by the first-order factors.

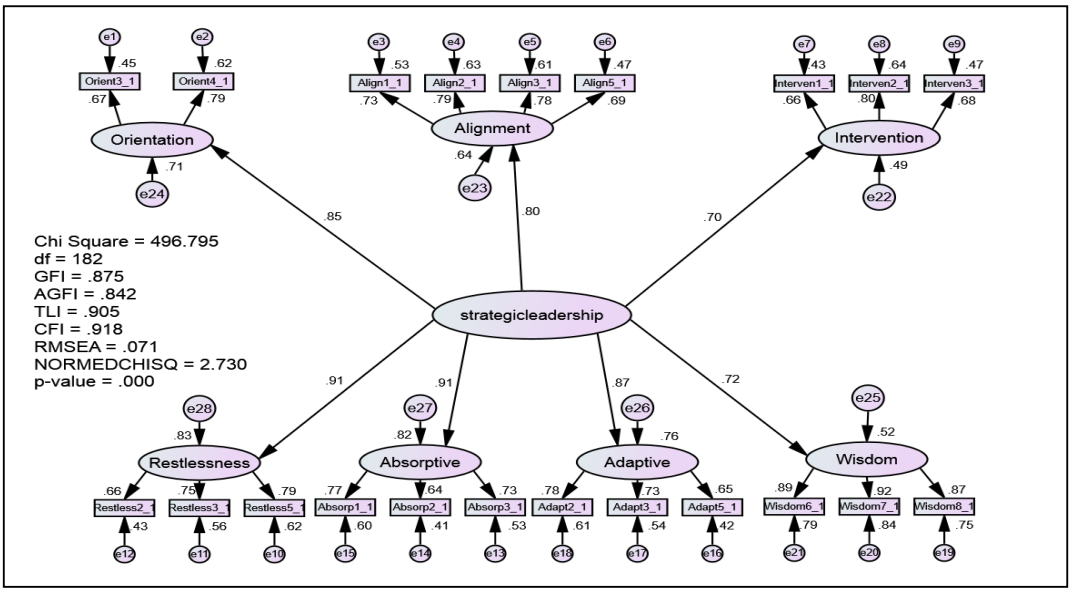


Figure 3: The Revised Second-Order Factor of MVCLSLI

Results from Testing the Hypotheses

SEM is also a statistical tool used for testing the hypothesis of the multivariate analysis (Byrne, 1994; Tabachnick & Fidell, 2001). Based on Table 6 and the generated revised model, as in Figure 3, the hypotheses are tested at 0.05 significance level. As exhibited in Table 6, the Malaysian Vocational College leaders possessed only seven (7) out of nine (9) strategic leadership practices characteristics as shown in the finding column.

Table 6:
Summary of Tested Hypotheses

Hypotheses	Elements of MVCLSLI	Identification	Findings
H1	Strategically Oriented	Orientation	Supported
H2	Translate strategy into action	Translate	Unsupported
H3	Align people & organization	Aligment	Supported
H4	Determining strategic intervention points	Interven	Supported
H5	Developing strategic competencies	Competencies	Unsupported
H6	Restlessness	Restless	Supported
H7	Absorptive capacity	Absorptive	Supported
H8	Adaptive capacity	Adaptive	Supported
H9	Wisdom	Wisdom	Supported

Discussions and Implications

The level of Strategic Leadership Practices Among the Malaysian Vocational College Leaders

In general, the Malaysian vocational college leaders possess a high level of strategic leadership practices. The highest score was restlessness (*M = 4.221, SD = .4403*) and the lowest score was strategic intervention (*M = 3.930, SD = .4716*). The level of other strategic practices such as restlessness and strategic intervention fall within the "high

level" range (M= 3.34 – 5.00) The findings are in congruence with Adelakun (2015), Nasruddeen (2015), Ali (2013) and Nazifah (2012) which concluded a high level of strategic leadership practices among educational leaders. Based on the findings, the Malaysian vocational college leaders proved to possess a high level of strategic leadership practices.

The development of the Malaysian Vocational College Leaders' Strategic Leadership Inventory (MVCLSLI)

The results from the revised MVCLSLI model (Figure 3) confirmed that the vocational college leaders only possessed seven out of nine attributes as suggested by Davies (2003) and Davies and Davies (2006; 2009). However, the finding was contradicted with Hairuddin (2012), which deduces strategic leadership as a six-factor model and Nasruddeen (2015), confirmed a four-factor model. Other studies established strategic leadership as a nine-factor model (Adelakun, 2015; Ali, 2013; Nazifah 2012). It is observed that the three (3) studies (Adelakun, 2015; Ali, 2013; Nazifah 2012) used only descriptive analysis to describe the model compared to Hairuddin (2012) and Nasruddeen (2015) who used SEM as the main statistical techniques.

Davies (2003), Davies and Davies (2004, 2006, 2009) described strategic orientation as "being strategically oriented". In other words, strategic orientation is the ability to see the bigger picture, and understand the contextual setting off an organization. Strategic alignment refers to one's capacity to align staffs with the organization. By possessing these characteristics, leaders are able to change the mindset as well as the behavior of their subordinates through strategic conversation, strategic participation and strategic motivation and hence building personal and organizational capability (Davies and Davies, 2009; Prahalad and Hamel, 1990; Stalk et al., 1992). Strategic intervention is another organizational capability element where leaders apply an effective strategic intervention points (Davies, 2003; Davies and Davies, 2004, 2006, 2009). According to Burgleman and Grove (1996), leaders with this ability can set change in the organization.

Restlessness or "dissatisfaction with the present" is an individual characteristic of a leader, which shows the capacity to challenge the ideas and processes in seeking better ideas for the benefit of the communities. Also, absorptive capacity reflects the "ability to absorb the available information" that is, of course, important for the student performance achievement (Davies, 2003; Davies and Davies, 2004, 2006, 2009). By having this capability (Prahalad & Hamel, 1990; Stalk et al., 1992), the school leaders are able to conduct the strategic analyzes prior to the preparation of the school strategic development planning (Bryson, 2003; Preedy et al., 2003). Subsequently, adaptive capacity prepares the leader to respond to the generated strategies (Eacott, 2008) and following the changes in the environment. Lastly, the vocational college leaders demonstrated leadership wisdom that comprised intellectual aspect, wise judgment; belief in the team's ability and excellent application of knowledge for organizational success (Bierly et al., 2000; Small, 2004; Rowley, 2006a, b; Bennet & Bennet, 2008). Bierly et al. (2000) suggested three (3) important drivers for organizational development and leadership wisdom namely experience, a passion to learn and to possess a high spirituality.

Theoretically, this research concludes a seven-factor model compared to the nine-factor model in the United Kingdom (Davies and Davies, 2004; 2006; 2009) of the strategic leadership practices among the Malaysian vocational college leaders as discussed above. One major inconsistency is observed, whereby, the strategic leadership practices model varies from one study to another. Thus, to confirm the seven-factor model, quantitative evaluation and replication were yet to be carried out with particular reference to the strategic leadership across all school types in Malaysia. Practically, this research

successfully pointed out the importance of conducting specific leadership training for school leaders. In the pursuit of the excellent performance of the vocational college leaders, the findings of this study would help educational administrators to come out with programs and courses that inculcate the strategic leadership practices among the vocational college leaders.

Limitations and Suggestions for Future Research

This research considered the different level of the vocational college leaders (directors, deputy directors, head of departments and head of Units) as one sample group. Future studies should consider different administrative levels as a separate sample groups and a multi-group analysis using SEM can be carried out on the same dataset to capture the length and breadth of the MVCLSLI components. Also, this research only considered vocational colleges' leaders to test the strategic leadership practices multidimensional constructs. To further develop the strategic leadership practices inventory for the Malaysian school leaders, leaders from all school types (e.g. national schools, national-type schools, and religious schools) should be considered as participants in the study. Thus, future research should consider the multidimensional constructs of the strategic leadership practices need to be explored across all school types (e.g. national schools, national-type schools and religious schools) in Malaysia to develop the strategic leadership practices inventory for the Malaysian school leaders.

Conclusion

In this study, we found the Malaysian vocational college leaders possessed seven (7) strategic leadership practices as suggested by Davies (2003) and Davies and Davies (2006; 2009. The strategic leadership practices among the vocational leaders were also found to be high. The findings of the study proved the importance of conducting specific leadership training for school leaders. In pursuit of excellent performance by vocational college leaders, the findings from this study would help educational administrators to come out with programs and courses that inculcate the strategic leadership practices among the vocational college leaders. The empirical findings suggest further research across all school types (e.g. national schools, national-type schools, and religious schools) to develop the strategic leadership practices inventory for the Malaysian school leaders. In short, continued research is needed to improve this study and to address its limitations. It is hoped that this study will give a preliminary insight and understanding on the strategic leadership practices among the school leaders in Malaysia.

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