Critical Success Factors for School Improvement in High Performing Secondary Schools in Malaysia

Faktor Kejayaan Kritikal Untuk Penambahbaikan Sekolah Di Sekolah Berprestasi Tinggi Di Malaysia

Umar Bin Man

Email: umarman@ymail.com

ABSTRACT

The aim of this study is to identify the critical success factors (CSF) in school improvement related to the principals' efforts, challenges and difficulties faced. Literature review shows two models commonly observed in the process of school improvement: (a) the top-down, and (b) the bottom-up models. However there are missing links to explain the differences between these models. The identifying process is designed through a descriptive non-experimental approach, adopting the grounded theory framework. Semi-structure interviews were conducted to gather data. Excellent principals for the interview are selected through 'critical sampling' approach from among all principals. Seven excellent principals have been identified in which one is for the pilot study and the remaining six for the interview. An openended and unstructured interview questionnaire is used. Data acquired is analyzed using the (i) within-case analysis and (ii) cross-case analysis. The approach is through thematic analysis using the three levels of coding process (i) open coding (ii) axial coding and (iii) selective coding. The results have identified a certain number of constructs clustered as critical success factors. Three main factors linked towards school improvement have been identified from the qualitative data collected from a group of high performing secondary school principals in Malaysia: (a) leadership (b) managements and administrations (c) strategic factors. These are shown in a model form named the CSF Model. The outcomes show that the model has empirically proved of its potentials. Specifically in enabling principals to identify the most effective way in their undertakings of school improvement efforts.

Keywords: School improvement, critical success factors, excellent principals, high performing secondary schools.

Introduction

Leading high performing secondary schools (HPS) are very challenging and demanding for principals especially those categorized as excellent principals (EP). Studies by Zuraidah Hanim, Mohd Hasani & Khaliza (2017) as well as by Muhammad Faizal & Saedah, (2014) have shown how these excellent principals faced these challenges through the means of their best practices. As school leaders they need to ensure that these schools are continuously getting better and better year after year. These are in keeping up with the various developments introduced by the policy makers derived from the top (Sufean, 2014). Besides, these excellent principals are also meeting the high expectations by the teachers, students, parents and the various stakeholders at the implementation levels at the bottom (Perera et al., in Harris & Jones, 2016).

All these set their focus and expectations on its all-round outstanding achievements of these HPS. One of the means in meeting these is through continuous school improvement efforts. Muhammad Faizal, et al., (2016), has shown that aspect of these is related to the teachers' continuous professional development (CPD). Zuraidah (2016) and Dima Mazlina@Siti Aishah (2016) highlighted on aspects related to professional learning community (PLC). Harris (2014) has shown how distributed leadership is practiced by school leaders in enhancing their school improvement efforts for high performing schools. The numbers of literature on principalship have also shown that they do make a difference (Harris & Jones, 2016; Rahimah & Simin, 2014; Hargreaves, Boyle & Harris, 2014). Their abilities to face these challenges and demands have been shown through these literatures to be the major contributing factor towards their successes.

Literature review

Conflicting models in school improvement

Literature has shown that that there are two models commonly in practice in most organizations. These are the top-down models and the bottom-up models. Both are adopted by policy makers and implementers in the process of school improvement (Sufean, Alyahmadi & Suriansyah, 2014; Mintzberg, Ahlstrand & Lampel, 1998). These models have strong implications upon the school particularly upon the roles and responsibilities of principals.

The top-down model is commonly termed as centre-periphery (Schon in Blenkin, Edwards, & Kelly, 1992). Those policy makers are at the centre while principals, teachers and students are at the periphery. Thus the various initiatives introduced for school improvement are externally imposed and centrally controlled through the model. For example, the case of the Ministry of Education Malaysia's efforts to

enhance the educational system to a world class standard where a number of initiatives are introduced. These are as part of the government's centralized National Transformational Programme whereby the Ministry introduced the 'rollout of the school improvement programme' (Hussein & Mohammed Sani, 2016; Govt. of Malaysia, 2010). All these initiatives are in the form of interventions to means that these are externally imposed. As a result schools are gearing themselves towards realizing those goals and objectives in a very competitive environment. Their performances and productivities are made to be measured in a more systematic way and are comparable to others.

The bottom-up model is termed as a 'problem-solving model' (Havelock in Blenkin, Edwards, & Kelly, 1992). He stated that it specifically focuses on the process of educational change that favoured most of the educational practitioners. According to Bennis, Benne and Chin, (1992) the model adopts the 'normative-re-educative' strategy for its implementation. They suggested that individuals or members are encouraged to change their normative orientations in attitude, beliefs, values, knowledge, skills, roles and relationships. For a bottom-up model the paradigm has to be in a more interpretive and reflective manners. It is to be derived authentically from the practitioners such as the principals rather than those people at the top or policy makers.

The two models: Shortcomings, issues and problems

In these two models there are certain shortcomings, issues and problems upon the school improvement efforts that have been discovered.

- The specific roles of these principals have not been clearly shown. Importantly on the shortcoming how they undertake the challenges in bringing about the success towards improving their schools.
- The issue that they existed in a polarized or on the opposite end of a continuum. Considering the nature of the work and responsibilities of principals, it has shown that both models have their influencing effects upon them.
- There is no specific indicator to show how these two models strongly influence these principals in their various efforts.

These conflicting situations are the major problems faced in leading their school towards improvement. It challenges their capacities and capabilities as heads of schools towards bringing success.

Thus their successes are mainly due to their abilities to adapt to these situations between the two models. This is the underlying theory to the reasons on the successes of these excellent principals of their respective high performing schools. Undeniably all principals adopt these two models but operate differently and

individually. It is the skills and competencies of these principals that determine how successful they are in their balancing acts between these two models. A theoretical summary of these are as shown in Figure 1.

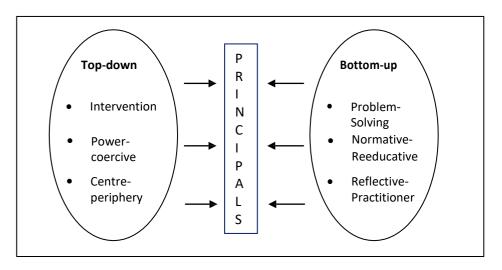


Figure 1: Influences of the two models upon principals

Aim of the study

The main aim of the study is to develop a model that is derived through studies on excellence. These are on the excellent principals and their respective high performing schools. The intentions are to identify those factors that are critical and are important to the success of school improvement efforts. These factors are termed in this study as critical success factors (CSF) and functional factors (FF). It is in the context of adapting to these differing models by the excellent principals of these high performing schools that the study is focusing. It examines how these excellent principals faces to those various challenges and problems in their school improvement efforts discussed within the situations of these two models. The analysis and the interpretation of this information are summarized into findings to form the CSF Model. It mediates between the two conflicting models discussed in earlier section being the top-down model and the bottom-up model. The main outcome of all these efforts through the CSF Model emerged is the new findings. They are aimed to be as a contribution to all principals concerned in their efforts towards bringing about improvements to their schools.

Research question

In the case of the top-down models these principals need to translate these policies into actions. Whereas for the bottom-up model they need the full support of the implementers to carry out those translated actions towards achieving those goals

and aims set by the policy makers. So far there is no study that has yet been discovered within the available literature that provides the empirical explanations needed. Hence, to attain the objective of this study, the main research question of this study is:

What type and content of the model that might emerge through the balancing act by these principals between the top-down model and the bottom-up model?

Methodology

The research design adopts a non-experimental descriptive approach derived from the concept of the grounded theory (Strauss & Corbin, 1990; Glaser & Strauss, 1967). The process is sequenced into exploration-inquiry-results where the keyword for the outcome is *emergent*. The story emerges from the raw data beginning with a broad topic, then use qualitative methods to gather information that defines (or further refines) a research question. The end result of a grounded theory study is to generate some broad themes to form a theory. The theory is mapped out in a form of model and in this study it is called the CSF Model.

The exploration

Findings on the exploration on excellent principals

Exploration starts with review of available documents. All these are acquired directly from the respective departments or offices, their resource centres or libraries and the various publications sold such as books, journals, magazines and many others. Also available are through their respective web sites or portals through the Internet. The main sources are the Ministry of Education Malaysia, the State Education Departments, the District Education Office and the schools. Besides all these are also those available literatures on school improvements.

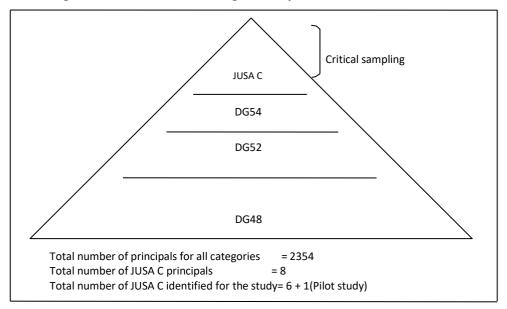
The result of the exploration and review undertaken has defined the roles of principals related to school improvements into three categories. These are the contributing factors towards school improvement as follows:

- Leaderships, specifically the principals have strong influence in the process of school improvement.
- Management and administrative system and practice at the school level under the leadership of the principal.
- Strategies in effectively executing these school improvement efforts.

Through the explorative efforts the study discovered that the total numbers of secondary schools in the mainstream education system at that time are 2,354 schools

(www.moe.gov.my). It has been the norm in the Malaysian educational system, that each of these secondary schools is headed by a principal. Thus there are a total of 2,354 principals altogether (a co-relation to the number of schools) based on the information acquired. According to an informal interview with a senior member from the *Majlis Pengetua Sekolah Malaysia* or commonly called as MPSM (Council of Principals Malaysia), though these numbers are according to the number of schools but there are differences between them. These are mainly because these principals are being categorized into different hierarchy based on their salary scales. Officially these principals are ranked according to their salary scales categorized as DG48, DG52, DG54 and JUSA C (Government of Malaysia, 2016; Government of Malaysia, 2011). Documents from the Ministry have shown that these salary scales stratified them into much smaller groups or clusters thus making them less homogeneous (Government of Malaysia, 2011). Those who started their appointments as principal are placed at DG48 category (being at the lowest level). The most senior principals are those in JUSA C category being the highest.

To arrive at the category of JUSA C they have to climb step-by-step up all these salary scales from the lowest at DG48 to the highest. As a result very few from among these principals are able to achieve and be promoted into this category. Hussein (2012) identified these principals as 'Super Leaders' whose enlightened leadership style takes the model of 'creative and futuristic' orientation (in addition to being among the most experience). In Figure 2 below is shown the structure developed by the study based on the result of these findings. It shows how these principals are categorized according to their salary scales. It is in a simple pyramid form and the development is not based on the exact number of the stratification of these categories of teachers but is generally assumed to be of this form.



Note: The pyramid is not according to specific scale and population

Figure 2: Categories of principals according to their salary scales

During the time for the identification of these excellent principals in the category of JUSA C was undertaken by the study in that year, their total number is only 8 of them altogether. Out of these, 7 of them have been selected. One of them has to be left out due to logistical reason being in the state of Sabah. Thus these are the critical sampling for the study identified. However one of these excellent principals is for the pilot study. Thus these remaining 6 excellent principals are the representatives for the rest of the principals in the secondary schools in the country. These are samples in the study and are homogeneous. They are equally balanced in terms of gender being three males and three females. Also their schools' locations where they served are well spread out in peninsular Malaysia. Two of them are in the Northern Zone, two in the Central Zone and two in the Southern Zone. Each of them has been in the school system between 33 to 35 years of service. A summary of data on these excellent principals are as in Table 1 below.

 Table 1:
 Summary of data on working experiences of excellent principals

No.	Informants (Category JUSA C)	Gender	Years of working experience in education	Number of schools served as principals	Other positions or duties held in education
1.	Principal A	Male	35+ years	4 schools (where 3 are fully residential schools)	Assistant District Education Officer & teacher in 2 schools
2.	Principal B	Male	34+ years	3 schools (where 2 are fully residential schools)	Senior Assistant, Head of Department & teacher in 3 schools
3.	Principal C	Female	33+ years	4 schools (where 2 are fully residential schools)	Lecturer in a Teacher Training Institute & teacher in 3 schools
4.	Principal D	Female	34+ years	2 schools (where 1 is a fully residential school)	Senior Assistant in 4 schools & teacher
5.	Principal E	Female	35+ years	3 schools (non- residential)	Senior Assistant in 2 schools, Afternoon Supervisor in 1 school & teacher in 2 schools
6.	Principal F	Male	34+ years	1 schools (fully residential)	Senior Assistant in 1 school. Officer in the Ministry & as a teacher in 2 schools.

Findings on the exploration of high performing schools

For the high performing schools when the field-study was undertaken, the total numbers are 6, identified from among the rest of the country's mainstream secondary schools. The number correlate to the 6 excellent principals selected who are in the salary scale categorized as JUSA C and are the principals of these 6 high performing schools. For a school to be awarded the status as high performing schools there are three screening processes that these schools have to undergo (Ministry of Education Malaysia, 2010). These are:

- First screening: School is in band (1). For the secondary school must get a composite score of at least 90 percent (%) based on Recognition Nomination Form which must be filled (HPS BPP-SBT form). Composite score is a 70% average grade school (AGS) and 30% of Malaysian Education Quality Standard (SQEM). Schools will be listed according to the composite score and scores in the HPS BPP-SBT form.
- Second screening: The Ministry will select the eligible school from the band of
 (1) to be evaluated and verified using Malaysian Education Quality Standard
 (SQEM) instruments and by the Inspectorate and Quality Assurance (IQA).
 Evaluations are on five characteristics of school excellence and superiority of
 eminent personalities, awards received, networking, networking and
 benchmarking.
- Third screening: Schools that have been verified by Inspectorate and Quality Assurance (IQA) are sorted by their rating scores. Only schools that receive a score of at least 90% in ratings have been verified by Inspectorate and Quality Assurance (IQA) be taken into account. The selection committee will choose the school that is recognized as eligible for high performing schools.

A summary of data on these schools are as follows in Table 2 below.

Table 2: Summary of data on identified high performing schools

Background	High performing schools						
Information	A	В	C	D	E	F	
Location	Town	Town	Town	Town	City	Town	
Co-education/	Co-	Co-	Co-	Co-	Girls Only	Royc Only	
Boys/Girls	education	education	education	education	Giris Only	Boys Only	
Students' Enrolment	800+	600+	700+	700+	700+	650+	
Classes	Form1-5	Form1-5	Form1-5	Form1-5	Form1-5	Form1- 5 IBDP	
Curriculum IBDP	KBSM	KBSM	KBSM	KBSM	KBSM	KBSM IBMYP	
Residential / Non- residential	Residentia l	Residential	Residential	Residential	Non- residential	Residential & SGE	
Year Awarded HPS Status	Cohort 5 2014	Cohort 3 2012	Cohort 2 2011	Cohort 1 2010	Cohort 1 2010	Cohort 1 2010	

Note:

KBSM=New Integrated Secondary Schools Curriculum.

IBMYP= International Baccalaureate Middle Year Programme.

IBDP= International Baccalaureate Diploma Programme.

The research framework developed

The research framework developed, following those findings arrived through the 6 excellent principals interviewed is shown in Figure 3.

The inquiry

The main part of the inquiry is the interview. It is a way of inquiring for the various forms of information directly from the source for detailed understanding on the phenomena being studied (Noraini, 2013; Cohen, Manion & Morrison, 2001; Arksey & Knight, 1999). An in-depth approach is adopted termed as qualitative interviewing (Yin, 2011). The main objectives of the inquiry through these excellent principals are to gain insights into their perceptions related to their personal experience and involvements on school improvement. In applying the qualitative strategy for the inquiry it has been an accepted practice that the number of sample is small. It is limited to a specific individuals or group and is sufficient to be based on certain homogeneity identified as 'critical sampling'. These are considered as purposeful sampling by being 'information-rich' in its character (Sandelowski, 1995).

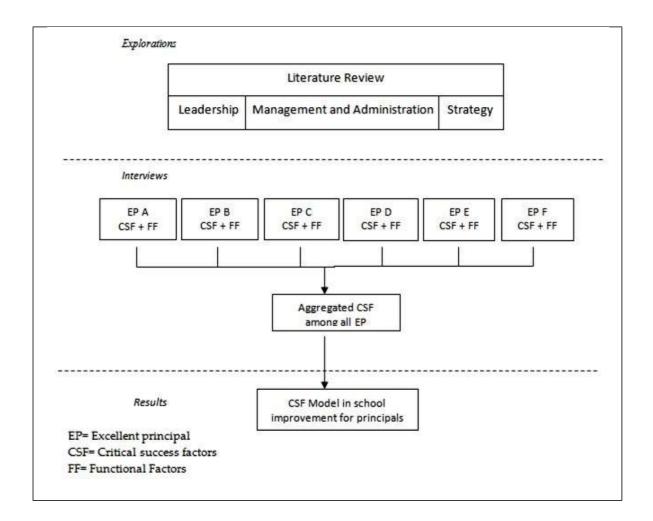


Figure 3: The research framework

The pilot study

Prior to the formal data collection process a pilot study was conducted. It was upon an excellent principal in similar category of salary scale being JUSA C of a fully residential school categorized as high performing school but is not among those listed in the 6 excellent principals in the study. Based on the outcomes of the pilot study a number of corrective actions are undertaken for further improvements. The final outcome is referred back to the respondents to cross-check for any misconceptions or other unintentional mistakes.

The main data collection process: The interviews

The formal interviews are carried out after the outcome of the analysis on the pilot study undertaken. The approach is that of non-structured interview procedure in which in this study it is preferred to be termed as 'qualitative interviewing' (Yin, 2011). Though it is non-structured but the interview is within certain framework mainly on core questions such as:

Question: In your experience, how do you undertake the process of improving your school?

<u>Question:</u> As principal of the school, how do you implement those policies directed from the top at the school level?

<u>Question:</u> What are some of the responses from among the teachers when those policies are introduced and implemented?

All interviews are on 'person to person' basis assisted by a research assistant to take notes and to record the discussion using an electronic tape-recorder. Upon completion of the interviews, all these two-way interactive discussions recorded are transcribed into texts using the computer. These texts are then printed out to facilitate the process of analysis. Prior to the analysis these prepared texts are sent to the respective excellent principals for their comments and confirmation. Further discussions with these excellent principals are usually through phones or the emails. At the end of all these processes the final texts are then keyed-in into the computer system for analysis.

Data display for analysis of interview:

Those transcribed text are data that is displayed for the process of analysis. The initial process of analysis begins with the data reduction and the coding process (Miles, Huberman & Saldana, 2014; Miles & Huberman, 1994). The lengthy textual form of data displayed has to be reduced to be within its manageable form and be of relevance to the study. These are done through editing and removing those unwanted texts that are irrelevant or out of the scope of the study. All these are done manually mainly to get a better feeling of the process. The following step is the coding. Coding is the process of reviewing notes and discovering common 'themes'. Whereas for themes describe the patterns or phenomena as results (Ryan & Bernard, 2013).

Data display through open coding

All these transcribed texts are read thoroughly where checking and counter checking are done to ensure of its accuracy and exactness between the audio and the textual forms. As these checking are in progress the process of noting or highlighting those important points (usually is termed as 'memoing') are done. It is the separation of that abundance of data between those that are very useful and those that are less useful or unrelated. The outcomes of these are collections of main points in the form of descriptors that are found to be closely related to the study. These are paraphrases and are termed as elements. These main points or elements are shaded and underlined using coloured highlighter for easy tracking in the later sorting process.

Data display through axial coding

The following step is the reduction of these paraphrases or elements into themes. These are merging of all these elements which have certain similarities into common categories as themes. It reduced those 'wider or general aspects of points of interest' into its specific and more systematically organized statements. These are in preparation for the following analysis of data. An example is the coding process done for one of the excellent principal interviewed being that of excellent principal F as shown in Table 3.

Table 3: An example of coding from interview texts into themes for excellent principal F

Factors	Themes identified	Codes
Leadership	Knowing you leadership style through theories	FL1
	Flexible	FL2
	Democracy	FL3
	Spiritual	FL4
	Love the job	FL5
	Avoid insulting	FL6
	Less talk, more action	FL7
	Communication skill	FL8
	Sincere and not demanding	FL9
	Motivation	FL10
	Know people	FL11

Note: Short forms used in coding: F=EP F; L=Leadership.

Numbers are sequencing of these themes e.g. FL1 is to mean that it is EP F on the first theme discovered and listed in cluster related to leadership factor.

Data display through selective coding

Selective coding is during the cross-case data analysis. It refers to the process based on the results of the accumulated interviews made upon these 6 excellent principals derived through the axial coding. All these results from the respective excellent principals are selected and are clustered for their similarities based on the themes identified. The clustering of these is done after the cross-case analysis has been completed. With reference to this study the process is termed as aggregation. It refers to the merging all these common themes into their similarities of meaning termed as constructs. Construct summarizes all similarities through the findings into certain category. This is to mean that constructs are the general factors that have yet to be clustered either into CSF (critical success factors) or FF (functional factors). Those clustered as critical success factors are regarded as the most critical factors towards the school improvement efforts undertaken by the school

principals. However there are those that are only applicable or have similarities to one or two excellent principals only when aggregated. These are clustered as functional factors. This is to mean that these are applicable only to one or two excellent principals but could not be generalized to all the rest of the 6 excellent principals. An example is shown in Table 4 below. It is the clustering of all statements from all the excellent principals having similar meaning under the leadership factor using colour coding.

Table 4: Example of themes compiled from among 6 excellent principals (EP) using colour codes

	Factors	Themes	EP	EP	EP	EP	EP	EP
			A	В	C	D	E	F
1	Leadership	- Good relationship with	AL8					
	-	teachers						
		- Humanistic approach in						
		leadership		BL3				
		- Don't offend others as						
		leaders						
		- Leading to success			CL4			
		- Positive thinking as leaders						
		-Knowing your leadership						
		styles through theories				DL4		
		-						
							EL3	

FL1

Source: Developed by the researcher.

EP A EP B EP C EP D EP E EP F

Note: Interview text statements from the respective excellent principal are in colour for convenience of selection of themes. Colours are according to respective excellent principal i.e. EP

Analysis of these displayed data

There are two categories in the method for the analysis. These are:

- Within-case data analysis.
- Cross-case data analysis.

In Miles, Huberman, & Saldana (2014) and Miles and Huberman (1994), provides some basic examples of how these two forms of data can be undertaken for the analysis. In both of these sources the interview data is in the form of texts. Analyses

of these texts are approached through identification of themes and other numerous quotations that are linked to the process of school improvements.

Results

Results of within-case data analysis

Within-case data analysis is an approach towards analyzing data acquired from a particular principal. According to Miles, Huberman & Saldana (2014) it is an inclusive explanatory analysis of a single case data in helping to see a certain aspects from among the various informants in depth. These are the step-by-step individual analysis of data on the respective excellent principal. It goes from one excellent principal and progressed to the next until all data on the rest of these 6 excellent principals are analyzed. Thus analysis is within this individual excellent principal in interpreting their perceptions on what are those critical success factors and functional factors in their view on school improvements. The approach undertaken for the discussion on the results of data analysis on interviews is according to the respective sections as follows:

- Interview for excellent principal A is for high performing school A
- Interview for excellent principal B is for high performing school B
- Interview for excellent principal C is for high performing school C
- Interview for excellent principal D is for high performing school D
- Interview for excellent principal E is for high performing school E
- Interview for excellent principal F is for high performing school F

The results are in the form of summaries of the thematic analysis. These are the paraphrasing and condensation of various salient points or descriptors identified in the transcribed texts. These are the various interpretations derived from the respective excellent principal. The results of the analysis of all themes identified are clustered under three main factors. These are namely (i) leadership (ii) management and administration (iii) strategy. These shall be discussed further through the results of the cross-case data analysis

Results of cross-case data analysis

Cross-case data analysis is a synthesis of all those findings through the within-case analysis upon all the 6 excellent principals interviewed. It is the aggregation of all those constructs perceived by the respective excellent principal through the clustering process. These constructs are the eventual and final factors identified. A summary of all those constructs identified through all the 6 excellent principals and their aggregation are shown in the respective tables below. The process is made simpler through the use of Microsoft Excel software. The figure shows of the

clustering of the various themes identified through interviews into constructs. The following are the results arrived through the analysis shown in table form. The process towards arriving at the results is by paraphrasing all those themes from the respective excellent principal according to their similarities in interpretive meanings. For example, for construct on 'personal attribute' are derived from 5 excellent principal which have almost similar interpretations. All these are shown by the 5 different colors in Table 5. So are for the rest of the respective themes identified. The same process applies to other tables shown below.

The outcome of the cross-case data analysis is the clustering of these themes into 2 categories. These are (i) critical success factors category (ii) functional factors category. The method in clustering these constructs into the 2 respective categories is through counting the number of similarities during the aggregation process. The cutoff number of similarities is between 2 and 3. Those constructs having more than 3 similarities are clustered into the critical success factors category. Those with 1 or 2 similarities are clustered into the functional factors category. Since there are 6 excellent principals in the critical sampling thus 3 similarities is considered 50% of the 6 EP and is thus categorized into critical success factors and those that are less is categorized into functional factors. Thus all the results of all these categorizing are as shown in the following tables from Table 5, Table 6, Table 7 and Table 8.

Results of findings on cross-case data analysis clustered under the leadership factor.

Those categorized as critical success factors:

- Personal attributes
- Appropriate approaches to those concerned
- Good rapport with others
- Be highly motivated
- Very knowledgeable and professional

Those categorized as functional factors:

- Dedication
- Firmness
- Good work Culture
- Self-evaluation
- Discussion
- Religion

Religion Discussion Self Evaluation Good Work Culture Principal Firmness A Leadership ■ B Dedication C Knowledge D Motivation F Approach (humanistic/spiritual/adaptable) Good relationship / rapport Personal attributes

Table 5: Results of aggregation of themes into constructs among all the 6 excellent principals for leadership factor

Results of findings on cross-case data analysis clustered under management and administration factor:

2

8

10

12 14

16 18

Those categorized as critical success factors:

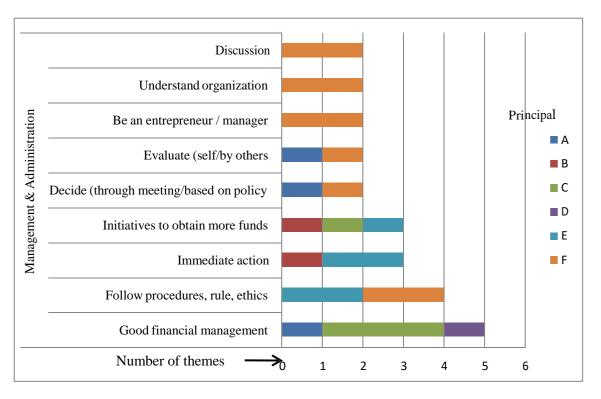
Number of themes

- Effective management of resources
- Adhering to rules and regulations
- Quick or fast in taking actions
- Personal initiatives for funds

Those categorized as functional factors:

- Decide (through meeting/based on policy)
- Evaluate (self/by others)
- Be an entrepreneur/manager
- Understand organization
- Discussion

Table 6: Results of aggregation of themes into constructs among all the 6 excellent principals for management and administration factor



Results of findings on cross-case data analysis clustered under strategy:

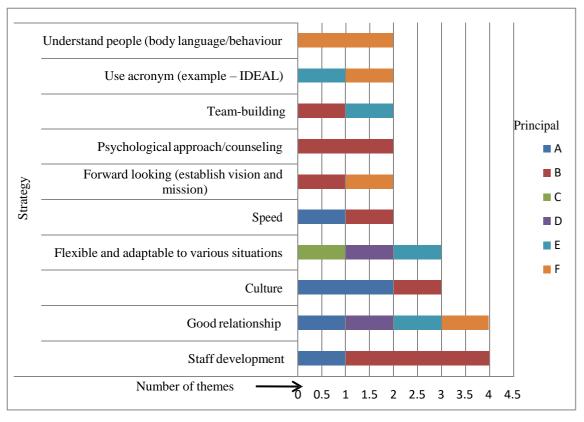
Those categorized as critical success factors:

- Regular staff developments programmes
- Continuously liaise with agencies or organization concerned towards cooperation and collaboration
- Establish positive work culture
- Being flexible and understandings

Those categorized as functional factors:

- Speed in actions
- Forward looking (establish vision & mission)
- Psychological approach/counseling
- Team-building
- Use acronym (example- IDEAL)
- Understand people (body language/behavior)

Table 7: Results of aggregation of themes into constructs among all the 6 excellent principals for strategic factor



Summary of findings on cross-case data analysis

Those critical success factors identified are:

1. Leadership factor

- Personal qualities
- Good rapport
- Positive way in approaches
- Motivational
- Knowledgeable

2. Management and administration factor

- Effective resource management
- Adhering to rules and regulations
- Prompt and timeliness
- Maximum efforts and initiatives

3. Strategy factor

- Maximize staff developments
- Cooperation, collaboration and liaison
- Positive work culture and environment
- Flexible and understanding

Those functional factors identified are:

1. Leadership factor

- Dedication
- Firmness
- Good work Culture
- Self-evaluation
- Discussion
- Religion

2. Management and administration factor

- Decide (through meeting/based on policy)
- Evaluate (self/by others)
- Be an entrepreneur/manager
- Understand organization
- Discussion

3. Strategy factor

- Speed in actions
- Forward looking (establish vision & mission)
- Psychological approach/counseling
- Team-building
- Use acronym (example- IDEAL)
- Understand people (body language/behavior)

