

Developing and Validating a Survey Instrument for Measuring Values-Based Leadership Practice among School Leaders

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Abstract: This article reports on the processes and procedures employed to develop a validated questionnaire as an instrument to measure the practice of values-based leadership (VBL) among the school leaders. It was decided that a specially tailored instrument to relevantly measure the practice of VBL among the school leaders in the country needed to be developed although there were existing instruments available. The development of this instrument was based on the management and leadership context of the country. The study objectives were to identify questionnaire items based on specified domains and to assess the reliability of all the items. Content validity, face validity and construct validity have been considered for the study. Based on the literature, there were four main values regarded as the domains for the instrument development namely, Basic Values, Moral Values, Social and Political Values, and Professional Values. The sub-values were then identified and put under each relevant domain. Next, eight demographic items, 84 questionnaire statement items using Likert Scale and one open-ended question were identified. A pre-test was carried out and followed by piloting the questionnaire after some modifications. Based on the Exploratory Factor Analysis (EFA) using the Principal Component Analysis (PCA) method, the study managed to finalize 45 self-assessment statement items that could be used to measure the practice of VBL among the school leaders of the country.

Key words: *Leadership, Values-based Leadership, School Leaders, Questionnaire Development*

INTRODUCTION

The practice of values-based leadership (VBL) is regarded as an important approach in sustaining a good governance of an organization. [1] claimed that lack of values and ethics and loss of integrity in the management practices contributed to the failure of an organization. This is because leaders who practice VBL usually strive to do the right things for the right reasons based on their belief values that they instill in their organizations [3, 4]. Tom Peters who is a renowned author and expert in management claimed that the main role as a leader is to manage the organizational values [10]. Steve Jobs also stressed on the importance to manage values to ensure organizational success [4]. In the educational leadership context, a study by [7] proved that there was a relationship between school performance and the practice of VBL by their leaders.

It is felt that VBL needs to be emphasized and practised accordingly among the school leaders

in the country. This would help realize one of the government's education aspiration in which to have high performing school leaders in every school as stated in the long term planning for the nation-wide school system known as Education Blueprint [8]. Due to this, a clear understanding of VBL practices among the school leaders needs to be acquired first before implementing further initiatives. This requires a suitable instrument that could at least provide a general overview of the actual VBL practices among them. The instrument should be based on the leadership and management context of the country as well as the the people's background in the country who are multiracial and multi-religions.

Background of the study:

Based on the importance of VBL practices among the school leaders, a focused and in-depth study needs to be carried out to get a good understanding on the extent of practice. It is targeted

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that findings from future studies could serve as a basis in implementing and strengthening aspects of VBL practices. Sources of literature regarding theories, related VBL models and instruments were reviewed and analysed. It was decided that an instrument based on the education context of the country should be developed.

Statement of the problem:

There were studies on various aspects of VBL by many researchers from other countries including in the field of leadership and management. These studies used self-developed instruments as well as adapted ones. The available instruments from other countries were understandably developed according to general and specific needs of the researchers' countries. This meant that not all aspects or elements of the instruments were relevant and suitable. In addition, there was a lack of literature sources on VBL in the country especially in the field of school leadership and management. This also meant that it was difficult to get a suitable instrument from the country.

Rationale of the study:

It can be said that VBL is regarded to be of the vital element in leading a successful organization. This is especially true for school leaders who involve directly in instilling good values to the students. It is timely that VBL to be the main agenda in the initiatives to produce high performance school leaders in schools all over the country. Therefore, it is relevant to get a clear understanding first on how far VBL is being practised by the school leaders at present. A suitable instrument to measure the VBL practices was required and this study attempted to realize that. The questionnaire instrument to measure VBL practices was developed specifically for school leaders in the country. This was because there existed different aspects in the practice of educational leadership and management of the country compared to others especially those in the western countries. Therefore, the development of this instrument could cater the needs and requirements of stakeholders in the country's education system.

Objectives of the study:

The study aimed to develop an instrument that could really measure the extent of VBL among the school leaders. To fulfill that purpose, two main objectives were identified:

1. To identify questionnaire items based on specified domains.
2. To assess the reliability and validity of all the identified items.

Significance of the study:

The instrument was regarded as important because it would enable to measure the levels of VBL practised by the school leaders in the country because it was developed based on the context of education system of the country. Its theoretical and conceptual framework was developed based on a combination of the needs of the country, its education system, the educational leadership aspects and the leadership field in general. The instrument would help the stakeholders in implementing efforts or initiatives on emphasizing the practice of VBL by the school leaders. The validated questionnaire could also be another source of instrument that could be used by other researchers.

LITERATURE REVIEW

Value is simply referred to what is good, right and appropriate [9]. According to [12], value was based on someone's belief that guided their leadership practices. [9] asserted that besides belief, the values held were influenced by interactions with family members, community, education, present living and work experience. The VBL therefore can be referred to leaders who hold their belief values tightly by doing the right things for the right reasons and instill the values in their organizations [3, 4].

The concept of VBL is based on the philosophy who we are and how we act, not what power that we have [13]. According to [14], VBL served as a complement to the present leadership initiatives, not as an alternative approach. Moreover, the VBL framework was actually related to theories of Servant Leadership, Authentic Transformation Leadership, Authentic Leadership and Ethical Leadership [3].

There were sources of literature that emphasized why VBL should be practised. Some of them were from [3, 4, 7, 13, 14]. Among its importance were:

1. An action was actually influenced by the values people held therefore, leaders should clearly know and understand what their values were.
2. An act done by leaders could affect their organizations' values therefore, leaders should ensure what values to be instilled in the organizations.
3. Leaders who practised VBL were able to produce successful organizations as results of skillful and efficient employees who had leadership abilities.
4. Leaders who practised VBL were able to gain high trust from their employees and customers.
5. Decisions and actions made based on values were the best method especially in complicated and uncertain situations.

Moreover, studies have proved that relationships existed between school leaders' performance and VBL practice. Some of the findings were good school leaders respected and cared for others. They valued happiness for themselves and other people. They also had a high level of integrity and morality [7].

In regards to literature on instrument development, it is important that a questionnaire to consider its validity and reliability aspects [5]. This referred to the content, face and construct validity of the instrument as well as to ensure the items measured correctly and relevantly. [5] outlined six-step procedure to ensure the instrument validity and reliability aspects. These were:

1. Preparing a conceptual framework and study design.
2. Drafting questionnaire items.
3. Testing the instrument.
4. Reviewing.
5. Collecting data
6. Doing observation and evaluation

Furthermore, an Exploratory Factor Analysis (EFA) could be used to construct validate questionnaire items. This could be done using the Principal Component Analysis (PCA) method based on the EFA. According to [2], PCA analysis was done for:

1. extracting important information from a set of data.
2. reducing the number of items and retaining a set of important items.
3. summarizing the description of the data set.
4. analyzing the observation structure and variables.

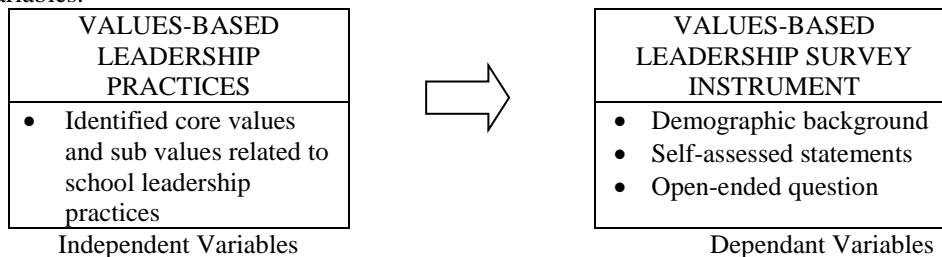


Figure 1: The Conceptual Framework of the Study

Based on Figure 1, a survey instrument would be developed that contained three main parts. Relevant demographic items, self-assessed statement items and an open-ended question would be identified to measure the extent of VBL practices among the school leaders. These instrument items would be depending on the

identified core values and sub values in the context of school leadership practices.

THEORETICAL FRAMEWORK

The theoretical framework of the study was based on [1, 6, 7, 9]. [1] proposed a model based on Islam religion that contained sets of values to be upheld by leaders. He developed an 'Islamic VBM (Value Based Management Score)' to assess VBM practices that were based on ensuring the welfare and protection of all stakeholders. [6] outlined the core values and sub values that should be practised by all government servants of the country. There were six core values and ethics provided namely, Basic Personal Values, Customer-Oriented Values, Leadership Values, Professional Values, Productivity/Quality Values and Religious Values. [7] suggested four core values and sub values that should be practised by school leaders. These values were Basic Values, Professional Values, Moral Values and, Social and Political Values. [9] discussed the types of values and the importance of understanding and upholding own personal values. They mentioned the three levels of values namely low values, middle values and high values. Leaders should possess high values and at the same time, ensure that their low and middle values were strong. Guidelines on how to develop personal values were also provided by [9].

CONCEPTUAL FRAMEWORK

The following figure shows the conceptual framework of the study:

METHODOLOGY

There were four main phases involved in the study. Prior to that, a detailed review of literature focusing on VBL theories, models and instruments was carried out. Then, a theoretical framework for the study was developed that consisted of four main values as domains and 28 sub-values of VBL. The phases involved two major tasks to complete which were developing and validating. The figure below gives an overview of the study framework:

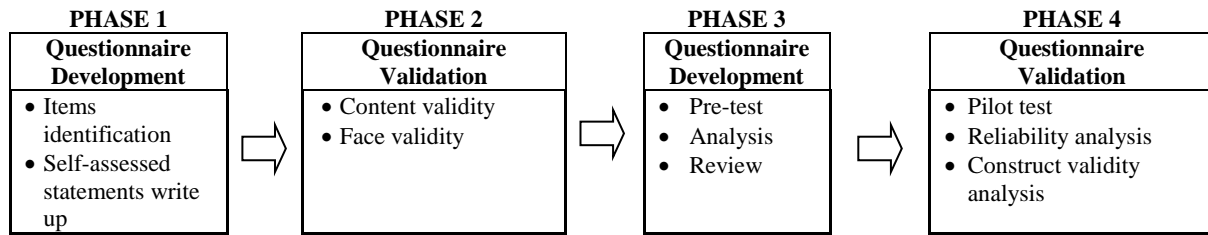


Figure 1: Framework of the Procedures of the Study

Based on Figure 1, the study involved four phases. The questionnaire development process started with identifying related items and drafting the statements after identifying the theoretical framework of VBL. The Experts' views and opinions on content and face validity were considered after completing the first draft of the instrument. The instrument was then pre-tested, analysed and reviewed for some modifications. The final phase of the study was testing the improved instrument for reliability and construct analyses.

Study Design:

The design of the study was based on achieving the two objectives to ensure the completion of the instrument. It was decided that the study employed qualitative and quantitative approaches. The qualitative approach used was the process of identifying relevant values of VBL. This involved analysing literature sources and categorized them into themes. After finalizing the the main values and sub-values, self-assessed statements were drafted. A checklist was used to achieve this purpose. This process conformed with

a suggestion by [10] that stated questionnaire items were designed after identifying indicators and variables and defining related components. The qualitative approach was also used in improving the instrument after the pre-test procedures.

The quantitative approach used was the process of validating the pilot test data. The data was analysed using the SPSS analytical software. Cronbach's Alpha reliability test was used to measure the reliability of the items. Principal Component Analysis (PCA) method based on Exploratory Factor Analysis (EFA) was employed to identify the most relevant items.

RESULTS

The VBL Framework

Based on the literature review analysis, focus group and expert opinion findings, the study identified four core values and 29 sub values that should be practised by school leaders. The four core values were based on suggestion by [7] and the sub values were based on [1, 6, 7, 9].

Table1:

Identified core values and sub-values for VBL School Leaders

BASIC VALUES	PROFESSIONAL VALUES	MORAL VALUES	SOCIAL AND POLITICAL VALUES
<ul style="list-style-type: none"> • Survival • Freedom • Happiness 	<ul style="list-style-type: none"> • Responsibility • Effects on students • Efficiency • Effectiveness • Continuous improvement • Integrity • Knowledge • Creativity • Inovative • Neutrality • Accountability 	<ul style="list-style-type: none"> • Fairness • Concerned • Courage • Honesty • Trustworthy • Hardworking • Humility 	<ul style="list-style-type: none"> • Participation • Sharing • Loyalty • Obedience • Equitability • Transparency • Openness

From Table 1, Basic Values consisted of three sub-values, 12 sub-values for Professional Values, seven sub-values for Moral Values and seven sub-values for Social and Political Values. It

was recommended that school leaders to practice VBL based on these values. These values were a combination of the concept of Islamic religious leadership values by [1], ethics and values

guidelines for civil service employees [6], concept of educational leadership by [7] and broader-based VBL practices by [9]. All these have been accounted for due to the fact that the country consisted of multiracial and multi-religion society where Islam is the religion of the country and other religions are to be practised freely.

The survey instrument

The questionnaire items were drafted and validated after identifying all the core values and sub values. After that, the survey instrument was tested. The instrument was distributed to 130 school leaders from most of the states in the country. The study managed to get back 100 questionnaire forms and after screening, all the forms were used to be analyzed. The respondents comprised 31 percent Principals of secondary schools and 69 percent Headmasters of primary schools. It was found that 66 percent of the respondents were male and 34 percent female. In terms of school location, analysis found that 57 percent were from urban areas and 42 percent rural areas. It was also discovered that 50 percent of them had more than five years experience

as school heads while the rest of them were below five years.

The first draft of the questionnaire managed to identify eight demographic items, 84 self-assessed statements meant to measure the VBL practices and one open-ended question. The 84 self-assessed statements were derived from the 28 values categorized under each of the four domains. There were three statements related to each of the values. Altogether, the first draft of the questionnaire consisted of nine statements for Basic Values, 33 statements for Professional Values, 21 statements for Moral Values and 21 statements for Social and Political Values. The statement items were not divided specifically into the four value domains but combined as a whole in the questionnaire. A five-point Likert scale was used for the respondents to evaluate the frequency of their own VBL practices. The frequency indicators were ‘Never’ (1), ‘Seldom’ (2), ‘Rarely’ (3), ‘Most of the time’ (4) and ‘Always’ (5). The following table shows an excerpt of the self-assessed statements:

Table 2:
Sample of the self-assessed statement items.

No.	Items	1	2	3	4	5
1	Implementing change management when new policies introduced.					
2	Let staff members give their opinions freely.					
3	Let staff members do things that they feel beneficial.					
4	Let staff members decide any approach that they feel appropriate to improve students’ achievement.					
5	Do things that make staff members happy.					
6	Appreciate staff members.					
7	Consider staff members’ feeling before taking action of punishment.					
8	Observing teachers’ teaching in the classroom.					
9	Completing all given tasks.					
10	Completing tasks within time.					

Table 2 shows the first ten items of the 84 self-assessed statements. Items 1 to 7 were meant to assess the Basic Values practices and items 8 to 10 were meant to assess the Professional Values practices.

After carrying out the reliability and validity tests, the questionnaire items were reviewed and modified. The eight demographic items were retained with some re-arrangement due to comments and suggestions given. The 84 self-assessed statements were reduced to only 45 self-

assessed statements after carrying out construct validity procedures. Further analysis confirmed that the chosen statements represented all the four core

values and each sub-values had at least one related statement. There were seven items associated with Basic Values, 17 items for Professional Values, nine items for Moral Values and 12 items for Social and Political Values. The open ended question was retained.

Items Reliability and Validity:

The Cronbach’s Alpha analysis indicated that the score for all the items was 0.97. Analysis based on the four domains of the core values was also done to test their reliability. It was discovered that the Cronbach’s Alpha for Basic Values was 0.78, Professional Values was 0.94, Moral Values was 0.85 and Social and Political Values was 0.90.

It can be said that the overall items and constructs showed excellent, good and acceptable scores.

The instrument was validated using the PCA method. After carrying out the EFA, there were 45 self-assessed statements decided to be retained out of 84 items. The decision was made based on KMO (Kaiser-Meyer-Olkin) eigenvalue dan Scree Plot results from the PCA method. The study decided to retain items that had eigenvalues with at least 0.5 with consideration of their positions at the Scree Plot.

CLOSURE

The study managed to develop a questionnaire instrument meant specifically to measure VBL practices among the school leaders in the country. This derived from the view that VBL should be the core element in developing high performance school leaders. The questionnaire was developed because a more suitable instrument for the school leaders in the country was required to really get a good understanding of their VBL practices.

The development and validation of the questionnaire instrument were carried out by following the recommended processes and procedures to ensure its reliability and validity. The study proved that the instrument had high reliability scores based on the Cronbach's Alpha test for all items as well as the four domains. The instrument was construct validated using the PCA method of EFA. As a final result, the instrument contained eight demographic items, 45 self-assessed statements and an open ended question.

It was understood that the results of the study were based on the pilot test analysis. The instrument required further tests to reconfirm its reliability and validity. This could be done by administering this questionnaire instrument to a larger number of respondents.

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