THE RELATIONSHIP BETWEEN TEACHERS’ COGNITIVE STYLES AND THE LEADERSHIP STYLE THAT THEY PREFER IN A PRINCIPAL

by

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ABSTRACT

It is the intention of this research to study the teachers' cognitive style and the leadership style that they prefer in a principal and then to see if there is any relationship between these two variables.

This study was done on forty percent of trained secondary school teachers from the Miri District of Sarawak. It covers all the thirteen secondary schools in that district and the teachers are stratified, randomly selected to represent the different gender, the two education levels of graduate and non-graduate, the different ethnic groups and the four academic fields of mathematics and science, language, humanities and vocational and technical.

Cognitive style was measured using Harrison and Bramson's (1982) Inquiry Mode Questionnaire (IₙQ) and leadership style preferred was measured using a modified thirty-two items LBDQ-Form XII (Stogdill, 1963; Sergiovanni, 1969).

Data collected was analysed using non-parametric statistics with the help of the computer software, SPSS (Statistical Package for Social Science).

Results of this study show that teachers have equal inclination for the cognitive styles of Idealist, Analyst and Realist but the least preference for the Synthesist style and the second least preference for the Pragmatist style. Generally, teachers like an integrated leadership style of high-people and high-task orientation. However, finer comparison shows that they have higher preference for the people-oriented style.

Demographic characteristics, namely gender, education level, ethnic origin and academic discipline have no influence on teachers' cognitive style as well as the leadership style that they prefer in a principal. There was no significant relationship between teachers' cognitive style and the leadership style that they prefer in a principal.

This study gives some insights into teachers' cognitive style and their preference of leadership style. Knowing and understanding teachers' cognitive style and the leadership style that they prefer will enable a principal to interact with and to influence his or her staff more effectively.
ABSTRAK

Kajian ini bertujuan untuk mengkaji gaya kognitif guru serta gaya kepimpinan yang digemari mereka dan kemudian menentukan sama ada terdapat hubungan di antara dua pembolehubah ini.

Ia dilakukan ke atas empat puluh peratus guru sekolah menengah yang terlatih di Daerah Miri di Sarawak. Mereka meliputi kesemua tiga belas sekolah menengah di daerah itu dan adalah dipilih secara rawak berlapis supaya mewakili kedua-dua jantina, kedua-dua tahap pendidikan, iaitu, siswazah and bukan-siswa, pelbagai kaum dan empat bidang akademik yang terdapat di sekolah menengah.

Gaya kognitif diukur dengan menggunakan instrumen ‘Inquiry Mode Questionnaire’ (I,Q) (Harrison dan Bramson, 1982) dan gaya kepimpinan yang digemari, diukur dengan menggunakan satu instrumen yang mengandungi tiga puluh dua perkara yang diubahsuai daripada LBDQ-XII (Stogdill, 1963; Sergiovanni, 1969).

Data yang dikumpul dianalisis dengan menggunakan statistik bukan-parametrik dan dengan bantuan perisian komputer, SPSS (Statistical Package for Social Science).

Dapatan kajian ini menunjukkan bahawa guru mempunyai kegemaran yang sama terhadap gaya kognitif Idealis, Analis dan Realis dan kurang sekali menggemari gaya Sintesis dan kedua, kurang menggemari gaya Pragmatis. Pada amnya, guru menggemari gaya kepimpinan bersepadu yang mementingkan kedua-dua pertimbangan (manusia) dan tugas. Walau bagaimanapun, perbandingan yang lebih terperinci menunjukkan bahawa tahap kegemaran guru terhadap gaya yang mementingkan pertimbangan adalah lebih tinggi.

Sifat-sifat demografi, iaitu jantina, tahap pendidikan, keturunan dan bidang akademik tidak mempengaruhi gaya kognitif guru ataupun gaya kepimpinan yang digemari mereka. Tiada juga hubungan yang signifikan di antara gaya kognitif guru dan gaya kepimpinan yang digemari mereka.

Kajian ini memberi sedikit celik mata terhadap gaya kognitif guru serta gaya kepimpinan yang digemari mereka. Mengenali dan memahami gaya kognitif guru serta gaya kepimpinan yang digemari mereka akan membolehkan seseorang pengetua berinteraksi dan mempengaruhi stafnya dengan lebih berkesan.
The writer of this report is a teacher who is currently pursuing the Master degree under the sponsorship of the Ministry of Education. She holds a Diploma of Science with Education (Physics) and also a Bachelor of Science with Education (Honours) from the University of Technology, Malaysia.

She has served in three secondary schools in the state of Melaka and Johor and has been teaching Physics, Science and Mathematics. Just prior to her study leave for pursuing this course, she was serving in a Technical Secondary School in Melaka.
DEDICATION

To all Thinking Beings.
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1.0 Introduction

This introductory chapter aims to give the reader an overview of what the whole study is about. It lays out the background of the study, the statement of the problem, the purpose and objectives of the study, the conceptual framework and the statement of hypotheses. It then goes to give the definition of terms used, the significance of the study and its scope and delimitation. It ends with a summary of what is discussed in the chapter.

1.1 Background of the Study

Man is a privileged creature. It is a species specially endowed with the cognitive faculty which enables it to think and to reason. This ability to think and to reason distinguishes it as superior to other species. A person’s cognitive ability develops as he grows and as he gains experiences through life. Through the years he acquires different ways of approaching situations and problems. Some adopt the cool and slow approach while some act quickly and forcefully. Those are reflections of different cognitive styles employed.
In schools, teachers bear the heavy responsibility of educating and developing the young. It is a challenging job which goes beyond just imparting knowledge. Teachers have to help to run the school and manage the students. New situations and problems are diverse and aplenty. Interestingly, despite being subjected to the same conditions, teachers in the same school take their strides differently. They employ different cognitive styles.

Schools are managed by principals who inevitably become the leaders of the schools. To make a school effective, a principal has to constantly get his staff to work with him. In the course of mobilizing his staff to achieve the goals set for the school, he exercises certain leadership styles.

Fiedler (1973) postulated that an individual’s preference of leadership style may be significantly related to his or her overall cognitive style; and an individual’s practice of leadership style is actually a reflection of one’s cognitive style. Consequently, if leadership style reflects an individual’s general cognitive style, then it is inferred that a leader will be more effective when his or her leadership style matches the followers’ cognitive style.

1.2 Statement of the Problem

Undeniably, teachers’ motivation and performance in school are very much affected by the principal’s leadership style, but there never seems to be a best
leadership style which is accepted favourably by all. It has been observed that different teachers in the same school seem to evaluate their principal differently and hence respond to him or her differently. A particular principal may work very well with a certain group of teachers but not with another. Conversely, another principal who manifests an opposite style of leadership, may find himself working very positively with the latter group of teachers but not so positively with the former. Principals and teachers who work well together, seem to see things in the same light. Do they share the same cognitive style?

With this in mind, this study intends to find answers to the following questions:

(i) Do teachers employ different cognitive styles in approaching situations and problems?

(ii) What is the leadership style that teachers prefer in a principal?

(iii) Are teachers' cognitive style influenced by:

(a) their gender?
(b) their education level?
(c) their ethnic origin?
(d) their academic discipline?

(iv) Are teachers' preference for leadership style influenced by:

(a) their gender?
(b) their education level?
(c) their ethnic origin?
(d) their academic discipline?
Are teachers' preference of leadership style in a principal influenced by their cognitive style?

1.3 Purpose of the Study

As it is inferred that one's cognitive style determines the leadership style that one prefers, it is the aim of this study to test its truth. First, it will examine the teachers' cognitive style and the leadership style that they prefer in a principal and then seek to find if there is any significant relationship between these two variables.

1.4 The Objectives

Specifically, the objectives of this study are as follows:

(i) To describe the demographic characteristics of the teachers under study.

(ii) To find out the distributions of respondents

   (a) in the different combinations of cognitive styles.
   (b) in the different combinations of leadership styles preferred.

(iii) To determine if there are any differences in teachers' preference for

   (a) the five cognitive styles.
   (b) the two leadership styles.

(iv) To determine if there are any differences in cognitive styles:

   (a) between male and female teachers.
(b) between graduate and non-graduate teachers.
(c) between teachers of different ethnic groups.
(d) between teachers of different academic disciplines.

(v) To determine if there are any differences in the leadership style preferred:
(a) between male and female teachers.
(b) between graduate and non-graduate teachers.
(c) between teachers of different ethnic groups.
(d) between teachers of different disciplines.

(vi) To determine if there is any relationship between teachers' cognitive style and the leadership style that they prefer in a principal.

1.5 Conceptual Framework

This study seeks to find out if teachers' preference of leadership style is influenced by their cognitive style. Hence teachers' cognitive style is the independent variable and the leadership style preferred is the dependent variable.

Prior to finding the relationship between teachers' cognitive style and the leadership style preferred, this study attempts to find if teachers' cognitive style and the leadership style preferred are influenced by demographic factors, specifically, gender, education level, ethnic origin and academic discipline. Hence, in these cases the demographic factors are the independent variables and the cognitive style and leadership style preferred are the dependent variables.
Figure 1.1 Chart showing Data to be Collected
Figure 1.2 Conceptual Representation of what the Study seeks to Find
Figure 1.1 is a chart showing the data to be collected; it lists out the variables, their attributes and the numerical codes used to represent these attributes. Figure 1.2 gives a picture of what the study seeks to find.

1.6 Statement of Hypotheses

In relation to the objectives of this study and based on the above conceptualized framework, the following hypotheses are formulated:

1.6.1 To determine teachers' preferences

H1: There is no significant difference in teachers' level of inclination for the five cognitive styles.

H2: There is no significant difference in teachers' level of liking for the two leadership styles.

1.6.2 To determine differences in cognitive style

H3: There is no significant difference in cognitive style between male and female teachers.

H4: There is no significant difference in cognitive style between graduate and non-graduate teachers.
**H5:** There is no significant difference in cognitive style between teachers of different ethnic groups.

**H6:** There is no significant difference in cognitive style between teachers of different academic disciplines.

1.6.3 To determine differences in leadership style preferred

**H7:** There is no significant difference in the leadership style preferred between male and female teachers.

**H8:** There is no significant difference in the leadership style preferred between graduate and non-graduate teachers.

**H9:** There is no significant difference in the leadership style preferred between teachers of different ethnic groups.

**H10:** There is no significant difference in the leadership style preferred between teachers of different academic disciplines.

1.6.4 To determine relationship between cognitive style and leadership style preferred

**H11:** There is no significant relationship between teachers’ cognitive style and the leadership style that they prefer in a principal.
1.7 Definition of Terms

The terms used in this study can be categorized into the cognitive styles, the leadership styles preferred and the demographic characteristics. These three categories are described below:

1.7.1 The Cognitive Styles

There are many ways of looking at cognitive style, but this study examines specifically the dimension of how individuals attend to data, assess problems and choose alternatives that Harrison and Bramson (1982) called the thinking styles. They expounded five thinking styles as defined below:

(a) The Synthesist

The synthesist style focuses on essential factors, underlying assumptions and abstract concepts. Synthesists are integrators. They like to discover two or more things that to other people may appear to have little or no relationship and find ways to fit them into a new, creative combination. Synthesists are not particularly interested in compromise, consensus or agreement on the best solution to a problem. What they look for, instead, is some perspective that will produce a best fit solution, linking the seemingly contradictory views.
(b) The Idealist

The idealist style focuses on process, values and aspirations. Idealists are people who like to take a broad view of things. They also tend to be future-oriented and to think about goals, that is, “Where are we going and why?” Attributing to that, idealists are likely to pay attention to the needs of people, to what is good for them. They often think in terms of people or society when trying to solve problems or in making decisions. In other words, they are interested in social values. Their thought processes are receptive. They welcome a diversity of views. When there is a problem to be solved or a decision to be made, they welcome a broad range of views and many alternatives. They then try to assimilate all those views and alternatives and come up with a solution that will have something in it for everyone.

(c) The Pragmatist:

The pragmatist style looks for immediate payoffs and tends to use incremental thinking. The motto of the pragmatist is: "Whatever works." They verify what is true or false in terms of immediate personal experience. This gives them a freedom from consistency that lends itself to experimentation and innovation. Pragmatists excel at finding new ways of doing things with the materials that lie at hand. They tend to approach problems in a piecemeal, incremental fashion, one thing at a time. They are interested in getting things done, in making do and in looking for the shortcut and the quick payoff.
(d) The Analyst

The analyst style considers method and plan, seeks predictability through ordering data and attends to concrete details. Analysts approach problems in a careful, logical, methodical way, paying great attention to details. Planning carefully, they gather as much information as possible before making a decision. Analysts tend to have a theory about almost everything. They analyse and judge things within a broad framework that will help to explain things and arrive at conclusions. Analyst’s thought processes are *prescriptive*. When a problem is presented, the analysts will look for a method, a formula, a procedure or a system that can solve it. Due to their interest in formula and method, analysts like to find the “one best way” to solve a problem.

(e) The Realist

The realist style points to realities and resources and considers variability and immediately apprehensible facts. Realists are *empiricists*, that is, what is “real” to them is what can be felt, smelled, touched, seen, heard, personally observed or experienced. The realist’s motto is, “Facts are facts.” The realist’s thought processes have a *corrective* quality. When realists see something that is wrong, they will want to fix it. They are oriented toward achieving concrete results. Realists want to do things surely, soundly and firmly and to be assured that once something is done it will stay that way.