MODELING OF PRINCIPALS' CHANGE LEADERSHIP COMPETENCIES AND ITS RELATIONSHIP WITH TEACHERS' CHANGE BELIEFS AND TEACHERS' ATTITUDES TOWARD CHANGE

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DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

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ABSTRACT

The main purpose of this study was to develop an empirically substantiated Principal Change Leadership Competency (PCLC) Model. The study also aspired to identify the relationship between PCLC and Teachers' Change Beliefs (TCB), TCB and Teachers' Attitudes toward Change (TATC). Further, the study also intended to ascertain the relationships among PCLC, TCB and TATC. Structural Equation Modeling was applied to test the model. A total of 936 teachers from 47 High Performing Secondary School in Malaysia completed the survey. The analysis yielded a four-factor PCLC Model namely, Goal Framing; Capacity Building; Defusing Resistance and Conflict; and Institutionalizing. The finding shows that PCLC Model will benefit educational practitioners in planning, designing, implementing and evaluating future training and development programs for school principals. Meanwhile, the PCLC Scale, with 12 items, offers a promising new measure for examining PCLC. The result of the study also shows that PCLC is significantly related to TCB; TCB is also significantly related to TATC; and TCB not only mediated the relationship between PCLC and TATC, but indeed a total mediator. As the findings confirmed that the quality of PCLC matters in determining TCB and TATC, it is a *sine qua non* for school principals to equip themselves with adequate and sufficient PCLC so as to implement school change successfully. Also as TCB plays a critical role in governing the relationship between PCLC and TATC, in-depth focus on TCB is the most effective way to increase the likelihood of teachers to embrace change. The findings encourage a fresh look at change leadership development and change management and alter the traditional approach of school principals in managing change.

ABSTRAK

PEMBINAAN MODEL KOMPETENSI KEPIMPINAN PERUBAHAN PENGETUA DAN HUBUNGANNYA DENGAN KEPERCAYAAN PERUBAHAN GURU SERTA SIKAP GURU TERHADAP PERUBAHAN

Tujuan utama kajian ini ialah untuk membangunkan sebuah model Kompetensi Kepimpinan Perubahan Pengetua (KKPP). Kajian ini juga bertujuan mengenal pasti hubungan KKPP dengan Kepercayaan Perubahan Guru (KPG), KPG dengan Sikap Guru Terhadap Perubahan (SGTP) dan seterusnya hubungan antara KKPP, KPG dan SGTP. *Structural Equation Modeling* (SEM) digunakan untuk menguji model. Data dikumpulkan menggunakan soal selidik yang diedarkan kepada 936 orang guru dari 47 Sekolah Menengah Berprestasi Tinggi. Dapatan kajian menghasilkan empat faktor KKPP iaitu Penentuan Matlamat, Pembinaan Keupayaan, Meredakan Rintangan dan Konflik, dan Pembudayaan. Model KKPP memberi manfaat kepada pengamal pendidikan dalam merancang, mereka bentuk, melaksana dan menilai latihan dan program pembangunan bagi pengetua-pengetua sekolah. Sementara itu, 12 item yang mewakili KKPP merupakan instrumen baharu yang berkesan untuk mengukur KKPP. Selain itu, kajian juga mendapati bahawa KKPP mempunyai hubungan signifikan dengan KPG; KPG juga mempunyai hubungan signifikan dengan SGTP; dan KPG bukan sahaja menjadi pengantara hubungan KKPP dan SGTP, malah merupakan pengantara penuh. Implikasi kajian menunjukkan bahawa pengetua sekolah perlu melengkapkan diri dengan KKPP yang sesuai. Selain itu, disebabkan KPG memainkan peranan kritikal antara hubungan KKPP dan SGTP, fokus kepada KPG merupakan pendekatan paling berkesan untuk meningkatkan kebarangkalian guru-guru menerima perubahan. Dapatan kajian turut membuka pandangan baru dalam pembangunan kepimpinan perubahan dan pengurusan perubahan serta mengubah pendekatan tradisional pengetua sekolah dalam mengurus perubahan.

TABLE OF CONTENTS

Page

Page

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

PCLC	Principals' Change Leadership Competencies
TCB	Teachers' Change Beliefs
TATC	Teachers' Attitudes toward Change
PCLCM	Principals' Change Leadership Competency Model
RO	Research Objectives
RQ	Research Questions
PCLCS	Principals' Change Leadership Competency Scale
TCBS	Teachers' Change Beliefs Scale
TATCS	Teachers' Attitudes toward Change Scale
VIS	Visioning
GF	Goal Framing
CB	Capacity Building
CE	Change Execution
INS	Institutionalizing
DIS	Discrepancy
APP	Appropriateness
EFF	Efficacy
PS	Principal Support
VAL	Valence
COG	Cognitive
AFF	Affective
BHV	Behavioral
DRC	Defusing Resistance and Conflict
TE	Teacher Efficacy
PTE	Personal Teacher Efficacy
GTE	General Teacher Efficacy
TPB	Theory Of Planned Behavior
IT	Information Technology
ERP	Enterprise Resource Planning
OCL	Online Collaborative Learning
SEM	Structural Equation Modeling
HPSS	High Performing Secondary School
OCRBS	Organizational Change Recipients' Beliefs Scale
RFOCS	Readiness for Organizational Change Scale
ATCS	Attitudes toward Change Scale
CMISSI	Change Management in Secondary School Instrument
EFA	Exploratory Factor Analysis
PCA	Principal Components Analysis
CFA	Confirmatory Factor Analysis
SIP	School Improvement Program
GPS	Grade Point Average
SQEM	Standard Quality Education Malaysia
DSS	Daily Secondary School
FRSS	Fully Residential Secondary School
RSS	Religious Secondary School

LIST OF ABBREVIATIONS (continued)

ML	Maximum Likelihood
GOF	Goodness of Fit
CFI	Comparative Fix Index
TFI	Tucker-Lewis Fix Index
RMSEA	Root Mean Square Error of Approximation
SFL	Standardized Factor Loadings
SMC	Squared Multiple Correlations
AVE	Average Variance Extracted
CRI	Composite Reliability Index
VIF	Variance Inflation Factor

“It is not the strongest of the species that survives,

nor the most intelligent that survives.

It is the one that is most adaptable to change.”

(Leon Megginson, 1963)

CHAPTER 1

INTRODUCTION

1.1 Overview

Education is an important catalyst which brings change to human civilization. It is a driver for economic growth as well as fundamental to societal equity and harmony. In light of globalization, fueled by the stunning rate of change in the world, today, educational reform has become a top priority for many countries. The global society tends to move to a paradigm shift in creating a more technologically literate, creative and thinking workforce who can learn continuously and work with diversity, locally and internationally. Schools, as the core of education, thus are subject to inescapable internal and external change pressures (Fink, 2003; Goodson, 2001; Hallinger, 2004; Harris, 2006).

However, although schools are faced with the need for continued reforms aiming at school effectiveness and education quality, most education reforms have not been completely successful at any place in the world (Balogun & Hope-Hailey, 2004; Levin, 2001; Ministry of Education Malaysia, 2012). This track record echoed those corporations undergoing major transformation whereby nearly two-thirds of the change efforts falling short of expectations (Beer & Nohria, 2000; Meaney & Pung, 2008). Over the last two decades, there is an array of studies substantiate that the change process is characterized by a variety of 'predictable' obstacles and one of these is the absence of leadership for the change (Drucker, 1999; Fullan, 2007; Hall & Hord, 2001; Kotter & Cohen, 2002; Pettigrew, Woodman & Cameron, 2001).

Indeed, research on education has found that the future effectiveness of all schools depends on the ability of school leaders managing change (Fullan, 2001; Hallinger & Leithwood, 1996). There is widespread belief that schools require effective change leaders if they are to provide the best possible education for students (Bush, 2007). There is also increasing awareness that effective change does not occur in educational organizations unless the school principals initiate the change process competently (Clarke, 2000; Hallinger & Leithwood, 1996; Lakomski, 2001; Oplatka, 2003). Clearly, there is a dire need for effective change leadership in school systems as school change can occur when guided by leadership (Fullan, 2001; Hallinger, 2004; Harris, 2004; Leithwood, Seashore, Anderson, Wahlstrom, 2004).

Nevertheless, the task of leading and executing change effectively requires a multi-dimensional set of competencies. Marcus and Pringle (1995) highlighted competencies as one of the three critical keys to successful change (the other two

being commitment and capability). Successful leaders of change are those ensure that competencies are put in place to involve and transform organizational individuals through the different stages of change (Tizard, 2001). As instructional leaders, school principals are responsible for change strategy, implementation, and monitoring in any change and thus, they need to possess specific change leadership competency (Hyland, 2007).

While the need for developing effective change leadership competency is acknowledged, there is much less certainty about which leadership competencies are most likely to produce favorable outcomes. Current trends indicated that identifying competencies is a valuable piece of the leadership development puzzle (Yamazaki & Kayes, 2004). Knowledge of which competencies significantly influence change success can help school principals to design and lead more effective change efforts. Hence, if principal change leadership is examined from a behavioral construct based on competencies, and focus on the most critical competencies that can be learned, there is little doubt that processes of change leadership development can be fine-tuned for greater efficiency to education change (Tubbs & Schulz, 2006).

On the other hand, numerous studies have revealed that teacher is the single most important factor in the change process (Darling-Hammond, 2000; Fullan, 2001; Hall & Hord, 2001). As the front-line implementers in the change process, teachers are the real source of, and the vehicle for, school change. They are the closest to the students and more aware of the needs of the students in the learning process. Thus, they are expected to play an important role in improving quality in schools by establishing an environment that encourages students to learn better in any school

change. Since changes must ultimately be implemented by school teachers, understanding how teachers perceive, react and adapt to change will provide very practical insights into how to best lead change in schools.

All too often, the main dilemma in any organizational change is whether there is acceptance to change (Hayes, 2010; Kotter, 1999). Resistance to change, the number one reason organization change initiatives fail (Deloitte & Touche, 1996), is always seen as the enemy of change. Indeed, without buy-in from the change recipients change will be 'doomed'. Likewise, although schools are being bombarded by change, as long as teachers, the front-line change implementers in schools, do not buy-in or put change into practice, school reform will be adopted on the surface or even fails.

In fact, resistance to change is closely linked with the development of attitudes toward change. Teachers' attitudes toward change are considered as one major determinant of their intention to embrace or resist change. In this regard, to better understand one's attitudes toward change, we must understand one's change beliefs. In general, a person's attitudes is always link to his or her beliefs which serves as the informational base and influences individuals' interpretations of events, feelings, thoughts and all these permeate choice-making processes which ultimately determine one's attitudes (Ajzen & Fishbein, 1975 & 1980). Simply, beliefs shape ones' attitudes (Pare, Sicotte & Poba-Nzaou, 2010).

As school leaders, in the process of change and to maximize the change efforts, school principals play a vital role in influencing teachers' change beliefs. As we know,

school principals have a strategic role in determining organization's strategies, plans and day-to-day management practices. To develop sound strategies, plans and management practices, they need competencies. And, school principals' competencies influence the choices and decisions they make in determining organizational strategies, plan as well as the management practices. Over time, in turn, these strategies, plans and management practices come to influence teachers' beliefs. Specifically, in the context of change, teachers (i.e. followers) look up to their principal (i.e. leader) as a source of certainty and may thus be more attentive to their decisions and actions (Oreg & Berson, 2011). Being behavioral predisposition, teachers' beliefs influence teachers' attitudes toward change. In other words, in the process of initiate, implement, evaluate and sustain the change through determining strategies, plans, and management practices that correspondent with their competencies, school principals modified, enhanced and shape teachers' change beliefs and ultimately the subsequent attitudes toward change that impact future implementation phases.

In line with the above rationale, it is evident that there is a relationship among principals' change leadership competencies (PCLC), teachers' change beliefs (TCB) and teachers' attitudes toward change (TATC). As can be seen, PCLC is the critical factor which leads teachers to advance change goals whereby leadership influence is exercised through competencies that seek to accomplish functions for the change. Hence, the best way for school principal to fulfill the role as an effective change agent, is by executing a process to influence and instill positive change belief among teachers (Armenakis, Bernerth, Pitts, & Walker, 2007; Piderit, 2000). As TCB links closely with their attitudes toward change, by creating conditions to promote positive change beliefs among teachers will help to harness the purposeful attitudes – teachers'

positive attitudes toward change and the likelihood to turn change goals into reality. In such, school principals need a substantial repertoire of competencies to draw on in order to exercise and exerting their influence.

Creating real change in schools is dynamic. As every school is a unique entity, there is no specific recipe with a list of ingredients, no detailed blueprint with roadmap to pave the way for success. However, Fullan (1993) argued that focusing on people is the most effective way to lead change successfully. Infrastructure and material development do not bring about change, people do. It is only when people within an organization change then the organization will adopt change. In essence, the most potent leverage for significant and sustainable change resides within the human system (Juechter, Caroline, Alford, 1998).

If the premise that people are the key to change is correct, it is of crucial importance to prioritize the continuous development of principal change leadership in the area of effective management of school change. Specifically, in-depth attack on leadership development training interventions that focus on introducing change leadership competencies which can help principals in creating ways and promoting conditions to influence and instil positive TCB. After all, at the centre of effective school change is the successful of principals to gain the heart and minds of the teachers to work through the change process (Duck, 1993). Simply, when teachers demonstrate positive change beliefs, they will work together; they will pull together to make change happen. The present study is one of the ways to examine this proposition and construct the solutions.

1.2 Statement of the Problem

Effective change leadership in school systems is of paramount importance as school change can occur when guided by leadership (Fullan, 2007; Leithwood, et al., 2004). In Malaysia, the need for effective school change is broadly accepted. It is how school principals facilitate and manage the change successfully, that is the real dilemma. In the year of 2009, Institut Aminuddin Baki, National Institute of Educational Management and Leadership, Ministry of Education Malaysia had conducted a need analysis study and the results showed that among the eight high impact competencies identified by school principals, managing change is the most needed competency (M=3.85) (Rosnarizah, Amin & Abdul Razak, 2009). However, although school principals who are in the position to implement change addressed their awkward predicament, yet, this need is not being effectively responded to by the field of education leadership.

Moreover, the Malaysian education system is entering an intensive period of change. To adequately prepare young Malaysians for the needs of the 21st century, a preliminary Blueprint that suggests eleven strategic and operation shifts for the enhancement of the education system over a span of thirteen years was developed in September 2012 (Ministry of Education Malaysia, 2012). Obviously, the envisaged reform is of great complexity in both breadth and depth. In relation to this, unless the school leaders, especially principals are equipped with subsequent competencies and initiate the process competently, if not school reform will fall short of the ambitious aspirations set out in the Blueprint and ultimately fail to live up to the promises.

Undoubtedly, to equip school principals with adequate competencies, we need relevant data and knowledge about which leadership competencies facilitate and promote change in educational settings. Specifically, a reliable and valid model as well as a comprehensive diagnostic instrument to effectively identify and assess critical change leadership competencies, which can help principal gauge improvement in enhancing different stages of school change over time. Unfortunately, model or scale development in the organizational science has been deficient (Boyd, Gove & Hitt, 2005). This is particularly true with respect to organizational change (Lengnick-Hall & Beck, 2005) and specifically in the Malaysian education context.

Meanwhile, changes in classroom practices ultimately require teachers be at the heart of the improvement process (Fullan & Hargeaves, 2000). Studies on school change will be incomplete without studying on teachers, the front-line change implementers in schools. Nevertheless, how teachers perceive, interact and adapt to the change still remains unexplored, particularly in Malaysian education context, especially regarding TCB and TATC. Considering the employees' beliefs and attitudes were among the most significant predictor of successful organizational change (Aslan, Beycioglu, & Konan, 2008; Bouckenooghe, 2009), to examine the relationship between these two variables thus appears to be a meaningful task.

Indeed, attitudes toward change's literature is abundant with studies on personal traits as the potential antecedents such as self-esteem (Wanberg & Banas, 2000), risk tolerance (Judge, Thoresen, Pucik, & Welbourne, 1999), need for achievement (Miller, Johnson, & Grau, 1994), emotional intelligence (Vakola, Tsaousis & Nikolaou, 2004), defense mechanisms (Bovey & Hede, 2001) and locus of

control (Chen & Wang, 2007; Lau & Woodman, 1995), however, relatively few has been conducted in relation to personal beliefs as a strong predictor.

On the other hand, to the best of the researcher's knowledge, most of the studies which have examined the relationship between leadership behaviors and followers' attitudes toward change found that there is a significant relationship between these two variables (e.g., Bommer, Rich & Rubin, 2005; Hartini Ahmad & Hamid Mahmood Gelaidan, 2011; Herold, Fedor & Caldwell, 2007; Kursunoglu & Tanriogen, 2009; Nemanich & Keller, 2007; Oreg & Berson, 2011). However, these studies did not examine directly the intermediating mechanism that link leaders' behaviors to followers' attitudes toward change.

In other words, although one could expect leadership behaviors influence followers' attitudes toward change through their impact on the organizational change-related culture, but the process was not measured directly. Hence, the conclusion drawn by the above researchers might over simplistic as it did not explicate the mechanism or process that underlies an observed relationship between the above two variables. Sensing the gap, the researcher takes the initiative to investigate the relationship among PCLC, TCB and TATC not only because it has been largely ignored by the change management literature, but rather, it emerges as a dire need. Specifically, to ascertain whether the relationship between PCLC and TATC has been mediates by TCB.

Lastly, although there are descriptions of change agents' and change implementers' behaviors paralleling the findings from the literature on change

management, most of the studies have been conducted in Western business and industrial settings, very few in educational settings. Comparatively and, little research has been conducted in Malaysian education context (e.g., Mohd Izham & Noriah Ishak, 2004; Mohd Izham & Norzaini Azman, 2009; Mohd Izham & Sufean Hussin, 2009). Whether the findings derived from Western business and industrial settings can be generalized across Eastern educational territory, is of interest as well to researcher.

1.3 Purpose of the Study

The main purpose of this empirical study was to develop an empirically substantiated Principal Change Leadership Competency Model (PCLCM), and secondly, to develop and validate an instrument to identify change leadership competencies that facilitate change in Malaysian secondary schools. The study also aspired to test the model of TCB and TATC. Besides, the study aimed to identify whether PCLC is significantly related to TCB. A concurrent concern of this study is to ascertain whether TCB is significantly related to TATC. Further, this research intended to ascertain the relationships among PCLC, TCB and TATC.

1.4 Objectives of the Study

Based on the above purposes of the study, six research objectives (RO) were formulated to guide the study. Specifically, the research objectives were as follows:

RO1. To develop and test the model of Principals' Change Leadership Competency.

RO2. To test the model of Teachers' Change Beliefs.

RO3. To test the model of Teachers' Attitudes toward Change.

RO4. To identify whether Principals' Change Leadership Competencies is significantly related to Teachers' Change Beliefs.

RO5. To identify whether Teachers' Change Beliefs is significantly related to Teachers' Attitudes toward Change.

RO6. To identify the relationships among Principals' Change Leadership Competencies, Teachers' Change Beliefs and Teachers' Attitudes toward Change.

1.5 Research Questions

Based on the purposes and objectives of the study, six research questions (RQ) were formed to guide the study. The research questions were as follows:

RQ1. Is the measurement model for Principals' Change Leadership Competency construct-valid?

RQ1.1: Can Principals' Change Leadership Competencies be explained by the following four factors: *Visioning*, *Capacity Building, Change Execution*, *and Institutionalizing?*

RQ1.2: Does each indicator have a nonzero loading on the hypothesized (targeted) factor?

RQ1.3: Does each indicator have a zero loading in the other (non-targeted) factors?

RQ1.4: Are the error terms uncorrelated?

RQ2. Is the measurement model for Teachers' Change Beliefs construct-valid?

RQ2.1: Can Teachers' Change Beliefs be explained by the following five factors: *Discrepancy, Appropriateness, Efficacy, Principal Support and Valence*

RQ2.2: Does each indicator have a nonzero loading on the hypothesized (targeted) factor?

RQ2.3: Does each indicator have a zero loading in the other (non-targeted) factors?

RQ2.4: Are the error terms uncorrelated?

RQ3. Is the measurement model for Teachers' Attitudes toward Change construct-valid?

RQ3.1: Can Teachers' Attitudes toward Change be explained by the following three factors: *Cognitive, Affective and Behavioral*?

RQ3.2: Does each indicator have a nonzero loading on the hypothesized (targeted) factor?

RQ3.3: Does each indicator have a zero loading in the other (non-targeted) factors?

RQ3.4: Are the error terms uncorrelated?

RQ4. Is Principals' Change Leadership Competencies significantly related to Teachers' Change Beliefs?

RQ5. Is Teachers' Change Beliefs significantly related to Teachers' Attitudes toward Change?

RQ6. Do Teachers' Change beliefs mediate the relationship between Principals' Change Leadership Competencies and Teachers' Attitudes toward Change?

1.6 Research Hypotheses

Based on the above research questions, the study derives into six research hypotheses (H) to guide the study. The following were the hypotheses for RQ1-RQ6:

RQ1. Is the measurement model for Principals' Change Leadership Competencies construct-valid?

H1: Principals' Change Leadership Competencies can be explained by the following four factors: *Visioning*, *Capacity Building, Change Execution*, *and Institutionalizing.*

H1a: Each indicator has a nonzero loading on the hypothesized (targeted) factor

H1b: Each indicator has a zero loading in the other (non-targeted) factors.

H1c: The error terms are uncorrelated.

RQ2. Is the measurement model for Teachers' Change Beliefs construct-valid?

H2: Teachers' Change Beliefs can be explained by the following five factors: *Discrepancy, Appropriateness, Efficacy, Principal Support and Valence.*

H2a: Each indicator has a nonzero loading on the hypothesized (targeted) factor.

H2b: Each indicator has a zero loading in the other (non-targeted) factors.

H2c: The error terms are uncorrelated.

RQ3. Is the measurement model for Teachers' Attitudes toward Change construct-valid?

H3: Teachers' Attitude towards Change can be explained by the following three factors: *Cognitive, Affective and Behavioral.*

H3a: Each indicator has a nonzero loading on the hypothesized (targeted) factor.

H3b: Each indicator has a zero loading in the other (non-targeted) factors.

H3c: The error terms are uncorrelated.

RQ4. Is Principals' Change Leadership Competencies significantly related to Teachers' Change Beliefs?

H4: Principals' Change Leadership Competencies is significantly related to Teachers' Change Beliefs.

RQ5. Is Teachers' Change Beliefs significantly related to Teachers' Attitudes toward Change?

H5: Teachers' Change Beliefs is significantly related to Teachers' Attitudes toward Change.

RQ6. Do Teachers' Change beliefs mediate the relationship between Principals' Change Leadership Competencies and Teachers' Attitudes toward Change?

H6: Teachers' Change beliefs mediate the relationship between Principals' Change Leadership Competencies and Teachers' Attitudes toward Change.

1.7 Significance of the Study

In general, the findings of the study would encourage a fresh look at change leadership development and change management in schools. As leadership is a process of influencing others, and the quality of PCLC matters in determining TCB and TATC, the effective way for school principals to involve teachers work through the change process, as proposed by the study, is by executing a process to influence TCB through PCLC and subsequently creating ways and conditions which nurture and sustain the excellence and monitor those beliefs as a way of assessing progress so to

cultivate positive TATC. It would be a timely finding which alters the traditional conceptions of leadership in managing change and offers to any or all practitioners and relevant parties a lens through which they could better understand, prepare for, or enhance schools' capacity for change.

Specifically, the PCLCM would contribute to the field of change management in schools. First, PCLCM would be a premier empirically tested model derived in a local Malaysian cultural setting. Not only following an accepted step-by-step procedure in designing the model recommended by Hinkin (1998), the respondents would be large and chosen from High Performing Secondary Schools whereby they are "information rich" (Patton, 2002), as well as Structural Equation Modeling (SEM), a comprehensive tool for analysis in academic research would be conducted to test the model. Undoubtedly, it would be a scientifically valid model to better understanding regarding the critical change leadership competency of school principals.

Secondly, to date, most change leadership competency models are designed to increase generic skills and behaviors relevant for managerial effectiveness and advancement (Bernal, 2009). Instead, PCLCM is tailored for developmental interventions to the distinct needs of school principals in the different stages of change. This would enable better understanding which specific competency of a change leadership development program should be incorporated as stage-matched interventions can have a far greater impact than other programs which basically emphasize on generic skills (Bernal, 2009; Harris & Cole, 2007; Levesque & Prochaska, 1999). From a human resource development perspective, this model would has far-reaching implications for the one-size-fits-all approach frequently

employed by trainers during education and training programs and thus maximizing learning impact.

Thirdly, the critical PCLC would identified based on phases of change synthesized and derived from four planned change models and then adjusted to fit local school system. The synthesized underpinned theory of the model not only would add to the body of knowledge on change management, it would advance practitioners and the relevant parties' knowledge and provides direction as useful feedback in the planning, designing, implementing and evaluating future training and development programs for school principals. It also would help develop professional development activities for present school principals, and particularly, set qualification criteria for prospective school principals in the field of managing school change.

Fourthly, practicality would be one of the distinct uniqueness of PCLCM. Although school principal needs a wide range of competencies in order to deal with anticipated changes, it would be of limited practical value to produce very long lists. The PCLCM encompasses critical clusters of PCLC that can be learned and can help principals gauge improvement in school change. By giving focus on these identified competencies, school principals would eventually gain confidence which will ultimately maximize school change effectiveness. This would enable school change unfold with less pain and in a more timely fashion with better results.

On the other hand, the Principals' Change Leadership Competency Scale (PCLCS) could be a promising and a welcome tool for both practitioners and scholars as it is rooted in a sound review of the literature. In terms of practicality, it can

combine with other scales to assess other related change variables simultaneously such as, change recipients' beliefs, change recipients' attitudes, and change recipients' efficacy. This research-based utilization and application provide more evidence-based assessment which could impact on the building of change leadership competency and thus could lead schools to be more successful in making needed changes.

Another important contribution of the study would be the finding of the study whether the relationship between PCLC and TATC has been mediates by TCB. As mentioned early, although most of the studies have found that there is a significant relationship between leadership behaviors and followers' attitudes toward change, however, these studies did not examine directly the intermediating mechanism that link these two variables. In other words, the conclusion drawn by the researchers might over simplistic and did not warrant interpretation. Most importantly, it did not reflect the actual reality. The traditional view of the leader-follower relationship would be transformed by the insight obtained from the current study if it is found that followers' beliefs (i.e. TCB) indeed play a critical role in governing the concerned relationship (i.e. PCLC and TATC). This shift in understanding of leadership behaviors on followers' attitudes via followers' beliefs is crucial and would alter the traditional approach of school principals in managing change as it expand the parameters of followers' beliefs in the concerned leader-follower relationship.

Apart from these, the perspective developed on TCB and TATC in this study could be useful and provides direction in helping school principals to influence TCB and TATC. By evaluating the cognitive and affective responses and behavioral intentions of teachers during pre-implementation of change, school principals could

gather valid data and knowledge to proactively prepare the organizations attempting any school change. For example, designing relevant professional development programs to enhance positive TCB and generate teachers' positive attitudes toward change. School principals could also use the model to identify the change critical mass – those teachers who are more likely to participate and commit themselves actively in the change process or act as change champions selling the process to others, which may prove invaluable for facilitating a successful implementation.

Besides, the study would advance school principals' knowledge and understanding of the significance and dynamic relationship among PCLC, TCB, and TATC. Consequently, school principals may be more attentive to how they interact with teachers and try to consciously temper their predisposition against change. Further, they may introduce mentoring programs to help teachers to cope with their emotional reaction to change, making teachers who resist change feel confident, stimulating teachers' enthusiasm to commit to the change goal and inspiring them to make the change goal a reality.

This study also would add to the body of previous literature by examining PCLC, TCB, and TATC. Specifically, if the findings of the study indicate that TATC encompasses cognitive, affective and behavioral responses to change, the results of the study would again prove to support the argument of Elizur and Guttman (1976), Dunham, Grube, Gardner, Cummings, and Pierce (1989), Piderit (2000), and Oreg (2006) that the construct of TATC should be conceived as a tridimensional concept. Besides, if the diagnostic nature of the results of the study shows that greater importance needs to be given to the human side of the change process, it again

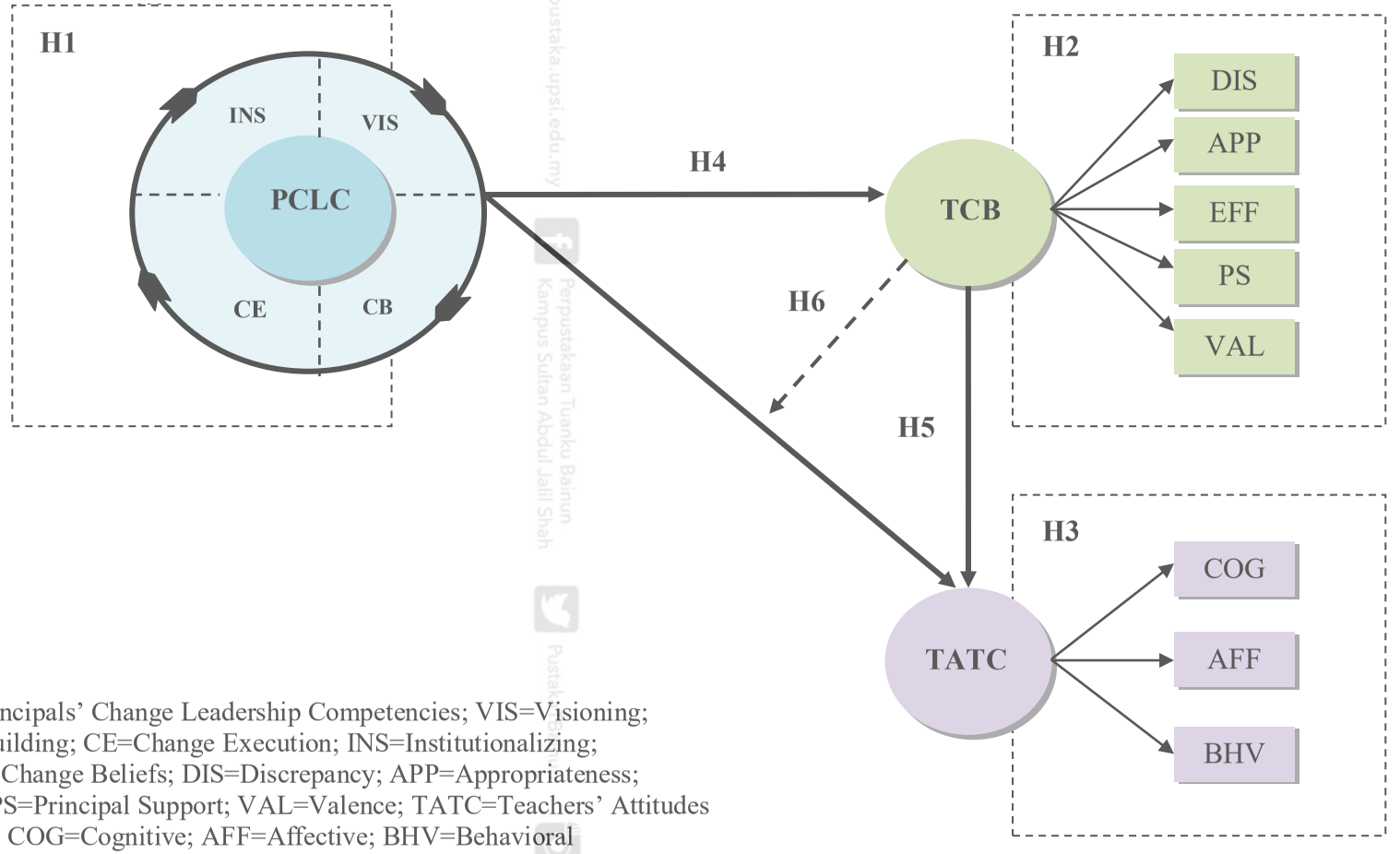
reinforce the existing literature that stress the significant human factor in change management.

1.8 Overview of the Conceptual Framework and Theoretical Foundation of the Study

A conceptual framework is a visual or written product which explains either graphically or in narrative form, the main components to be studied – the key factors, concepts, or variables, the presumed relationships among them and the underpinned theory (Maxwell, 2005). The conceptual framework helps in the designing the research – to assess and refine the research goals, develop realistic and relevant research questions, selects appropriate methods and justify the concerned research. However, importantly, the most productive conceptual frameworks integrate different approaches, lines of investigation, or theories that are borrowed from elsewhere, but the structure, the overall coherence, is something that the researcher builds, not something that exists ready-made (Miles & Huberman, 1994).

The conceptual framework of the current study was intended to help understand and explain whether PCLC is a multidimensional concept by identifying the critical leadership competencies that facilitate change in schools and how these perceived competencies influence on TCB and TATC. A review of the literature in Chapter II identified the variables and factors which formed the basis for the development of the framework of this study as shown in Figure 1.1. Briefly, the study was confined to three latent variables and 12 indicators as follow:

Figure 1.1: The Conceptual Framework with Study Hypotheses



Note. PCLC=Principals' Change Leadership Competencies; VIS=Visioning; CB=Capacity Building; CE=Change Execution; INS=Institutionalizing; TCB=Teachers' Change Beliefs; DIS=Discrepancy; APP=Appropriateness; EFF=Efficacy; PS=Principal Support; VAL=Valence; TATC=Teachers' Attitudes Toward Change; COG=Cognitive; AFF=Affective; BHV=Behavioral

(i) Latent variable 1: Principals' Change Leadership Competencies (PCLC) which is measured by four indicators, namely (a) *Visioning;* (b) *Capacity Building;* (c) *Change Execution; and* (d) *Institutionalizing;*

(ii) Latent variable 2: Teachers Change Beliefs (TCB) which is measured by five indicators, namely (a) *Discrepancy;* (b) *Appropriateness;* (c) *Efficacy;* (d) *Principal Support; and* (e) *Valence*;

(iii) Latent variable 3: Teachers' Attitudes toward Change (TATC) which is measured by three indicators, namely (a) *Cognitive;* (b) *Affective; and* (c) *Behavioral.*

The conceptual framework in the current study not only taking into consideration the three latent variables and the 12 key factors discussed above, and importantly the research purposes, objectives and relationship based on the underpinned theories or models which support the research design and to help researcher to justify the research so to accomplish the objectives of the study. Eventually, the framework was constructed by incorporating findings and theories or models which evolved: change leadership theory (Conner, 1999; Higgs & Rowland, 2000; Kotter, 1999), competencies theory (Boak & Coolican, 2001; Cairns, 2000), organizational change recipients' beliefs (Armenakis et al., 2007), attitude theory (Dunham et al., 1989; Elizur & Guttman, 1976; Oreg, 2006; Piderit, 2000), theory of planned behavior change (Ajzen & Fishbein, 1975 & 1980), Lewin's three-step change model (1958), Kotter's eight-step change model (1999), Nilakant and Ramanarayans' four-step change model (2006) and Hayes's five-step change model (2010). The conceptual framework enables a comprehensive analysis of

all relevant factors and the overall coherence was built into structure based on relevant theories and models as illustrated in Table 1.1. Further discussion about the development of the conceptual framework of the study based on relevant theories and model was presented in Section 2.6 to 2.8.

Table 1.1.

The Development of Conceptual Framework Based on Relevant Theories / Models

Factors	Underpinned Theories/Models	
● Principals' Change Leadership Competencies	Change leadership theory (Conner, 1999; Higgs & Rowland, 2000; Kotter, 1999) Competency theory (Boak & Coolican, 2001; Cairns, 2000)	Lewin's three-step change model (1958) Kotter's eight-step change model (1999) Nilakant & Ramanarayans' four-step change model (2006) Hayes's five-step change model (2010)
● Teachers' Change Beliefs	Organizational change recipients' beliefs (Armenakis et al., 2007)	Theory of planned behavior (Ajzen & Fishbein, 1975 &1980)
● Teachers' Attitudes toward Change	Attitude theory (Dunham et al.,1989; Elizur & Guttman, 1976; Oreg, 2006; Piderit, 2000)	

1.9 Operational Definition

Change is any activity that alters the current state within an organizational or sociological settings. It is a process of identification and implementation of new organizational routines and practices.

Planned change refers to deliberate and concerted effort to establish conditions and circumstances in the process of creating a new system and the institutionalizing of new approaches to achieve organizational objectives.

Change management means effective management of new methods and systems which are used to handle both the internal as well as external changes to achieve desirable outcomes or results. It is a structured approach to transitioning organizations from a current state to a desired future state and also the approach for supporting individuals through the changes to fulfill or implement a vision and strategy.

School change refers to systemic and structural change in education. It is interchangeably used with the terms 'school reform' and 'school improvement' in the current study which comes down to the goals aiming at school effectiveness and education quality for raising student achievement through change.

Leadership is an interpersonal influence process with a set of values, qualities and behaviors exhibited by the leader that inspire and encourage the participation, development, and commitment of followers to achieve organizational goals.

Competencies are defined as knowledge, skills, abilities and behaviors that demonstrate excellent performance in a particular role or work context. They do not include "baseline" knowledge and skills, but do include "applied" knowledge and manifestation of skills that produce success.

Principals' Change Leadership Competencies are knowledge, skills, abilities and behaviors that demonstrate excellent performance, required for a principal in influencing staff to work toward the achievement of organizational objectives in the process of creating a new system and the institutionalizing of new approaches. For this study, four competence clusters were identified based on four main processes of change i.e. Visioning, Capacity Building, Change Execution, and Institutionalizing.

Visioning associated with competencies of setting a vision to help direct the change effort, initiating dialogue in the organization to make people aware the needs for change, communicating the vision, assessing the situation to determine the desired outcomes and developing change goals and strategies to realize the vision.

Capacity Building focuses on developing the capacity of the organization members' concerned competence to address the change, enhance people's self-efficacy to face the challenges of change and ensuring the

performance quality meet the required standard and needs of the change. It consists of three major tasks: evaluating organization's change readiness, building competence to meet change requirements and defusing resistance and conflict of change.

Change Execution associated with redesigning the systems, identifying the critical mass of support, delegating authority, establish effective coordination mechanisms, building collaboration among staff members and others, ensuring sufficient resources and the smoothness of the implementation of the change plan through effective monitoring and applying continuous improvement principles to meet the change quality.

Institutionalizing associated with evaluating the change outcomes which provides accurate information about the effectiveness of the change, institutionalizing best practices by promoting continuous improvement to ensure ongoing success, promote learning as a desirable goal in the organization, and sustaining the achievements of the change that the best practices become the norm of the organization.

Teachers' Change Beliefs refer to subjective probability judgments which underlie teachers' motives to support change efforts and therefore increase the likelihood of successful organizational change. There

are five key beliefs: (a) discrepancy; (b) appropriateness; (c) efficacy; (d) principal support; and (e) valence.

Discrepancy refers to the belief that a change is needed as there is a gap between the current state and the desired future state in the organization. A discrepancy helps legitimize the need for change or the motive for a change may be perceived as arbitrary.

Appropriateness reflects the belief that a correct change reaction is designed to fix the gap identified by discrepancy. The change recipients believe that the proposed change is the correct one for the situation at hand and will effectively address the discrepancy.

Efficacy is the belief that he or she had the necessary skills and ability to cope and make the change succeed. Change efficacy is higher when people share a sense of confidence that collectively they can implement a complex organizational change.

Principal Support is the belief that key organizational leaders support and committed to the success of a change and will take optimal steps to face any obstacle.

Valence refers to the belief that the change is beneficial to the change recipient and can be enjoyed over a period of time. It clarifies the extrinsic and intrinsic benefits of the change which can help develop momentum for change. Extrinsic valence refers to the rewards or benefits realized from adopting change whereas intrinsic rewards includes autonomy for decision making which is one form of self-actualization.

Attitude is defined as a learned predisposition to respond to an object in a consistently favorable or unfavorable way. Normally we learn to favor behaviors we believe have largely desirable consequences and we formed unfavorable attitudes toward behaviors we associate with mostly undesirable consequence. Simply, attitudes reflect evaluations of objects (e.g., person, event, situation, etc) on a dimension ranging from positive to negative.

Teachers' Attitudes toward Change is the internal state that influences a teacher's choices of personal action, or a response tendency towards the change. It refers to a teacher's overall positive or negative evaluative judgment of a change initiative implemented by his or her school. In general a teacher's attitude toward change consists of a teacher's cognitions about change, affective reactions to change, and behavioral tendencies toward change ranging from strong positive attitudes to strong negative attitudes. It is the cognitive precursor to

behaviors of either embracing or resisting implementing change and even actively undermining that effort.

Cognitive reaction to change refers to the individual's beliefs about the need for change, the significance of the change, and the favorability of outcomes i.e. the extent to which the change will be personally and organizationally beneficial.

Affective reaction to change refers to an individual's feelings about the change. It is an individual's tendency to enjoy changes in organizations. An individual's response to change along this emotional dimension might range from positive emotions e.g. excitement, enthusiasm and happiness to strong negative emotions such as anger, resentment, frustration, anxiety or fear.

Behavioral reaction to change measures the extent to which an individual would take action to support or initiate change. Behavioral responses are outcomes of the cognitive and emotional reactions and can range from strong positive intentions to support change, for example, actively involves in change to negative intentions to resist it such as quitting intentions due to the change.

High Performing Secondary School refers to those 186 schools which were in band 1 and 2 while School Improvement Program (*Program Pembangunan*

Prestasi Sekolah) was implemented in the year 2010 by Ministry of Education Malaysia to help raise performance of schools nationwide. The ranking was done on all public schools based on composite score which comprises 70% School Grade Point Average (GPS) mainly on school academic performance, and 30% Standard Quality Education Malaysia (SQEM) where four main dimensions of the schools (vision and mission; organization management; education program management and student accomplishment) had been evaluated. It had been ranked into 7 performance bands and for current research purpose, those schools in band 1 and 2 with composite score of 80% as a threshold are classified as High Performing Secondary Schools.

Daily Secondary School is the most popular type of school and contributes 85% of the secondary schools in Malaysia. It is regarded as extensions of the national primary schools and admissions are not selective. In the current study, Technical Secondary School also categorized as Daily Secondary School due to the following reasons: (i) the number of Technical Secondary School was too small for conducting statistical analysis after applying proportionate stratification procedure; (ii) the management of Technical Secondary School is closely similar as the normal Daily Secondary School except that students in this type of school will sit for public examination which focus on technical subjects.

Fully Residential Secondary School is boarding school with selective admission for students who demonstrate outstanding academic achievement and potential at the elementary level. As among the leading schools in Malaysia, it provides opportunities for students especially those from the rural areas, to receive education with organized, complete and updated facilities, in a condusive school climate. It also aims to increase the opportunities for indigenous students to receive quality education as preparation for higher education to fulfill national needs.

Religious Secondary School employs an overtly Islamic-based curriculum. They were two types of Religious Secondary School involved in the current study: National Secondary Religious Schools (SMKA, or *Sekolah Menengah Kebangsaan Agama*) and Secondary Religious Schools (SMA, or *Sekolah Menengah Agama*). SMKA usually have compulsory Arab language classes incorporated into the school teaching hours while SMA not only Arab language but also with detailed *fard 'ain* knowledge.

1.10 Organization of Thesis

The study was structured by five respective chapters. Chapter One consists of an overview of the study, statement of problem, purposes and objectives of the study, research questions, and research hypotheses which form the focus of this thesis. Next,

the significance of the study was discussed followed by an overview of the conceptual framework and definition of terms. Last, organization of thesis was presented.

Chapter Two was structured into twelve sections. The first section was an introduction followed by second section, overview of organizational change. The third section reviewed on patterns of change. It mainly discussed the change characterized by the rate of occurrence and change characterized by how it comes about. The fourth section presented the previous studies on leadership and change. The fifth section discussed the relationship between change leadership and competency. From the sixth to the eleventh section was then presented the conceptual framework and theoretical foundation of the current study with a focus on the relationships among PCLC, TCB and TATC, respectively, based on the underpinned theories. Specifically it critically reviews the relevant literature about the domains of PCLC, TCB and TATC that form the proposed research model. Research gaps were identified and a summary of the chapter was presented in the last section based on the proposed relationships derived from the literature findings.

Drawing on the literature in Chapter Two, Chapter Three describes the methods and procedures that had been followed in answering the research questions. It contains an overview about the research design employed in the study, followed by a discussion of the research instruments. Subsequently the chapter illustrates a seven-approach of pilot test. The next section describes the final survey regarding the population, sample size, sampling procedure, questionnaire design, survey administration, and data collection method. Following these, the data analysis section is described in five parts as (a) data preparation prior to analysis; (b) preliminary data

analysis; (c) assessing construct validity through Confirmatory Factor Analysis; (d) the assessment of measurement models and (e) the assessment of structural model. Finally, the ethical considerations involved in this study are presented.

Chapter Four presents the results of data analysis and the testing of the hypothesis. It consists of data preparation, demographic characteristics, assessment of the first- and second-order measurement models of PCLC, TCB and TATC and the structural model with a focus on assessing its construct validity which includes the convergent and discriminant validity and construct reliability. The chapter ends by showing the outcomes of the hypotheses testing.

Chapter Five discusses the findings of the study in the light of the relevant literature by interpreting the results drawn from testing the six hypotheses identified in Chapter One. The next section explores the implications of this study, including theoretical and practical, in the fields of PCLC, TCB and TATC especially the relationships among these three variables. Limitation and future directions are addressed before conclusions are made.

1.11 Summary

The foundations of this research have been laid in this chapter. It provided a background to the study, drawing on the research problems, purposes and objectives which form the focus of this thesis, outlined the research questions and research hypotheses. Research was then justified in terms of its significance within Malaysia,

briefly described the conceptual framework and explained key definitions used in the study. Finally, the organization of the study was presented. On these foundations the thesis now proceeds to a review of recent literature pertinent to the research to enable the understanding of the influence of PCLC on TCB and TATC in Malaysian secondary schools.