Organizational Member Learning and the Influential Factors: The Empirical Study of Thailand

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Based on the literatures of organizational learning and change, this research continues to focus on the individual level of learning in organization. Individual learning comprises of at least the cognitive and behavioral aspects as the two represent two different phenomenon and complementary to each other. A questionnaire survey was conducted with employees of corporations in Thailand with an attempt to seek for factors in which influence the level of learning in individuals in both cognitive and behavioral contexts. Among the three influential factors, perceived negative impact from change hinders the cognitive buy-in of change initiative the most, while the general understanding of the necessity of organizational learning and change depicted as the strongest factor in inducing individual's participative cooperation to change projects. Additionally, the overall results suggest that organizations in which are involved in organizational change movement should pay attention in educating their employees to be highly aware of the importance of organizational learning and change in general, as well as, creating more of the direct positive impact and less of the direct negative impact from any specific change movement, in order to be able to gain employees' cognitive understanding of and behavioral cooperation to the change.

Introduction

The unclear definition of what learning really is makes the debates and studies in the area of organizational learning hard to unfold. To make a solid starting point of further discussion, this paper adopts the organizational learning definition by Fiol and Lyles (1985: 803); *"Organizational learning means the process of improving actions through better knowledge and understanding"*.

Following this definition, it is crucial to distinguish between the notion of cognitive and behavioral developments. Cognitive development occurs with the interpretation of events and the development of in-depth understanding, while behavior development takes place when new responses or actions arises (Bood, 1998). A number of theorists have argued that the development in behavior often is a result of gained knowledge (Bood, 1998), and learning only takes place when new knowledge is translated into different replicable behavior (Argyris and Schon, 1978). However, the difference between the two developments is imperative as both represent two different phenomena and the change in behavior does not necessary accompany change in cognition, or vice versa (Fiol and Lyles, 1985: 806). The appearance of one might not be an accurate reflection of the other.

Even though no concrete agreement exists on the process of how individual learning contributes to organizational learning (Bood, 1998), it must not be denied that individual learning is important to organization (e.g. Fiol and Lyles, 1985; Ulrich et al., 1993). Organizational members are key players in the learning process (Dechawatanapaisal and Siengthai, 2006), as their ability to learn and apply what they have learned at work increases the value of organizations (Watkins and Marsick, 1993). The notions of individual learning are vital for understanding organizational learning (Kim, 1993). In this sense, to learn of which **factors influence the changing in individual learning in both terms of cognition and behavior is essential**. However, the difficulty in accurate measurement and observation impede the literature contribution in this aspect (Lyles and Easterby-Smith, 2003).

This chapter continues to look at individual level of learning in organization and attempt to contribute empirically to the measurement and evaluation of learning in such level. The objective is to examine the change in organizational member's cognition and behavior during an organizational change implementation and seek for the influential factors.

The following section introduces related literatures regarding individual changes. The theoretical framework is presented along with research assumptions and hypothesis. Then, the sections moves to introducing field research, including the questionnaire construction, data findings and analysis, before closing with research summary and discussion.

Building Individual Learning Measurement Framework

Keeping in mind of organizational learning terminology by Fiol and Lyles (1985: 803), organizational learning is twofold, involving (1) the evidence of improving actions or behavioral development and (2) the better knowledge and understanding or cognitive development. Cognitive aspect is not an alternative, but rather a compliment to largely dominated behavioral perspective of change in the past (Huff et al., 2000). Incorporating cognitive development perspective distinguishes organizational learning from a mere change, transformation, adaptation (Bood, 1998). As organizational change can be regarded as the outcome of organizational learning process (Schultz, 2002), the ultimate goal of organizational change that contributes to the improvement of organizational development therefore should aim at gaining organizational members' (1) **cognitive buy-in** to the change project, and (2) **behavioral cooperation** in the project implementation. These two basic dimensions seem to appear with some consistency in the literature (Fiol and Lyles, 1985: 809).

Once it is agreed that organizational learning and change may involve two different processes (Pruksapong, 2008), the problem lies at **a measurement problem** (Fiol and Lyles, 1985). Individual cognition is known at best as an explanatory fiction inferred from observations of behavior (Fiol, 2002). However, changes in behavior may occur without

cognitive development but merely by a need to do something (Fiol and Lyles, 1985). Knowledge may also be gained without any accompanying change in behavior (Starbuck and Hedberg, 2001). Two separate assessments for both layers of change are required for assessment.

Learning in Terms of Behavioral Change

Behavior development takes place when new responses or actions arises (Bood, 1998). By looking at the behavior alone and not to associate it with underlying mental frames, the observation of such changes is not problematic. In the organizational level, Fiol and Lyles (1985) suggested that behavioral adaptation can be measured by changes in management systems, decisions, and the allocation of resources (Fiol and Lyles, 1985). Taking that changes in organizational behavior can be observed through changes in the way organization are run, then similarly, changes in individual behavior shall possibly be observed through the mere change in individual action. In the case of organizational change context, the desired change in action is the behavioral cooperation with the change project implementation (Pruksapong, 2008).

Learning in Terms of Cognitive Change

Cognitive development has gained crucial importance in social science researches. Human beings do not necessarily look at things based on facts. Rather, we use certain mental frames to perceive things and interpret the world around us (Argyris and Schon, 1974). In order to effectively gaining people to undergo any kind of change, it is necessary to pay attention to the change in their mindsets (Clegg and Walsh, 2004). In order to capture individual change in cognition, it demands an in-depth assessment that is capable of distinguishing cognitive development from pure behavioral adaptation (Fiol and Lyles, 1985).

The nature of organizational change delivers well the combinations of "what is" and "how to" knowledge (Pettigrew et al., 2001). The distinction is necessary because the *what* provides the information on the vision and overall direction for the change, and the *how*

explains the process of implementation and adoption (Burke, 2002: 14). The identification of change characteristics provides the information on what change is all about and why it is important to the organization. It helps people understand more about the change. Once the *what* knowledge is delivered, the *how* part becomes crucial as the knowledge involves a more sophisticated and demanding engagement with practice (Pettigrew et al., 2001). Specifically, it reveals how people are to be involved and in what way they need to deliver the satisfactory expected outcome of change. Engaging with a change project and implementation, an awareness of why change is needed, and the knowledge of how to change, among other things, are important elements in the management of organizational change (Hiatt, 2006).

Based on this notion, this paper proposes to distinguish cognitive development measurements into two aspects: the understanding of (1) what change is and (2) how to implement it.

Research Hypothesis

The Understanding of an Organizational Change

Emotion and feeling are crucial to human beings. The behavior of people alters mostly by how people feel. Even in many successful cases of change, the ways people use to help others deal with problems and seek for solutions often influence emotions and not just thought (Kotter, 1995). Altering individual's mindsets is also indeed difficult as people have different mental frames in interpreting the world around them (Argyris and Schon, 1974; Clegg and Walsh, 2004; Gardner, 2004). People think differently. However, even in a diverse group of audience, they share one thing in common. People have a tendency to recline toward things in which they feel positively of and away from what they feel as being negative (Deutschman, 2005).

Acceptance and resistance of change are impacted by how the change is perceived (Chreim, 2006). Once the knowledge regarding change is discovered, people emotionally

assess the information and make decision whether to resist (Hay and Härtel, 2001). This process is shaped by a number of key variables. However, the first question people often ask themselves when hearing of any change movement is "How is this (change) going to affect me?" (Atkinson, 2005).

Change implementation may lead to perceived threats of losing out as a result of change; treats to one's job security, one's way of performing, one's status-quo, or one's power (e.g. Dent and Goldberg, 1999; Clegg and Walsh, 2004) Change mean doing things differently, and the new things will have to be learned and applied (Atkinson, 2005). Change creates anxiety and fear of the unknown. As a consequent, people resist, i.e. refuse to cooperate with the change plan. Change resistance seems to be one of the obstacles to the success of change project and hoped to happen at the very least. However, it is undeniable that all kinds of changes attract some resistance (Atkinson, 2005). It is perhaps a normal circumstance that when people feel negatively affected by the change, they do not wish to participate or actually get involved in it.

To many employees, change is not something to be sought after or welcomed, but something that upsets the balance (Strebel, 1996). However, not all employees will oppose change. They often take sides. If there are those against it, there are those who go for it. The employees who react unfavorably tends to be anxious about the change, while employees who support change tend to be favorable and feel comfortable to comfort it (Hay and Härtel, 2001). It is very important to create emotional resonance and evocate positive experiences when wanting to gain attention of people's acceptance over something (Gardner, 2004) as it is too easy for people to go into denial if they perceive something bad might happen to them (Deutschman, 2005).

Hypothesis 1: _The higher the organizational members are negatively affected by the change project, the lower they tend to learn cognitively/behaviorally._

__Hypothesis 2:__ The higher the organizational members are positively affected by the change project, the higher they tend to learn cognitively/behaviorally.

3.2 The Understanding of Organizational Learning

For additional analysis of the study, the understanding of organizational learning and change is added to the account. It may be a cliché to restate that organizational learning and change are crucial organizational practices in the globalization era. The interconnectedness of business around the world through the advance technology makes the business boundary fragile. Changes are taking place at a rapid course and information is fast and widespread, the organizations that can learn and utilize their knowledge are likely to be able to gain and maintain competitive advantage (Davenport and Prusak, 1998; Marsick and Watkins, 1999; Dechawatanapaisal and Siengthai, 2006). The continuous adaption and improvement of organization are no longer the options, but a must-do, for organizations seeking to survive this turbulent operating environment (Goh and Richards, 1997; Jellison, 2006).

Organizational change and adaption happen as organization strives for its survival, especially in the long run. Changes contributed by individuals are implemented to facilitate organization to move in its desired direction (Burke, 2002). Researching on learning in organizations, Marsick and Watkins (1999) have asserted that employees are making learning and change matter, both for the personal fulfillment, and benefit of organizational outcome. Even though there are times in which people find their learning is blocked, they increasingly recognize the need to continue learning; if learning is not for own pleasure, it is for the very least their necessary burden to keep themselves remain employable (Marsick and Watkins, 1999).

__Hypothesis 3:__ The higher the organizational members reveal positive understanding for organizational learning, the higher they tend to learn cognitively/behaviorally.

Research Methodology

Studying organizational learning, like other organizational phenomena, usually involves some forms of measurement (Chiva et al., 2007). A number of organizational learning empirical work studied organizational learning using different kinds of measurement instruments. Aside from the quantitative method of questionnaire surveys (see review in Bapuji and Crossan, 2004), other means such as learning or experience curve (e.g. Epple et al., 1991) were also evidenced. However, such studies often adopt by-products of learning, such as the increase in sale amount (Leslie and Holloway, 2006), or production capacity (Morrison, 2008) to depict the outcome of change. Empirical studies in individual level are restricted to the use of cognitive science methodology namely cognitive mapping or cause mapping (Barr et al., 1992) in capturing the understanding of individuals. Behavioral aspect of change is omitted for this instrument. Henceforth, none of the existing methods are suitable as a measurement that can capture both aspects of cognitive and behavioral change.

Development of Individual Learning Measurement Scale

The measurement scale was constructed based on the general agreement for the measurement scale creation literature: (1) theoretical representation of the concept in such a away as to reflect its defining features; (2) specification of the concept, by breaking it down into the various dimensions or relevant aspects it covers; (3) choice of indicators; and (4) synthesis of the indicators through the elaboration of a weighted index for each of the conceptual dimension (see Chiva et al., 2007). Through the reviews of organizational learning and change management literatures (e.g. Kotter, 1995; Strebel, 1996; Dent and Goldberg, 1999; Piderit, 2000), the following measurement instruments were developed.

Individual perceived cognitive and behavioral learning

The measurement of individual cognitive learning comprises of four items measuring perceptions toward a particular change, its characteristic and the understanding of change necessity (the *What*), and four items for the perception toward change implementation procedures (the *How*). Prior to completing these questionnaire items, correspondents were to think of a specific change they were directly involved with in the organization where they work. A 7-point semantic differential scaling with two contrasting adjectives defined at the bipolar of scale (e.g. bad/good, unnecessary/necessary, confusing/clear, problematic/unproblematic) was selected for the instrument measuring correspondent attitudes (Heise, 1970) toward that particular change project. The 7-point scale allows neutrality and has enough gradation to give meaningful data yet not too tedious for correspondents (Al-Hindawe, 1996). The scaling of 1-3 represented adjectives of the negative perception, 4 as neutral, and 5-7 for positive perception toward the change projects.

Additional four items were added to measure correspondents' perceived behavioral change. The 7-point Likert-Scale was adopted with 1 represent 'strongly disagree', and 7 as 'strongly agree'. Example items are: (1) I responded favorably to the change, and (2) I am enthusiastic in making this change happen.

Perceived effects from change and understanding of organizational learning

Also based on the literature review of organizational learning and change, six items comprise of a mixture of both negative and positive aspects of the impact were developed for the dimension of personal impact from changes. For example, (1) This change makes my future employment at this organization uncertain, (2) I received good support for necessary resources for this change implementation from my organization.

In addition to this, four items were added to the questionnaire to capture organizational member's perception toward organizational learning and change. Example items are (1) I

basically agree that our ability to learn is the key to improvement in our work process, and (2) The organization needs to change in order to survive. The 7-point Likert-Scale was also adopted with 1 represent 'strongly disagree', and 7 as 'strongly agree' for these dimensions.

Age, gender, tenure years, position ranking in the company, education level were added as control variables for this study.

Data Gathering

The questionnaire items were originally created in English based on literature studies and the content was carefully designed and discussed with organizational researchers. Since the data collection for this study was taken in Thailand, once the items in each scale were fixed, the questionnaire was translated into Thai and cross-checking the meaning with language experts. The questionnaire then was pilot tested with 12 Thai graduate students from various education and work experiences to observe the understanding of questions, and to refine questionnaire wording, items order, format, and overall appropriateness. A completed version of questionnaire was then again tested with the employees of a family-own service business in Thailand to double testing how well questionnaire items can capture correspondents' perceptions in real situation.

At the time of the questionnaire pilot study, a number of organizations in Thailand were handpicked using convenience sampling technique. The conditions were given that participative organizations must display emphasis on organizational learning and human resource development, have had experiences in handling change projects, and focus on delivering continuous organizational development. A letter of introduction was sent out to selected organizations with an inquiry for interest to participate in the questionnaire analysis.

Four large organizations with employees of more than 800 people replied with positive responses. All four organizations specialize in different product types, but are in manufacturing and trading or service industry. The pre-questionnaire interview was conducted with human

resources personnel and/or executives, to gain basic understanding of the company and the vision toward organizational change and development. A total of 675 questionnaires were subsequently distributed to participative organizations during the month of June 2008.

Before the end of July 2008, a total of 642 questionnaires were returned (Response rate of 95.11%). The questionnaire correspondents were asked to think of the change projects they recently have experienced in the organization and self-assess their cognitive understanding and behavioral cooperation toward such change in the subsequent questionnaire sections. After screening the completeness of the questionnaire responses, 447 valid questionnaires were included for this analysis.

The data demographic characteristics are as followed. Approximately 41.16 percent of the correspondents were between 21-30 years of age, 37.36 percent were between 31-40 years, and approximately 21.5 percent were above 40. Slightly more than half of the correspondents were female (56.15 percent). In terms of education background, the majority of the correspondents (67.11 percent) held a bachelor degree, with additional 16.11 percent holding Master degree or above. 58.39 percent of the correspondents were regular employees. 26.17 percent were in the team leader rank and 15.21 percent in the middle to high executive level. As for tenure, 10.29 percent had been working at their current organization for less than 1 year. Approximately half of the correspondents (50.78 percent) were at their organizations for more than 1 year but less than 10 years, while 38.93 percent had been there for more than 10 years.

Factor analysis and scale reliability

Factor analysis with SPSS 15.0 was conducted to find principle components of measurement instrument dimensions. The components were extracted with eigen value of over 1 rule. The varimax method of rotation was employed and items in which received less than 0.5 communality score were removed.

1) *Perceived cognitive and behavioral change*

As a result of the analysis, one item was removed from the list and three factors were extracted with clean factor loadings. Factor 1 comprises of four items representing "perceived cognitive understanding of change initiative" (Cronbach's alpha of 0.939). Factor 2 comprises of four items, denoting "perceived behavioral change" with Cronbach's alpha of 0.851. And lastly, factor 3 comprises of three items representing "perceived cognitive understanding of change implementation" (Cronbach's alpha of 0.796). The factor reduction explains 76.866 percent of variance.

2) *Personal impact from changes and perception toward organizational learning and change*

One item was also dropped out as a result of the analysis. Four items loaded cleanly on Factor 1 denoting the "perception toward organizational learning and change" (Cronbach's alpha of 0.863). Three items represent Factor 2, the "negative impact from change" variable (Cronbach's alpha of 0.818). Lastly, Factor 3 comprises of two items denoting the "positive impact from change" variable (Cronbach's alpha of 0.535). This factor reduction explains 71.995 percent of variance.

Results

The mean scores, standard deviation and correlation coefficients of each variable are displayed in Table 1. The negative impact from change is negatively correlated at a significant level with the perceived cognitive understanding toward change initiative (r = -.483, p < .01), perceived cognitive understanding toward change implementation (r = -.204, p < .01), and perceived behavioral change (r = -.402, p < .01). The results are consistent with *Hypothesis 1*.

Table 1: Factor Correlations, Means, and Standard Deviation for Individual Change in Cognition and Behavior, Personal Impact from Change, Perception toward Organizational Learning and Change, and Control Variables

Correlations	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
1. Perceived cognitive understanding of change initiative	5.68	1.23	1										
2. Perceived cognitive understanding of change implementation	4.29	1.42	.365**	1									
3. Perceived behavioral change	5.27	1.02	.595**	.405**	1								
4. Negative impact from change	3.09	1.48	-.483**	-.204**	-.402**	1							
5. Positive impact from change	4.72	1.26	.514**	.409**	.529**	-.317**	1						
6. Perception toward OL and change	6.23	.86	.305**	.114*	.446**	-.340**	.243**	1					
7. Age	34.18	8.14	.183**	.164**	.226**	-.125**	.219**	.143**	1				
8. Gender	.56	.50	-.155**	-.101*	-.171**	.077	-.131**	-.096*	-.187**	1			
9. Education Level	3.90	.81	-.066	-.124**	-.051	-.066	-.104*	.117*	-.315**	.172**	1		
10. Tenure Years	3.82	1.61	.086	.157**	.188**	-.048	.139**	.108*	.798**	-.090	-.275**	1	
11. Position Ranking	2.57	.77	.222**	.174**	.277**	-.232**	.217**	.240**	.584**	-.276**	-.059	.475**	1

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
a) N = 447

Similarly, the positive impact from change is positively correlated at a significant level with the perceived cognitive understanding toward change initiative (r = .514, p < .01), perceived cognitive understanding toward change implementation (r = .409, p < .01), and perceived behavioral change (r = .529, p < .01). The results are consistent with *Hypothesis 2*.

In addition, the perception toward organizational learning and change is also positively correlated with the perceived cognitive understanding toward change initiative (r = .305, p < .01), perceived cognitive understanding toward change implementation (r = .114, p < .01), and perceived behavioral change (r = .446, p < .01), in which are consistent with *Hypothesis 3*.

To test all hypotheses, dependent, independent and control variables were entered into the regression analysis using SPSS 15.0. The results of regression analysis are shown in Table 2. The findings suggest that there is an invert relationship between negative impact from change and the perceived cognitive understanding of change initiative (β = -.374, t = -8.931, p < .01), and perceived behavioral change (β = -.166, t = -3.975, p < .01. However, a negatively related but not significant relationship is found with perceived cognitive understanding of change implementation (β = -.054). It can be implied that when the perceived negative impact from a change program is higher, employees tend to reveal lower cognitive understanding of what change initiative is about and why it is necessary, as well as, lower behavioral cooperation in getting the change implemented. *Hypothesis 1* is partially confirmed.

In terms of the positive impact from change, significant positive relationships are found with all three dependent variables: with perceived cognitive understanding of change initiative (β = .293, t = 6.949, p < .01), perceived cognitive understanding of change implementation (β = .251, t = 5.356, p < .01), and perceived behavioral change (β = .297, t = 7.073, p < .01). In other words, as the perceived positive impact from change increases, employees have a tendency to reveal higher understanding of change initiative, its implementation process, and participative action. *Hypothesis 2* is supported.

Table 2: The Result of Regression Analysis for Individual Change in Cognition and Behavior and Influencing Factors

Variables	Perceived cognitive understanding of change initiative		Perceived cognitive understanding of change implementation		Perceived behavioral change	
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Age	.222*	.130	-.049	-.096	.004	-.073
Gender	-.062	-.039	-.019	-.008	-.087	-.053
Education Level	-.025	-.044	-.097	-.074	.040	.000
Tenure Years	-.216**	-.147*	.097	.124	.098	.131
Position Ranking	.114	.000	.076	.049	.151*	.038
Negative impact		-.374**		-.054		-.166**
Positive impact		.293**		.251**		.297**
OL and change perception		.117**		-.037		.344**
F	4.764**	20.002**	2.419*	5.434**	5.786**	20.303**
F Change	4.764**	43.122**	2.419*	10.205**	5.786**	41.819**
df	446	446	446	446	446	446
R	.226	.517	.163	.300	.248	.520
R^2	.051	.268	.027	.090	.062	.271
Adjusted R^2	.040	.254	.016	.074	.051	.257
R^2 Change	.051	.216	.027	.064	.062	.209

* $P < .05$, ** $p < .01$, N = 447

Statistical results also reveal that the change in perception toward organizational learning and change can explain the change in perceived cognitive understanding of change initiative ($\beta = .117$, t = 2.782, $p < .01$), and perceived behavioral change ($\beta = .344$, t = 8.173, $p < .01$), in the same direction, and cannot explain significantly the change in perceived cognitive understanding of change implementation. *Hypothesis 3* is only partially supported.

In addition, the majority of control variables such as age, gender, educational level, tenure years and position ranking in the company do not seem to have any significant statistical relationship with individual change in both terms of cognition and behavior. The only exception is found with the relationship between with tenure years and perceived cognitive

understanding of change initiative. Statistical outcome reveals a negative relationship between the two variables ($\beta = -.147$, $t = -2.147$, $p < .05$).

The understanding of organizational learning and change, by far, is the factor that has the largest impact on individual perceived behavioral change, while perceived negative impact from change seems to hinder the cognitive buy-in of change initiative the most. At the same time, the perceived positive impact from change has positive effect on all three kinds of individual change at nearly the same degree.

Summary and Discussion

The objective of this research is to find out the factors in which influence the cognitive understanding and behavioral change of organizational individuals during a change project. Sharing the root with organizational change management, this study focuses on the personal direct effects individuals may experience during a change initiative as the potential influencing factors to individual learning in cognition and behavior.

The results of the study contribute empirically to the study of organizational learning, focusing at the individual level of learning. Generally speaking, the results are consistent with the fact that people tend to recline toward the positive influence and against the negative one (Deutschman, 2005).

People often stop and ask the question of how changes are going to affect them. The fact that change could hamper the job security, decrease benefits ought to receive, or contradict the former beliefs may hinder their acceptance of, and participation to the change initiative. This is consistent to the empirical study by Dechawatanapaisal and Siengthai (2006) on cognitive dissonance and learning. People are usually accustomed to and less willing to step out of their comfort zone. If the new knowledge makes them feel uncomfortable to learn, they are unlikely to commit to learn of such new knowledge nor be involved in action (Dechawatanapaisal and Siengthai, 2006).

Concentrating closely on the cognitive aspect of individual learning, the negative impact on individuals seems to be able to explain the direction of individual understanding of change initiative alone and not the understanding of the implementation process. The *how* here is affected less as the *what* is already off-putting. To lead any kind of change, it is indispensible to gain a shared sense of desire future, as well as, understanding and commitment to a new direction (Kotter, 1996). To do so is not easy. It is perfectly normal for people to protest or complain of the task they do not like and did not choose when they find it problematic (Jellison, 2006). Negative attitude puts the required initial acceptance for change movement at difficulty. It is crucial for anyone involved in a change initiative to make sure of the lowest negative impact organizational members are to experience from such change in order to gain the initial cognitive buy-in on the change movement. Successful organizational adaptation is growingly dependent on building employee support and enthusiasm for proposed change plans (Piderit, 2000).

On a diverse notion, if changes ought to bring good and positive impact to the employees, they tend to buy-in the concept of change initiative, agree to change implementation plan, and act for change implementation. The clear and accurate information on job expectation and things that are offered by the organization to help employees get their job done are primary requirements for creating the reciprocal obligations and mutual commitment between employees and organization (Strebel, 1996). The knowing that organization is supporting employees in implementing change task, i.e. creating the positive impression (Lambert, 2000), matters to how employees perceive and react to the initiative and its implementation. All in all, it is necessary for organization to make sure of increasing positive impact and reducing negative consequence on employees when considering implementing a change project.

For additional analysis of the effect of perception on organizational learning and change on the employees' cognitive and behavioral learning, the statistical results support that the

change in such knowledge can explain the change in behavioral cooperation of employees, and cognitive understanding of the *what* of change, in the same direction.

The knowing that organization needs to continuously adapt and change in order to survive may make employees realize the need for them to be supportive and cooperative to change movements. Sometimes even when the change implementation direction is not clear and implementers are doubtful, as long as the goal of becoming a learning organization seems to be worth striving for, it may be a good motivator for employees to work their ways toward organizational learning and change (Marsick and Watkins, 1999). However, it should be precaution that too much emphasis on the importance of learning to organization's survival might be double edged as employees may overlook the careful interpretation of what that particular change is bringing about. The notion that change is good for organization may blind the employees to believe that the change initiative is good without looking at the characteristics of change, or not questioning the implementation process. Without the true understanding of a change movement, employees may feel the force of having to participate in making change happen as it may have reverse effect to them if they do not.

Conclusion

This study offers an additional dimension to looking at organizational change. The two approaches of behavioral and cognitive aspects coexist because they represents two different phenomena and neither is adequate by itself, although the distinction in reality is rather abstract (Starbuck and Hedberg, 2001). As individual learning is deem crucial to organizational learning, the study of factors influencing the two dimension of learning is necessary. It is suggested that organizations in which are involved in organizational change movement should pay attention in educating their employees to be aware of the importance of organizational learning and change, as well as, creating more of the direct positive impact and less of the direct negative impact

employees are to perceive from any change movement, to be able to gain employees' cognitive understanding of and behavioral cooperation to the change.

The study is restricted to generally the self-perceived effect and understanding of change as the influential factors and bounded in a specific geographic area. Further analysis that enhances the study into becoming more multi-dimensional and multiple-site study is high recommended.

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