

# How Responsible Leadership by School Administrators and Effective Teamwork, Influences the Effectiveness of Schools under the Office of the Basic Education Commission, Thailand with Intellectual Capital as a Mediator

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## Abstract

The objectives of this research were to study responsible leadership by school administrators, effective teamwork, intellectual capital, and schools effectiveness under the control of the Office of the Basic Education Commission with a view to developing a linear structural equation model of their effectiveness based on empirical data. The sample consisted of 432 school administrators employed by the Office of the Basic Education Commission selected by multistage random sampling. The research instrument was a 4-section questionnaire with items using a 5-point rating scale. The data were analyzed by descriptive statistics, Pearson correlation coefficients, and a structural equation model (SEM). The findings revealed that: 1) effective teamwork and intellectual capital have a direct effect on school effectiveness with the effect size equalling 0.41, 0.53 respectively 2) responsible leadership of school administrators and effective teamwork have an indirect effect on school effectiveness with intellectual capital as a mediator variable and the effect size equalling 0.77, 0.71 respectively 3) responsible leadership of school administrators has an indirect effect on school effectiveness with effective teamwork and intellectual capital as mediator variables and the effect size equalling 1.18 and 4) the linear structural equation model of school effectiveness developed fit the empirical data based on the following criteria:  $\chi^2 = 184.93$ ,  $df = 69$ ,  $\chi^2/df = 2.68$ ,  $RMSEA = 0.06$ ,  $CFI = 0.98$ ,  $GFI = 0.95$ ,  $AGFI = 0.90$ . Responsible leadership of school administrators, effective teamwork, and intellectual capital jointly explained 85% of the variance in school effectiveness.

**Keywords:** Responsible Leadership of School Administrators, Effective Teamwork, Intellectual Capital, School Effectiveness

## Introduction

Since 1992, Thailand has focused on education as a means of developing human resources based on increased investment in education. However, the outcome of education in Thailand as reflected by the students' achievements is still unsatisfactory. For example, in 2015, the International Institute for Management Development (IMD) placed Thailand 30<sup>th</sup> out of 61 countries around the world for student outcomes behind both Singapore and Malaysia, and in 2012, the Organisation for Economic Co-operation and Development (OECD) through its Program for International Student Assessment (PISA) assessed Thai students' results as being below average in every subject. Further, while the World Economic Forum (WEF) ranked Thailand's ability in competitiveness as 31<sup>st</sup> out of 144 countries in 2014-2015, this was still behind both Singapore and Malaysia. Moreover, based on the outcome of basic education, Thailand is behind Singapore, Malaysia, Indonesia, The Philippines, and Laos with the scores of primary students in Thailand in the Ordinary National Educational Test (O-NET) in the five main subjects in 2015 being less than the regional mean. While the scores of high school students are a little higher than the regional mean, those in English are much lower than the mean. Therefore, it is obvious that Thailand is facing problems in educational management which need to be urgently resolved. (Office of the Education Council, 2016a, 2016b, 2016c; The PISA Thailand and The Institute for the Promotion of Teaching Science and Technology, 2014; Office of the Education Council, 2015; Office of the Basic Education Commission, 2015; National Institute of Educational Testing Service (Public Organization), 2016a, 2016b, 2016c).

In addition, as Thailand has sought to transform its economy into a knowledge-based system, the importance of the development of intellectual capital has been appreciated. Many researchers have studied the issue of intellectual capital. Stewart (1997) and Bontis et al. (2000) defined intellectual capital as a mixture of staff knowledge and capacities which bring success to an organization or company and a number of studies have found that the intellectual capital inherent in an organizations' staff has a significant influence on the effectiveness of that organization (Chaikongkiat, 2008; Chanakhar, 2014; Bontis et al., 2010; Akbarpour and Badrabad, 2013; Vaziri et al., 2014; Hadijah et al., 2015; Hashim et al., 2015, and Gogan et al., 2016). Intellectual capital can also create value by managing knowledge and the more that intellectual capital is used the more it will develop. Further, Kumari et al. (2015) discovered that responsible leadership has a direct effect on intellectual capital because it leads to effective decision making and working. However that study discovered that responsible leadership has an indirect effect on intellectual capital with effective teamwork acting as a mediator variable. Similarly, in Thailand, Charuaendech (2015) discovered that the style of teamwork has an influence on organizational effectiveness because teamwork is an important element in learning and improvement since learning through teamwork links people with the organization.

## Operational Definitions

**School effectiveness** is the ability of a school to be modern and adaptable in the face of globalization, to respond to change and to achieve its objectives while giving satisfaction to stakeholders, based on four perspectives adapted from the conceptual framework of Quinn and Quinn (2009, cited in Hoy and Miskel, 2013):

1. Competitive view, which is the ability of a school to compete by using the products of successful processes employed by educational staff, students, and other stakeholders.
2. Collaborative view, which is the ability of the school to create collaborations and networks to manage education effectively.

3. Control view, which is the ability of the school to work and to use knowledge in the manner most beneficial to the school, and acceptable to relevant organizations.

4. Creative view, which is the ability of the school to support educational staff, students, and stakeholders to show initiative and creativity, to create learning products or innovations, to develop the school to be capable of solving any problems presented by globalization and to be an educational leader.

**Responsible leadership** is the ability to create and sustain relationships with stakeholders based on leaders' values and ethics, leading to the achievement of the organization's objectives, including three elements adapted from the conceptual framework of Wood and Winston (2005):

1. Responsibility, which is the administrators' responsibility towards their staff and their responsibility to perform their duty in a manner acceptable to them and to show willingness and acceptance of being the leader who administers the organization and makes it successful.

2. Openness, which is open-mindedness to accepting changes and comments from others, paying attention to stakeholders' feelings and adapting to new challenges.

3. Answerability, which is the ability to provide explanations and answers to any questions, and to behave in a manner which will gain respect and public trust.

**Effective teamwork** is collaboration among educational staff which leads to the achievement of organizational goals, staff satisfaction, good relationships, responsibility and a willingness to work towards achieving goals. It is based on six elements adapted from the conceptual framework of Cantu (2007):

1. Teamwork, which is the cooperation of educational staff whereby everyone subscribes to the organization's objectives and values, and willingly performs their own duties for the benefit of the organization and national education.

2. Decision-making, which is the administrator's ability to understand problems appropriately and to choose proper solutions for those problems through engaging the staff in the school, working individually or as a group.

3. Leadership support, which is good support from the administrator.

4. Trust and respect, which is the ability to obtain respect both in manner and thought from educational staff in the school through effective communication.

5. Recognition and rewards, which are important as a way of ensuring that staff are treated fairly and rewarded appropriately, leading to acceptance and satisfaction among the educational staff in the school.

6. Customer focus, which is the school understanding its customers' demands and responding effectively to them.

**Intellectual capital** is people's knowledge, capacities, skills, and experience inherent in them and gained from learning. It is the personal potentiality of the administrator, teachers, educational staff, students, and stakeholders in a school to create value for themselves and the organization, and is considered from three perspectives adapted from the conceptual framework of Stewart (1997):

1. Human capital, which is the knowledge of the educational staff, students, and stakeholders in the school gained from learning, studying, experience in their professions, innovation and creativity, which can create new strategies to develop education in the school more effectively.

2. Structural capital, which is knowledge inherited from past and present educational staff, students, and stakeholders in the school, regarding its daily routines, system, processes, research and development, and its intellectual capital, and enables new staff to learn quickly and become part of the management and culture of the school.

3. Relationship capital, which is the knowledge of external relationships among stakeholders and public and private organizations involved with the school which help to maintain the stability of the school.

## Research Hypothesis

The hypotheses of this study are that

1. Effective teamwork and intellectual capital have a direct influence on the effectiveness of schools under the control of the Office of the Basic Education Commission (OBEC).
2. The responsible leadership of school administrators and effective teamwork have an indirect effect on the effectiveness of schools under OBEC control, with intellectual capital as a mediator variable.
3. The responsible leadership of school administrators has an indirect effect on the effectiveness of schools under OBEC control with effective teamwork and intellectual capital as mediator variables.

## Research Methodology

This study was conducted using a descriptive survey as its methodology. The population was 30,816 schools under the control of OBEC of the Ministry of Education in the school year 2016. The sample consisted of 432 schools selected by multi-stage random sampling, and the school was used as the unit of analysis.

The research instrument was a questionnaire consisting of items based on a 5-point rating scale. The questionnaire consisted of 115 questions divided into four sections: 17 questions measuring responsible leadership of school administrators, 54 questions measuring effective teamwork, 24 questions measuring intellectual capital, and 20 questions measuring school effectiveness. Cronbach's Alpha coefficient was used to test the reliability of the instrument and the reliability coefficients were found to be as follows: responsible leadership of school administrators: 0.876, effective teamwork: 0.984, intellectual capital: 0.976, and School effectiveness: 0.970. Hypothesis testing was conducted through SEM using the LISREL software package.

## Research Results

Based on the testing of the first hypothesis, effective teamwork has a direct effect on the effectiveness of school under OBEC control with a direct influence coefficient of 0.41 which is significant at  $p < 0.01$ . In addition, intellectual capital has a direct effect on the school effectiveness under OBEC control with a direct influence coefficient of 0.53 which is also significant at  $p < 0.01$ . Thus the first hypothesis is supported. This finding shows that the development of school effectiveness is directly influenced by: 1) effective teamwork because organizations with effective teamwork can adapt and solve problems and can increase production and encourage the cooperation of members in a team to reach their goals and objectives. As Thiratanachaiyakul (2015) said opined, an effective team is one in which the members cooperate and take responsibility to finish work completely. Good teamwork is where each member contributes ideas and is willing and committed to finishing their work in order to achieve the organization's objectives. Because of the differences in each member's knowledge, ability, and behaviour, working as a team can produce ideas and apply abilities to produce work and deal with problems. (Kasetauim, 2015). Moreover, effective teamwork allows the organization to increase its effectiveness and as mentioned in the study by Charuaendech (2015), influences the effectiveness of the organization. Cantu (2007) suggested that there are six dimensions along which to measure the effectiveness of an organization, consisting of, teamwork, decision-making, leadership support, trust and respect, recognition and rewards, and customer focus. Hence, administrators need to understand the elements and factors promoting effective teamwork because the achievement of most tasks or missions depends on teamwork. Team members need to brainstorm ideas and to be creative to fulfil the organization's plans. When the teamwork in the organization is effective, the overall

effectiveness of the organization can be increased.

The other variable directly influencing the effectiveness of schools under the control of OBEC is intellectual capital which represents the sum of the knowledge, abilities, skills and experience of the individuals in the organization gained from previous learning. It can be considered as the individual potential that can give value to the owners of the school and can help the school succeed against its competition. As countries transform themselves to knowledge economies, many countries, including Thailand, have focused on intellectual capital management and this has become an issue on which academics place great stress. It is an important factor which can give the organization an advantage in the competition of intellectual property and plays an important role in the transformation of organizations to construct a knowledge economy, especially in dramatically changing and increasing the use of technology. In addition, many researchers have found that intellectual capital can produce more value overall than other factors. For instance, Chaikongkeit (2008), Akbarpour and Badrabi (2013), Hadijah et al. (2015), Hashim et al. (2015), and Gogan et al. (2016) all found that intellectual capital has a direct influence on organizational effectiveness, while Chanakhar (2014) noted that the management of intellectual capital has a similar direct influence on organization effectiveness. Vaziri et al. (2014) meanwhile, suggested that intellectual capital influences organization effectiveness in three dimensions; relationship capital, structural capital, and human capital. Therefore, administrators must be aware that the intellectual capital of an organization in the form of human, structural or relationship capital can create value for both individuals and the organization. Intellectual capital can also increase as time passes because it represents not only knowledge and skills, but also includes the application of intelligence to tasks.

In respect of the second hypothesis, it was found that the responsible leadership of school administrators and effective teamwork have an indirect influence on the school effectiveness under the control of OBEC with intellectual capital as a mediator variable and the second hypothesis is therefore supported. As Chanakhar (2014) found, the administrator's leadership has an indirect effect on organizational effectiveness with the management of intellectual capital as a mediator variable and this finding was consistent with that of Hadijah et al. (2015) that transformational leadership has indirect effects on organizational effectiveness with intellectual capital as a mediator variable. Transformational leadership is a process that affects team-mates and staff and encourages them to view themselves favorably and work in new ways. It also builds awareness of the corporate vision and mission. The United Nations Global Compact and European Foundation for Management Development (2008, cited in Szczepanska-Woszczyzna, 2015) suggested that responsible leadership is a global practice consisting of a leader's ethics and basic values which need to contribute to the economy, society and sustainable development. It is the art of motivation, communication, reinforcement, and the stimulation of others to create new visions in sustainable development. Responsible leaders can use their ideas to bring about transformations for the benefit of stakeholders in schools. However, leaders must cultivate a good relationship between those stakeholders and the school as well as developing strategies to improve the students' learning achievements as noted by Leithwood et al. (2010), Hargreaves and Harris (2011), and Starratt (2004 and 2005 cited in Stone-Johnson, 2014). So, the school administrator is an important person who controls the factors that affect students' learning and she/he can use her/his leadership through other people to develop relationships that can lead to success.

In respect of the third hypothesis, responsible leadership of school administrators was found to have an indirect influence on the school effectiveness under OBEC control with effective teamwork and intellectual capital as mediator variables. The third hypothesis is therefore supported. and this finding is consistent with the study of Kumari et al. (2015) who found that responsible leadership has both direct and indirect effects on intellectual capital with effective

teamwork as a mediator variable, as well as with the study of Chanakhar (2014) who found that the administrator’s leadership has indirect effects on organizational effectiveness with the management of intellectual capital as a mediator variable. This is because an administrator who exercises responsible leadership is able to build good relationships both inside and outside school and by carrying out their management role honestly, is able to control the school system and motivate those involved in the school organization towards success and the realization of the school’s goals, while recognizing and taking into account the needs of those involved in making decisions about the school and adapting their actions to the needs of globalization.

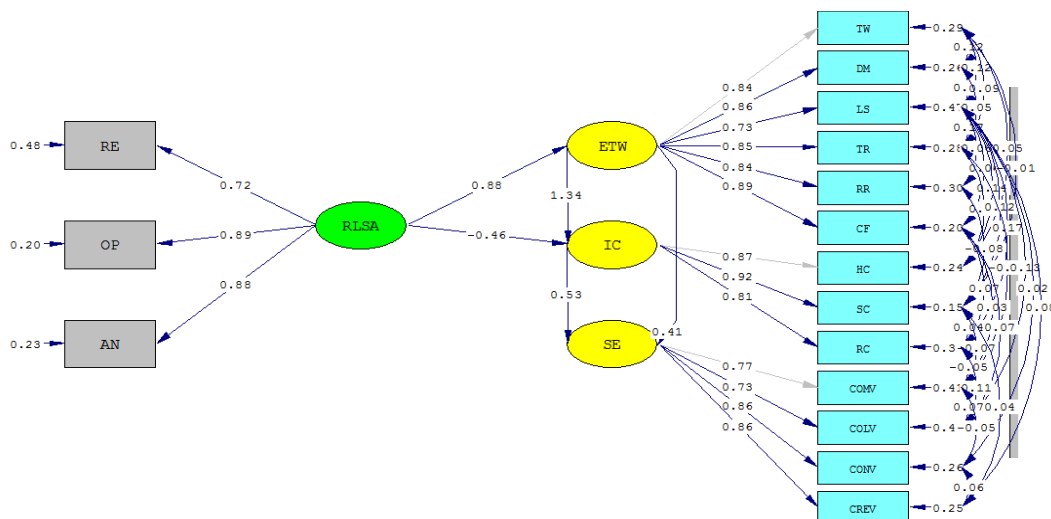
Another finding from this study is that administrator’s responsible leadership does not have any effect on intellectual capital (influence coefficient: -0.46 not significant at  $p < 0.01$ ). This is consistent with the study of Chanakhar (2014) who found that the leadership of the administrator has only an indirect effect on organizational effectiveness with intellectual capital as a mediator variable, but found that the administrator’s leadership has a direct effect on intellectual capital.

### Conclusion

Overall, the dimension of responsible leadership of school administrators that had the highest mean was answerability, followed by openness, with responsibility having the lowest mean. The dimension of effective teamwork with the highest mean was recognition and rewards, followed by decision-making, with leadership support having the lowest mean. The dimension of intellectual capital with the highest mean was human capital, followed by relationship capital, with structural capital having the lowest mean. The dimension of school effectiveness with the highest mean was competitive view, followed by control view, with creative view having the lowest mean.

The SEM of responsible leadership of school administrators, effective teamwork, intellectual capital and school effectiveness under the control of OBEC produced results that fit the empirical data with the fit indices being:  $\chi^2 = 184.93$ ,  $df = 69$ ,  $\chi^2/df = 2.68$ ,  $RMSEA = 0.06$ ,  $CFI = 0.98$ ,  $GFI = 0.95$ ,  $AGFI = 0.90$ .

Based on a joint variance test, it was discovered that the independent variables in the model explained 85 % of the variance in the effectiveness of schools under the control of OBEC and all the study’s research hypotheses were supported. The SEM showing the causal relationships between the variables is shown below in Figure 1.



**Figure 1** Structural Equation Model

## Recommendations

1. School administrators should focus on effective teamwork and encourage cooperation among administrators, teachers, and educational staff, show empathy for others and take responsibility for the achievement of success through effectively planned work and the six elements of effective teamwork.
2. School administrators should focus on intellectual capital which represents the sum of the knowledge, abilities, skills, and experience both inherent in people and gained by them from learning. Intellectual capital is the individual capabilities of school administrators, teachers, educational staff, students and other stakeholders who are involved in the school system and can create benefits for the individuals and their school through the three elements of intellectual capital.
3. School administrators should focus on responsible leadership which incorporates the ability to establish sustainable relationships between the administrators and stakeholders based on the leader's values and ethics, leading to the achievement of the school's objectives through the three elements of responsible leadership.

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