

Leadership and Strategic Management Affecting the Educational Institution Administration under Educational Service Area in Official Inspection Region 1

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ARTICLE INFO

Article history

Received: May 29, 2024

Accepted: June 22, 2025

Published: July 31, 2025

Volume: 13 Issue: 3

Conflicts of interest: None

Funding: None

ABSTRACT

The objectives of this research were to study to identify (i) the components of leadership of school administrators under Educational Service Area in Official Inspection Region 1, (ii) the components of strategic management of school administrators, and (iii) the causal relationship between leadership and strategic management of school administrators as to the effectiveness of school administrators. Then, exploratory factor analysis (EFA) was used to analyze the components of the sample group of administrators, namely 600 school administrators or teachers in schools. Data was collected using a 5-level rating scale questionnaire with a reliability between .803 and 1.00. The 5-level rating scale had a reliability between .803 and 1.00. The causal relationship of leadership and strategic management, contributing to the effectiveness of educational administrators, was consistent with the empirical data at a good level. The structural equation was consistent with the empirical data. From the model validity test index, the overall fit was good among all values. The effectiveness of educational administrators through strategic management had an influence coefficient of 0.42, which was statistically significant at the 0.05 level. Further, strategic management had a direct influence on the effectiveness of administrators at 0.44, which was statistically significant at the 0.01 level.

Key words: Components, Leadership, Strategic Management, School Administrators' Effectiveness, Causal Relationship

INTRODUCTION

The executives of an organization are an important mechanism that drives the organization. It is very important to have specific characteristics, competencies or skills that will lead the organization to be able to change what is happening. The components of the leader should have characteristics that are intelligent about people, optimism, professionalism, and formal as well as informal leaders. The subordinates will then create an atmosphere with a shared vision, team learning and systematic thinking. They can motivate, lead or guide the group members to join forces to complete the group's missions (Ladathanasak, 2018). In Thailand 4.0, everything must go through planning to create a good foundation and environment. Participants must be patient because it takes a long time to see results. Everything takes time and must operate in many parts simultaneously, especially in creating a strategy to drive the country. Currently, everyone must come to see that what is being produced is an innovation that can be expanded commercially. Executives need to acquire new characteristics to adapt to changing contexts (Saensuk, 2021) and adapt to the current situation.

Administrators should plan, design or define strategic visions for the organization, leading it to implement

development. If there is a strategic leadership model to enable administrators to promote leadership, planning, setting guidelines, supporting, helping, having visions, and being able to motivate and guide individuals or groups to work to achieve their goals; then leadership development is the key to driving change. School administrators must adjust management and leadership styles to be consistent and appropriate with the changes that occur (Office of the Basic Education Commission, 2023). There are specific characteristics that are different from other provinces in Thailand.

From the reasons mentioned above, educational area in Official Inspection Region 1 still does not have a guideline for developing leadership and strategic management for developing educational institutions located in geographical areas. This is despite that it has the highest hidden population, namely Bangkok, Nonthaburi and Phra Nakhon Si Ayutthaya. Therefore, it has led to the study on "Leadership and Strategic Management Affecting the of Educational Institution Administrators under Educational Area in Official Inspection Region 1" to be used as a guideline for developing leadership and strategic management of educational institution administrators. This will result in better management of educational institutions and promote the organization's management process to be

effective. It will raise the quality of educational management of educational institutions to meet standards and achieve objectives effectively and efficiently. In addition, the results of the research will be used as information for improving quality, enabling quality education management, and developing work processes for sustainability.

Objectives

1. To identify the components of leadership of school administrators under Educational Area in Official Inspection Region 1
2. To identify the components of strategic management of school administrators
3. To identify the causal relationship between leadership and strategic management of school administrators as to the effectiveness of school administrators

METHODOLOGY

This research used the Mixed Methods Research methodology, which was divided into 4 sub-headings follows:

Sample

The research studies the leadership components of school administrators under Educational Service Area in Official Inspection Region 1 by starting from the review of related documents and research. This consists of concepts and theories on basic education administration, leadership, and strategic leadership. The research studies the leadership components of school administrators under Educational Service in Official Inspection Region 1 by starting from the review of related documents and research. This consists of concepts and theories on basic education administration, concepts and theories on leadership, and strategic leadership.

Instruments

Instruments and construction of instruments were used in the research. The researcher used a questionnaire with a five-level Likert rating scale and checked the quality of the instrument by checking the content validity with CVI. The questionnaire had 41 variables with a reliability between .803 and 1.00. For the data collection, the researcher acquired data via Google Form. Data analysis and statistics used in the research Factor Analysis, Exploratory Factor Analysis, and Confirmatory Factor Analysis to obtain the research results.

Data Collection

This study of the causal relationship between leadership and strategic management on the effectiveness of school administrators under Educational Service Area in Official Inspection Region 1 is a quantitative analysis through the creation and verification of Structural Equation Modeling (SEM) using data from questionnaires collected from administrators.

Data Analysis

This related research utilizes Content Analysis and Confirmatory Factor Analysis (CFA) to examine and confirm the measurement model obtained from the empirical data and model. The population was 600 school administrators. This is to Confirmatory Factor Analysis (CFA) was used to check and confirm that the measurement model obtained from empirical data and the measurement model obtained from the theory were truly consistent. The population consisted of 600 school administrators under the Educational Service Area Group One. Instruments and construction of instruments were used in the research as follows. The researcher used a questionnaire with a scale (five-level Likert rating scale) and checked the quality of the instrument by checking the content validity with CVI. The questionnaire had 18 variables with a reliability between 0.803 and 1.00. For data collection, the researcher acquired data via Google Form. Data analysis and statistics used in the research were Factor Analysis, Exploratory Factor Analysis, and Confirmatory Factor Analysis.

RESULTS

Study of the Effectiveness Components of School Administrators

The results of the synthesis of documents, concepts, theories, and research related to the Effectiveness Components of School Administrators indicated that Exploratory Analysis (EFA), according to the initial agreement of the statistics of the analysis of each component, must be significant. This further indicated that the questions are related enough to be used for the exploration component analysis. The value indicating the appropriateness of the data should be greater than .50. The analysis results are as shown in Table 1.

In conclusion, when extracting the Factor Extraction and Factor Rotation using the Oblique Rotation method, the indicators of the effectiveness of school administrators from the exploratory component analysis found that they could show details of the components and indicators that passed the selection criteria as shown in Table 2

Results of Confirmatory Factor Analysis (CFA) using the Amos program, and when considering the consistency of the measurement model according to the research framework, found the components of the promotion of discipline, morality, ethics, and development of the learning environment, development of students, and effective school management.

Preliminary data analysis Skewness (SK) and Kurtosis (KU) indicated that the observed variables were distributed as Normal Distribution.

Results of the confirmatory factor analysis of the effectiveness of school administrators, which the researchers have compared with the Fit Indices, and commonly reported for CFA measurement criteria, are shown in the details of Table 3.

From Table 3, the results of the analysis of the components of the indicators of the effectiveness of school administrators, the overall measurement model, found that the model is consistent with the empirical data at a good level.

Table 1. Kaiser-meyer-olkin measure of sampling adequacy and bartlett's test of sphericity for the analysis of components and indicators of school administrator' effectiveness

| Indicator | Kaiser-Mayer-Olkin measure of sampling adequacy: (KMO) | | Chi-Square | Bartlett's test of sphericity value obtained from analysis | Optimum value |
|------------|--|------------------------------|------------|--|---------------|
| | Optimum value | Value obtained from analysis | | | |
| Indicator | More than 0.50 | 0.880 | 22060.152 | p<0.001 | p<0.05 |
| 29 | (More than 0.90 is considered | | | | |
| Indicators | Very Good) | | | | |

Table 2. Eigenvalue, percentage of variance and cumulative percentage of variance of the components of the effectiveness indicators of school administrators

| Component | Eigenvalue | Percentage of variance | Cumulative percentage of variance |
|--|------------|------------------------|-----------------------------------|
| 1. Producing students with higher academic achievement | 11.886 | 56.599 | 56.599 |
| 2. Promoting discipline, morality, ethics and developing a learning environment. | 2.127 | 10.130 | 66.728 |
| 3. Student development and effective school management | 1.109 | 5.279 | 72.008 |

Table 3. Fit indices, and commonly reported statistics, measurement criteria, analysis results and analysis results compared to measurement criteria

| Statistics | Measurement criteria | Analysis results | Analysis results compared to measurement criteria |
|-------------|----------------------|------------------|---|
| χ^2/df | ≤ 3 | 2.650 | pass |
| P | $>.05$ | .000 | pass |
| RMR | $<.08$ | 0.005 | pass |
| TLI | ≥ 0.90 | 0.981 | pass |
| CFI | ≥ 0.90 | 0.995 | pass |
| RMSEA | $<.08$ | 0.053 | pass |

$\chi^2 = 90.096$, $df = 34$

The significance is not shown, so the p value is statistically significant.

The results of the confirmatory component analysis show the weight of the latent variables used in the structural equation model, as shown in Table 4.

From Table 4, the result of the analysis of the latent variable indicators in the structural equation model of the causal relationship of leadership and strategic management that influences the effectiveness of the model, showed that the model was consistent with the empirical data at a good level. This result was considered from the chi-square value (χ^2), which was equal to 8.1446 at the degrees of freedom (df) which is equal to 4. The probability value (p.) equal to 0.086, the chi-square value (CMIN/DF) is equal to 2.036, the comparative fit index (TLI) is equal to 0.991, and the comparative goodness of fit index (CFI) is equal to 0.999.

This study shows the causal relationship between leadership and strategic management which influences the effectiveness of educational institution administrators. The results of the test of the causal relationship between

Table 4. Results of the analysis of the harmony of the measurement of the latent variables in the structural equation model of the causal relationship of leadership and strategic management which influence the effectiveness of school administrators

| Statistics | Measurement criteria | Analysis results | Analysis results compared to measurement criteria |
|-------------------------|----------------------|------------------|---|
| CMIN/DF (χ^2/df) | ≤ 3 | 2.036 | pass |
| P | $>.05$ | 0.086 | pass |
| RMR | $<.08$ | 0.002 | pass |
| TLI | ≥ 0.90 | 0.991 | pass |
| CFI | ≥ 0.90 | 0.999 | pass |
| RMSEA | $<.08$ | 0.042 | pass |

$\chi^2 = 90.096$, $df = 34$

leadership and strategic management that influence the effectiveness of educational institution administrators under Educational Service Area in Official Inspection Region 1 found that the structural equation is not consistent with the empirical data. This is considered from the chi-square value (χ^2) of 1565.637 at the degrees of freedom (df) of 49, the probability value (p.) of .000, the chi-square correlation value (CMIN/DF) of 31.952, the comparative fit index (TLI) of .719, the comparative fit index (CFI) of .791, and the square root mean square of the residuals (RMR) of .013, as shown in Figure 1.

The researchers therefore adjusted the structural equations according to the hypothesis to be consistent with the empirical data as suggested by the modification index program. The results of the data analysis after adjusting the structural equations are shown in Figure 1.

The results of the data analysis according to the adjusted structural equations (Figure 1) showed that the structural

equations were consistent with the empirical data. From the overall model fit index test values, all values were in a good range, resulting in a statistically significant p value. Therefore, the model fit test must consider other statistical values (Wanichbancha, 2013; Rangsungnern, 2011). The causal factors in the model can jointly explain the variance of strategic management and the effectiveness of educational administrators, overall, by 93 and 82 percent, respectively, as seen from the squared multiple correlation coefficient (R^2). The results of hypothesis testing from the adjusted structural equations by analyzing direct influences, indirect influences, and combined influences, are shown in Table 5.

Table 5 presents the results of hypothesis testing from the adjusted structural equations by analyzing direct influences, indirect influences, and combined influences.

From Table 5, the hypothesis testing from the adjusted structural equation by analyzing direct influence, indirect influence and combined influence found the estimation in the structural equation model as follows:

1. Leadership has a direct influence on the effective strategic management of educational institution administrators at the influence coefficient of 0.96, which is statistically significant at the 0.01 level.
2. Leadership has a direct influence on the effectiveness of administrators at the influence coefficient of 0.47, which is statistically significant at the 0.01 level. It also has an indirect influence on the effectiveness of educational institution administrators through strategic management at the influence coefficient of 0.42, which is statistically significant at the 0.05 level.
3. Strategic management has a direct influence on the effectiveness of educational institution administrators at

the influence coefficient of 0.44, which is statistically significant at the 0.01 level.

DISCUSSION

The results are discussed in the following section following the objectives of the study. The results related to the components and indicators of leadership of administrators who have ideas and understanding lead to effective strategy determination. This helps educational institution administrators to analyze changing situations and effectively lead to new strategy determination. They can manage work so that different departments work together for the same purpose, helping to drive educational institutions to achieve educational goals and sustainably respond to the needs of society. This is consistent with the results of the research of Muangsong (2007) who studied the strategic leadership development model of basic education administrators. It was found that the strategic leadership development model of basic education administrators was related to the essence of important strategic leadership characteristics which is to have activities that use High-Level Cognitive Activity, resulting in leading the organization to develop in the new era. This is consistent with the concept of Nawikarn (2001) who mentioned that an effective strategic leader must be a leader who has the Revolutionary Thinking method applied to help administrators manage in line with the needs of the community and those involved. It further helps to gain acceptance and support from personnel and the community. Using organizational culture to determine strategies is important to lead educational institutions to success. This is consistent with the view of Boonkwan (2006) who stated that administrators must stimulate ideas

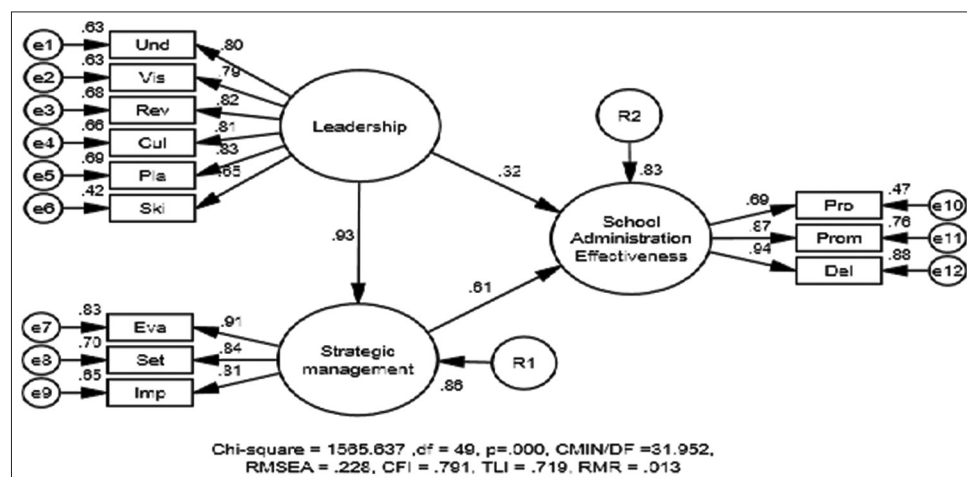


Figure 1. data analysis after adjusting the structural equations

Table 5. Results of analysis of factors with direct influences, indirect influences, and combined influences on the effectiveness of school administrators

| variable | Strategic Management | | | Effectiveness of educational administrators | | |
|----------------------|----------------------------|---------------------------|-----------------------|---|---------------------------|-----------------------|
| | Influence Straight path | Influence Indirect way | Influence together | influence Straight path | influence Indirect way | Influence together |
| Leadership | 0.96** | - | 0.96** | 0.47** | 0.42* | 0.89** |
| Strategic Management | - | - | - | 0.44* | - | 0.44* |

and be open to everyone according to the principle of participation that promotes relationships in the organization. When encountering a problem, it will be solved for long-term results. One must be a strategic planner who drives the strategy to achieve the goal. This is consistent with the results of the study of Sritumma and Wongkhomthong (2021) who researched the components of strategic leadership competency among nursing executives in private hospitals in Thailand. It was found that the strategic leadership competency of nursing executives in private hospitals in Thailand carried a relatively high weight and demonstrated innovative strategic thinking and planning. This led to new findings that senior nursing executives should prioritize developing strategic thinking and strategic planning. Internal indicators of skills and strategic thinking will also help educational institution administrators develop quality in line with the results of the study. Prasertsak et al. (2020) studied the components of strategic leadership of private university administrators in Thailand. The researcher found that senior executives should attach greater importance to developing private university administrators to have strategic leadership skills, and that they should use strategic leadership components as a guideline for developing criteria or indicators for the performance of private universities.

The results related to the elements and indicators of strategic management of educational institution administrators conclude that indicators within the element, which are strategic evaluation and control, are important for strategic management of educational institution administrators. This is because they are the first element that will promote strategic management of educational institution administrators, as well as help educational institutions to adapt quickly to changes in society, technology, and educational policies. This is consistent with Chunhaphanrak (2001), Yawirach (2006), and Kaewjamnong (2009) who stated that the strategic management process consists of these important steps: strategic evaluation and control (which is a step that focuses on monitoring) and then evaluating and controlling the results. Indicators within the element show that strategy and goal-setting help administrators lead educational institutions in a clear direction that is consistent with its vision and mission. Organizational structure helps the work in educational institutions to become more systematic and efficient. This is consistent with Rasamithamchote (2008) who found that the elements of strategic management that cover goals and strategies are sub-guidelines that the organization uses as a framework for selecting plans, works or projects to achieve objectives. These are indicators within the element, that is, strategy implementation and monitoring. These help in planning policies that are consistent with the vision, while creating an information system that covers personnel and student management. In addition, the effective implementation of strategies helps administrators to monitor progress and update strategies in a timely manner. This is consistent with Kaewjamnong (2009) and Chatreewisit (2010) who also mentioned the important elements of strategic management, which are strategy implementation and evaluation.

We also studied the components and indicators of the effectiveness of school administrators who help produce

students with increased academic achievement. It is important to develop the effectiveness of school administrators because they can closely supervise and develop the quality of teaching. It further helps teachers to have up-to-date skills and knowledge. It can help organize teaching and learning more effectively. Therefore, it is possible to continuously improve and develop teaching and learning. All this is consistent with the research results of Kangpeng (2008) who found that academic achievement and the learning organization are important components of school effectiveness. Indicators within the components involve promoting discipline, morality, and ethics as well as developing a learning environment. These helps increase the potential of teachers and personnel. It creates an environment conducive to the development of desirable characteristics that will affect the quality of education in the school. It includes praising students who follow the rules and regulations of society. It promotes students to have mental stability and will help them evolve into quality persons who are good citizens of society. It is consistent with Hoy and Miskel (2008) who asserted that the effectiveness of schools consisted of the following important components: the ability to develop students' positive attitudes (Positive Attitude); letting students have good opinions or behaviors that are reasonable and consistent with the needs of society; promoting expression which is desirable to a society; and maintaining mental stability. The confirmation of the components and indicators of the latent variables in the structural equation model of the causal relationship of leadership and strategic management were found to influence the effectiveness of school administrators under Educational Service Area in Official Inspection Region 1 (referenced earlier). It resulted in three components and 12 indicators:

1. leadership components with six indicators,
2. strategic management components with three indicators, and
3. school administrator effectiveness components with three indicators.

All of these are consistent with the empirical data of all three components and 12 indicators. Therefore, the researcher used the obtained indicators to create a structural equation model of the causal relationship of leadership and strategic management that influences the effectiveness of school administrators under the Educational Service Area Group One. This is also consistent with Banjong (2018) who studied the causal model of leadership practices of administrators and school atmosphere through teachers' morale that affect the academic achievement of primary school students under the Office of the Private Education Commission. It was found that the leadership practices of administrators, the school atmosphere, and teachers' morale were at a moderate level.

The results related to the causal relationship of leadership and strategic management that influence the effectiveness of educational administrators showed that leadership has a direct influence on the strategic management of educational administrators under Educational Service Area in Official Inspection Region 1. This is because strategic management requires leaders or administrators who are able to set directions and strategies that are appropriate for specific

environments, both in terms of ideas and understanding. These lead to effective strategy determination, vision determination, revolutionary thinking for organizational development, the promotion of a culture of participation in the organization, planning and driving strategies, and strategic skills and thinking. All of these are consistent with the study of Buphata (2019) who studied the strategic leadership development model of police station chiefs under the Provincial Police Region Four. The research results found that the overall strategic leadership level of police station chiefs was high, with strategic direction determination, strategy implementation, organizational culture creation, strategy transfer to the organization, and resource management, all at a high level. Factors affecting strategic leadership include motivation from educational institutions and communities, self-development of consciousness, and professional ideology. Leadership has a direct influence on the effectiveness of educational administrators under the Educational Area in Official Inspection Region 1 because leadership is an important factor that determines the direction and success of the educational institution. Leaders with good leadership can set the organization's directions. They can motivate, develop personnel, create cooperation, and manage resources effectively, resulting in educational institutions achieving their goals and developing educational quality. This is consistent with the study results of Phichit Kopol (2016) who found that strategic leadership of educational institution administrators, in terms of high-level thinking processes, strategy formulation, strategy implementation, strategy control and evaluation, affects the effectiveness of opportunity to expand schools under the Office of the Basic Education Commission in the Northeast. Leadership indirectly influences the effectiveness of educational institution administration through strategic management because leaders with good leadership can set strategies that are consistent with the vision, create participation and cooperation, develop personnel, manage resources, and monitor and evaluate effectively. These result in educational institutions achieving their goals and developing educational quality. This is consistent with the research of Prasertsak (2020) who studied the relationship model between strategic leadership, innovation management, and the performance of private universities in Thailand. It was found that strategic leadership indirectly influences the performance of private universities through innovation management. The conclusion of the research results indicates that university administrators with strategic leadership abilities should use innovation management in their organizational management to help improve university performance. Strategic management has a direct influence on the effectiveness of educational institution administrators under the Educational Service Area in Official Inspection Region 1 because strategic management consists of strategy and goal formulation, strategy implementation, strategy evaluation and control. Further, monitoring and reviewing performance results will help school administrators to effectively determine the direction and plan for educational development, as well as adapt and solve problems in a timely manner. This results in effective school management and helps develop and improve the

quality of education in schools under Educational Service Area in Official Inspection Region 1. All of this is consistent with Sueajoy (2021) who studied the strategic leadership of school administrators that affects the quality of students in schools under the Office of the Secondary Education Area, Singburi, Ang Thong. It is necessary to define long-term organizational objectives and prioritize them so that they can be implemented. At the same time, there is an analysis of the external and internal environment to study the real context of the organization. Characteristics of good school administrators should include: being courageous in making decisions, being sensitive to information, increasing vision, being honest and creative, coordinating in all directions, thinking of new ways of working, motivating colleagues, being durable against problems and obstacles, being flexible according to events, and managing with participation. They must manage in a way that allows the team to participate in thinking, planning, making decisions, and taking responsibility. They must understand and analyze the problems to adjust the management strategy in line with the results of the study by Kanjanamaneet et al. (2025). The results of the study found that: They can use the SWOT Analysis as a strategic analysis tool to efficiently manage resources and provide opportunities for stakeholders to express their opinions in a safe atmosphere. In terms of resilience, executives should prepare for changing situations by supporting learning from challenges, viewing challenges as opportunities for learning and self-development, and conducting a risk analysis to prepare for potential situations.

CONCLUSION

School administrators in an era of many changes are leaders who can motivate internal personnel play a role in determining directions and policies, and lead schools to create the dynamics leading to success. They must be ready in terms of outstanding characteristics, namely, having high intellectual skills, being professional administrators, having a creative mind, and having a good attitude. They are visionary people with high expectations who aim to create success in work, as well as developing schools into learning organizations and creating schools into new-era innovative organizations. In addition, new-era school administrators must espouse a most important role, which is to change their roles from being controllers to leaders who set guidelines. These guidelines are for directing the work of personnel, understanding cultural diversity, demonstrating proactive management, and adhering to the principle of participation. They are adept at adjusting the organization to become a small organization within a greater horizontal structure and strengthening educational partnerships. Therefore, new-era leaders in the 21st century must seek knowledge in both theory, practice, and experience. In summary, this research can be used as a guideline for developing administrators.

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