



Causal relationship model of factors affecting collaboration between local administrative organizations in early childhood education management in Thailand

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Abstract

The purpose of this research was to study the consistency between the causal relationship model of factors affecting collaboration between local administrative organizations in early childhood education management in Thailand and the empirical data, and to examine the factors which directly and indirectly affect collaboration between local administrative organizations in early-childhood education management in Thailand. The methodology in the research was quantitative, using questionnaires as a research tool. The sample based on simple random sampling and drawing lots consisted of 62 child development centers and 372 participants. The findings of this study showed that the causal relationship model was inconsistent with the empirical data and therefore had to be adjusted. It was also discovered that only the law, and financial and budget limitations have direct effects on collaboration between local administration organizations in early childhood education management in Thailand.

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Introduction

The 1997 Constitution of the Kingdom of Thailand prescribed local administration to enable localities to autonomize their administration and management. The 1999 Determining Plans and Process of Decentralization to Local Government Organization Act was enacted to allow for the transfer of power in the provision of public services to local administrative organizations. These services include infrastructure development, educational promotion, public health, disaster prevention and mitigation,

environmental management, and more. Therefore, local administrative organizations tend to be the primary provider of public services to local people. This is especially true for educational services. At present, the central authorities transfer their authority to local administrative organizations so that they may take a role in supporting the provision of education and/or in providing education themselves. This is apparent in the provision of early childhood education (children aged between 3 and 5 years) for which most local administrative organizations have gradually established their own early childhood development centers. Previously, the local administrative organizations provided education for 5,201 early childhood development centers. Today, a total of 19,481 early childhood development centers have been transferred from various government authorities. This includes 7,520 centers from the Community Development Department (under the Ministry of Interior), 4,110 from the Office of Religious

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Affairs (under the Ministry of Education), and 2,560 from the Office of the National Primary Education. A part of the management budget has been allocated by the government as compensation for teachers and child caretakers, and to supply lunches, food supplement (milk), learning materials, and equipment. The remaining budget has been allocated by local administrative organizations to support the management of child development centers ([Department of Local Administration, n.d.](#)).

However, according to the early childhood education management of child development centers under several local administrative organizations, there have been several problems, such as the limited budget of several local administrative organizations, unprepared personnel, and other limitations regarding the administration of facilities, environment and safety, academics, curriculum-based activities, and community participation and support, which did not meet the standard operating criteria for child development centers of local administrative organizations ([The National Health Foundation, 2008](#)).

Given the limited budget to be allocated for the development of education management, and unstandardized management of several child development centers, if the local administrative organizations in charge of early-childhood development centers joined hands in the provision of early-childhood education, their management capabilities would be more efficient and effective. However, Thailand's local administrative organizations continue to rely on limited resources, (either budget or personnel) for the provision of education rather than collaborating with each other to enhance the quality and standards of education. This has been due to many local administrative organizations attaching their limited resources to a number of various activities rather than specific ones ([Sethabutr et al., 2002](#)). In fact, the 1999 Determining Plans and Process of Decentralization to Local Government Organization Act specifies that all types of local administrative organizations may collaborate.

Taking all this into account, it was interesting to look at the general concepts and theories relating to collaboration between local governments in the provision of public services and how they have been applied to constructs of collaboration between local governments. Therefore, a causal relationship model of factors affecting the collaboration between local administrative organizations in early childhood education management in Thailand was constructed. This model was then tested using empirical data. The findings of this study enabled us to determine if the causal relationship model of factors was consistent with the data, and which factors directly and indirectly influenced the collaboration between Thai local administrative organizations in early childhood education management.

Objectives

1) To study the consistency between the causal relationship model of factors affecting collaboration between local administrative organizations in early childhood education management in Thailand and the empirical data.

2) To examine the factors which directly and indirectly affect collaboration between local administrative organizations in early-childhood education management in Thailand, the following assumptions were made.

- 2.1) Law has a direct effect on the collaboration between local administrative organizations in early childhood education management. It also had an indirect effect on the collaboration between local administrative organizations in early childhood education management, as seen through the administrators of local administrative organizations.
- 2.2) Administrators of local administrative organizations have a direct effect on the collaboration between local administrative organizations in early childhood education management.
- 2.3) Administrators of local administrative organizations have an indirect effect on the collaboration between local administrative organizations in early childhood education management through their social networks.
- 2.4) Limitations of finance and budget indirectly affect the collaboration between local administrative organizations in early childhood education management through the administrators of local administrative organizations.
- 2.5) The insufficiency of management resources has an indirect effect on the collaboration between local administrative organizations in early childhood education management through administrators of local administrative organizations.
- 2.6) Political interests indirectly affect the collaboration between local administrative organizations in early childhood education management through administrators of local administrative organizations.
- 2.7) Transaction costs directly affect the collaboration between local administrative organizations in early childhood education management.

Literature Review

Literature relating to the factors which affect the collaboration between local administrative organizations in early childhood education management in Thailand was reviewed and is presented below.

Law affects collaboration between local administrative organizations. [Burns \(1994\)](#) and [Hulst, van Monfort, Haveri, Airaksinen, and Kelley \(2009\)](#) have shown how various constitutions recommend de-centralization, giving more power to local organizations, and promoting and encouraging collaboration between local administrative organizations. These were all relevant to the law of Thailand which empowers local administrative organizations to collaborate with each other and with other organizations, either government and/or private agencies, to provide public services. In Thailand, collaboration can be done formally by establishing a juristic-person organization or informally by making an agreement. The 1999 Determining Plans and Process of Decentralization to Local Government Organization Act deals with the promotion and support of

local administrative organizations to provide public services to local people (Sethabutr et al., 2002).

The administrators of local administrative organizations have an effect on collaboration. Jung and Kim (2009) found that professional administrators were personally involved in collaboration more often than in suburban cities and counties that were not administered by professionals. Morgan and Hirlinger (1991) found that local administrations with city managers were more likely to create local collaboration. In addition, Akomkong (2007) found that administrators who had knowledge, understanding, and an interest in education were more likely to provoke collaboration between local administrative organizations in the provision of education in Thailand.

Social networks also affect collaboration between local administrative organizations. Thurmaier and Wood (2002) found that administrative interpersonal and social networks served an important role in creating trust between local officers. This trust then produced inter-local service delivery agreements, and allowed for the sustainability of such agreements. Feiock (2004, 2007) explained how some social networks allow for cooperation of local governments. An example of such a network would be a regional planning organization that built cooperation in inter-local service delivery and allowed for interactions between local civil servants. Consequently, this arrangement increases trust and coordination in public service delivery.

Financial limitations and budget allocation can assist with collaboration between local administrative organizations. Morgan and Hirlinger (1991) and Holzer and Isaacs (2002) demonstrated how higher expenses for the provision of public services result in cooperation between administrators of local administrative organizations and other local organizations in order to provide public services. Ferris (1986) and Post (2002) found that administrators had to be concerned with the finances in addition to their other duties. As administrators, they had to watch for budget deficits and surpluses, the debt per capita, debt to expenses, and percentage of income ownership; all of these factors influence collaboration.

Insufficient management resources can affect collaboration between local administrative organizations. According to Kruger and McGuire (2005), Feiock (2007), and Carr, Gerberry, and Luper (2007) found that the shortage of management resources results in local administrative organizations seeking collaboration in order to acquire effective programs.

Political interests are another factor in collaboration between local administrative organizations. Bartle and Swayze (1997) found that local administrators played an important role in building collaboration. Administrators aimed to build collaboration because they could receive political benefits. When local people wanted more public services, the local administrators or city council members were required to share their existing resources with other government bodies in order to provide the public services requested. With the exception of tax increases, this budget-saving form of collaboration could boost political popularity so that administrators have greater chances of reelection.

Transaction costs affect collaboration as well. Stein (1990), Feiock (2007), Zhang and Feiock (2010), Bricker, Stein, and Post (2010), and LeRoux, Brandenburger, and Pandey (2010) found that local administrative organizations that built collaboration might encounter transaction costs (also known as agency costs) that are a result of different problem-solutions between officers. North (1990) and Shrestha and Feiock (2009) found that the information costs (objects to be shared, rights protections, controls, and execution in conjunction with agreements), as well as incomplete information, could obstruct negotiations for collaboration. Williamson (1975) claimed that the time spent on negotiations, monitoring, and execution of agreements was a type of transaction cost in building collaboration.

The framework of collaboration between local administrative organizations in early-childhood education management in Thailand was influenced by these concepts relating to collaboration between local administrative organizations in the provision of public services. This is reviewed and described below.

Concepts regarding the classification of collaboration were presented by Agranoff (2003) and Mandell and Steelman (2003); concepts referring to the level of work cooperation were adapted from Agranoff and Pattakos (1979), Hondale (1982, pp. 362–374), Martin, Checkrein, Imerchien, and Frumkin (1983), Kagan (1991, 1993), Mattessich and Monsey (1992), Cigler (1999) and Holzer and Isaacs (2002). Concepts regarding the collaboration model between local administrative organizations in the provision of public services were adopted from Nunn and Rosentraub (1997), Jennings and Ewalt (1998), Sethabutr et al. (2002), Pinyaonuntapong (2003), Hulst and van Monfort (2007), and Hulst et al. (2009).

Early childhood education management by local administrative organizations in Thailand is within the jurisdiction of The Department of Local Administration, which is a subsidiary of the Ministry of Interior. This hierarchy possesses the authority to promote and support various activities of these local administrative organizations. The standards of educational provision in child development centers are defined as follows.

Standard 1: Management of child development center—Subsumed by this standard are three aspects: administration, budget execution, and personnel administration.

Standard 2: Personnel—This standard entails the determination of the qualifications, status, roles, duties, and responsibilities of child development center chiefs and teachers.

Standard 3: Facilities, environment, and safety of the Child Development Center—This standard is concerned with determination of the location standard, internal and external environment standard, and safety standard.

Standard 4: Academic matters and curriculum-based activities—This standard involves determination of the curriculum that organizes experiences for children, as well as other academic matters.

Standard 5: Involvement and supports of all sectors—Section 29 of the National Education Act, B.E. 2542 (1999) and its Amendment, B.E. 2545 (2002).

Standard 6: Promotion of development network for early childhood children—This standard deals with determination of the guidelines for improving the network development for early childhood children at the local administrative organization level, district level, provincial level, and regional level (Bureau of Local Educational Development and Coordination, Department of Local Administration, 2010a).

By synthesizing all these theories and concepts, a conceptual framework was created for use in the research as illustrated in Figure 1:

Methods

This study consisted of quantitative research. The units of analysis consisted of local administrative organizations with child development centers. Only local administrative organizations that were participating in the government project entitled *Competency Development for Child Development Centers under Local Administrative Organizations* were selected.

Participants

The sample consisted of 12 model child development centers and another 57 child development network centers, making 69 centers in total. Each child development center consisted of six administrators: the Chief Executive of the Local Administrative Organization, the Chief Administrator of the Local Administrative Organization, the Director of Office/Bureau of Education, an academic officer, the head of the child development center and a teacher. In total, the model child development centers consisted of 72 participants, and the child development network centers consisted of 342 participants. The total sample was 414.

Hair, Black, Babin, and Anderson (2010) stated that the sample size in Structural Equation Modeling (SEM) analysis should have a sample size equal to 10–20 times the

observed variable. This research used a sample size 20 times the size ($20 \times 8 = 160$). Therefore, the sample size was 160 participants. However, the sample size should be appropriate for the SEM analysis; due to the small populations of the 12 model child development centers, all were selected to be included in the sample. In total, the model child development centers consisted of 72 participants. The 57 child development network centers provided a large number of samples. Yamane's formula (Yamane, 1973) was used to calculate the sample size with a 5 percent, or .05, acceptable sampling error. Therefore, the sample was 50 child development network centers. In total, the network child development centers consisted of 300 participants. When including the sample of the child development model centers with such child development network centers, the sample size was 372 participants from 62 child development centers.

The sampling method was based on probability sampling by way of simple random sampling and drawing lots from the list of child development centers under local administrative organizations participating in the project entitled Competency Development for Child Development Centers under Local Administrative Organizations to develop the quality of child development centers as held by the Department of Local Administration and Thai Health Promotion Foundation (ThaiHealth) (Bureau of Local Educational Development and Coordination, Department of Local Administration, 2010b).

Data Collection

The data were collected using a questionnaire. The constructed questionnaire was checked by three experts to ensure its content validity before calculating its item-objective congruence index (IOC).

Regarding the questionnaire reliability, the constructed and revised questionnaires were pre-tested in a group of 30 people with similar qualifications to the sample. Then, the

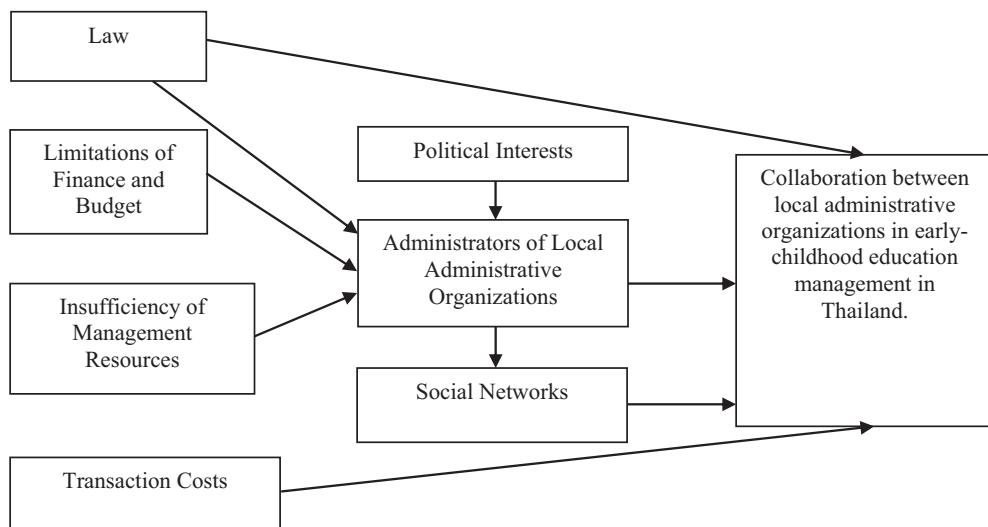


Figure 1 Conceptual framework

general reliability of the questionnaire was calculated using Cronbach's Alpha Coefficient. The result of the calculation was .94.

The discrimination power of each question was calculated using the Item-total Correlation technique. The construct validity of each question was examined using Confirm Factor Analysis via the LISREL program to analyze the questionnaires returned from the sample group of this research. Factor loading values exceeding .30 were retained, while those lower than this were omitted.

Data Analysis

The data were analyzed using descriptive and inferential statistics. The consistency of the data was checked between the Path Analysis Model of factors affecting the collaboration of local administrative organizations in early childhood education management of child development centers and the empirical data using the LISREL program.

Results

The consistency of the Hypothesis Model was tested using the empirical data. The comparison of the statistical results of the Path Analysis based on the Hypothesis Model with the standard criteria used by [Joreskog and Sorbom \(1996\)](#) is shown in [Table 1](#).

The results demonstrated that while some statistics of the Model met the required standards, others did not. For example, the Relative χ^2 (χ^2/df) was 4.55 (>2.00) and was deemed to meet the determined criteria. The Goodness-of-Fit Index (GFI) was .93 (>.90) and thus it met the required criteria. The Adjusted Goodness-of-Fit Index (AGFI) was .70 (<.90) and did not meet the determined criteria. The Root Mean Squared Residuals (RMR) was .03 (<.05) and met the required criteria. The Standardized Root Mean Squared Residual (SRMR) was .06 (>.05) and did not meet the determined criteria. The Root Mean Squared Error of Approximation (RMSEA) was .18 (>.05) and did not meet the determined criteria. The *p*-value for the Test of Close Fit was .00 (<.05) and did not meet the required criteria. The Normed Fit Index (NFI) was .96 (>.90) and met the determined criteria. The Incremental Fit Index (IFI) was .89

Table 1
Criteria for Goodness-for-Fit index of the model and empirical data

List of criteria	Determined criteria
Likelihood Ratio Chi-Square	$p > .05$
Statistic (χ^2)	
Relative χ^2 (χ^2/df)	>2.00
Goodness of Fit Index (GFI)	>.90
Adjusted Goodness of Fit Index (AGFI)	>.90
Root Mean Squared Residuals (RMR)	<.05
Standardized Root Mean Squared Residual (SRMR)	<.05
Root Mean Squared Error of Approximation (RMSEA)	<.05
<i>p</i> -Value for Test of Close Fit	>.05
Normed Fit Index (NFI)	>.90
Incremental Fit Index (IFI)	>.90
Comparative Fit Index (CFI)	>.90
Critical N (CN)	>200

(<.90) and did not meet the determined criteria. The Comparative Fit Index (CFI) was .97 (>.90) and met the determined criteria. The Critical N (CN) was 532.19 (>200.00); therefore it met the determined criteria.

The statistical test of the Path Analysis according to the Hypothesis Model was not consistent with the empirical data and the estimation of the path coefficient in the Model was unacceptable. Therefore the Hypothesis Model was revised by changing the path of related variables in the Model and by considering their theoretical probability. The revisions were as follows:

Eliminate the following relationship paths between variables:

1. Eliminate the limitations of finance and budget affecting the administrators of local administrative organizations.
2. Delete the transaction costs affecting the collaboration between local administrative organizations in early childhood education management.

Add the following relationship paths between variables:

1. Limitations of finance and budget affect the collaboration between local administrative organizations in early childhood education management.
2. Transaction costs affect the administrators of local administrative organizations.
3. Law affects social networks.

It was decided that the limitations of finance and budget affecting the local administrative organization administrators would be eliminated, and a new relationship path would be added by allowing the limitations of finance and budget to affect the collaboration between local administrative organizations in early childhood education management. This was done based on the fact that [Morgan and Hirlinger \(1991\)](#) found that the limitations of finance did not have any effect on the decision to collaborate. In addition, [Grant \(1965\)](#), [Rogers and Lipsey \(1974\)](#), [Gustley \(1977\)](#), [Blomquist and Parks \(1995\)](#) and [Miller, Miranda, Roque, and Wilf \(1995\)](#) found that the collaboration between local administrative organizations did not heighten their efficiency.

Moreover, it was decided that transaction costs affecting the collaboration between local administrative organizations in early childhood education management would be eliminated and a new path would be added to allow for transaction costs to have an effect on the local administrative organization administrators. This was done because [Feiok \(2004, 2007\)](#) and [Zhang and Feiok \(2010\)](#) found that public managers decided to form collaborations with other local administrative organizations because they had concerns about the management efficiency and economy. These decisions went against the attitudes of local employees who rejected such collaboration because they wanted to keep their positions and duties. Similarly, [Hecita \(2012\)](#) found that transaction costs occurred when the administrators of local administrative organizations decided to form collaborations with other local administrative organizations, but such collaborations were contrary to local opinion.

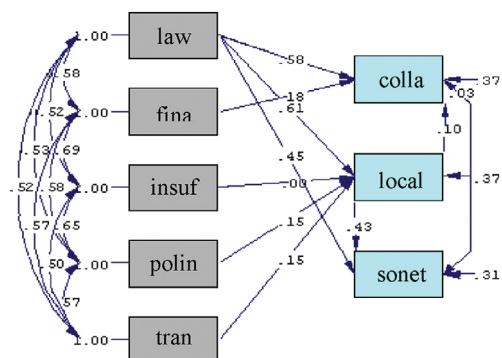
It was also decided that a new relationship path would be added by allowing the law to affect social networks. This was done because the law enables various organizations to build their own networks for any joint-undertaking. [Hjern and Porter \(1981\)](#) and [Ostrom \(1990\)](#) claimed that the players in the networks often still exist in the government structure that had to take over the power and duties prescribed by law. For a formal undertaking to work, connections with external organizations need to be made. Therefore, preparation of such organizations to work with other organizations necessitated powerful policy makers to enact the law to serve the network-based co-working.

After revising these relationship paths, the Adjusted Model was found to be consistent with the empirical data. All statistics of the Model met the determined criteria: the Relative χ^2 (χ^2/df) was 2.64 (>2.00); the Goodness-of-Fit Index (GFI) was .98 ($>.90$); the Adjusted Goodness-of-Fit Index (AGFI) was .92 ($>.90$); the Root Mean Squared Residuals (RMR) was .01 ($<.05$); the Standardized Root Mean Squared Residual (SRMR) was .02 ($<.05$); the Root Mean Squared Error of Approximation (RMSEA) was .07 ($<.05$); the *p*-value for Test of Close Fit was .13 ($>.05$); the Normed Fit Index (NFI) was .99 ($>.90$); the Incremental Fit Index (IFI) was 1.00 ($>.90$); Comparative Fit Index (CFI) was 1.00 ($>.90$); and lastly the Critical N (CN) was 279.64 (>200.00) and met the determined criteria.

From the above statistical index, it could be concluded that the adjusted relationship paths were much more consistent with the empirical data than the Hypothesis Model. As a result, the estimation of the Influence Coefficient in the adjusted Model was used in order to examine the direct, indirect, and total effects of the variables that affected the collaboration between local administrative organizations in early childhood education management. This effect became significant, as shown in [Figure 2](#) and [Table 2](#).

Discussion

The Adjusted Model was consistent with the empirical data, as shown in [Figure 3](#), and assisted in answering the research hypotheses below:



Chi-square = 21.14, df = 8, *p*-value = .00, RMSEA = .07

Figure 2 Hypothesized path analysis model as revised and consistent with the empirical data

1) Law had a direct and an indirect effect on the collaboration between local administrative organizations in early childhood education management with the Influence Coefficients equaling .58 at the .05 level of significance. Furthermore, law also had an indirect effect through administrators of local administrative organizations and the social network. However, there was no significance total effect with the Influence Coefficients equaling .08.

The results of testing Hypothesis 1 demonstrated that the law allowed administrators of local administrative organizations to build collaboration with other local administrative organizations in the provision of all educational levels. The decisions made relied solely on local administrative organizations' administrators who were not given any clear legal guidelines. This allowed administrators to decide whether or not they would build collaborations with other local administrative organizations. This result was consistent with [Burns \(1994\)](#) and [Hulst et al. \(2009\)](#), who found that many constitutions worldwide recommend the decentralization of government to local organizations, which allows for the promotion and empowerment of collaborations between local organizations.

2) Administrators of local administrative organizations did not have a direct effect on the collaboration between local administrative organizations in early childhood education management.

The results of testing Hypothesis 2 showed that the occurrence of collaboration depended on the individual administrators of local administrative organizations. Collaboration is dependent on administrators gaining knowledge and understanding of collaboration and early childhood education management. If the administrators of local administrative organizations have good knowledge and understanding of collaboration in the provision of education, then tangible collaboration can occur. This result is consistent with [Akomkong \(2007\)](#) who found that administrators who had knowledge, understanding, and interest in education were likely to provoke collaboration between local administrative organizations in the provision of education.

3) Administrators of local administrative organizations did not have an indirect effect on the collaboration between local administrative organizations in early childhood education management through social networks.

The results of testing Hypothesis 3 demonstrated that social networks were not able to convince the administrators of local administrative organizations to build collaboration in early childhood education management. This is consistent with research by [LeRoux et al. \(2010\)](#) They discovered that membership in professional associations of local administrative organizations did not result in mutual collaboration in the provision of public services.

4) Limitations of finance and budget had a direct effect on the collaboration between local administrative organizations in early childhood education management. This factor had an Influence Coefficient of .18 at the .05 level of significance. However, it did not have an indirect effect on the collaboration between local administrative organizations in early childhood education management through administrators of local

Table 2

Standard scores of analysis results regarding direct effect, indirect effect, and total effect of the revised hypothesis model to be consistent with the empirical data

Variable	R ² according to structural equation	Relationship	(n = 298)						
			Causal factor						
			Law ^a	Fina ^b	Insuf ^c	Polint ^d	Tran ^e	Local ^f	Sonet ^g
Colla ^h	.63	Direct	.58*	.18*				.10	.03
		Indirect	.08		.00	.02	.02	.01	
		Total	.66*	.18*	.00	.02	.02	.11*	.03
Local	.63	Direct	.61*		.00	.15*	.15*		
		Indirect							
		Total	.61*		.00	.15*	.15*		
Sonet	.69	Direct	.45*						.43*
		Indirect	.26*		.00	.07*	.06*		
		Total	.71*		.00	.07*	.06*	.43*	

$\chi^2 = 21.14$, df = 8, p-value = .00; Relative $\chi^2 = 2.64$; GFI = .98; AGFI = .92; RMR = .01; SRMR = .01; RMSEA = .07; p-Value for Test of Close Fit = .13; NFI = .99; IFI = 1.00; CFI = 1.00; CN = 279.64

*Significant at .05, t-test was not in the range –1.96 to 1.96 indicating that the Influence Coefficient was significant at .05

^a Law: Law Factor

^b Fina: Limitations of Finance and Budget Factor

^c Insuf: Insufficiency of Management Resources Factor

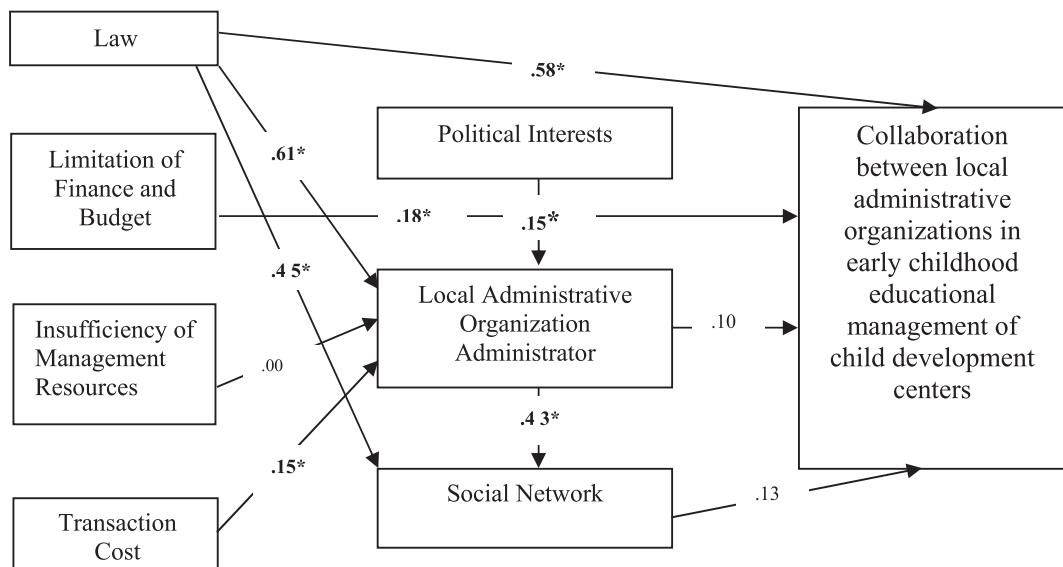
^d Polint: Political Interests Factor

^e Tran: Transaction Cost Factor

^f Local: Administrators of Local Administrative Organizations Factor

^g Sonet: Social Network Factor

^h Colla: Collaboration between Local Administrative Organizations in Early-Childhood Education in Thailand

**Figure 3** Adjusted model

administrative organizations. When considering the total effect, this factor had an Influence Coefficient of .18, equivalent to the direct effect on the collaboration between local administrative organizations in early childhood education management.

The results of Hypothesis 4 show that limitations in finance and budget lead to collaboration between local administrative organizations in early childhood educational management. This result is consistent with those of [Morgan and Hirlinger \(1991\)](#) and [Holzer and Isaacs \(2002\)](#), which support the idea that financial and budget limitations could

help to create collaboration between local administrative organizations. It could help with budget saving, costs reduction, and an increased economy of scale.

The hypothesis testing also found that limitations of finance and budget did not have an indirect effect on the collaboration between local administrative organizations in early childhood education management through local administrative organization administrators. This is consistent with [Morgan and Hirlinger \(1991\)](#) who found that the limitations of finance and budget did not always result in a decision to build collaboration.

5) Insufficient management resources did not have an indirect effect on collaboration between local administrative organizations in early childhood education management through administrators of local administrative organizations.

The results from Hypothesis 5 showed that collaboration between local administrative organizations in early childhood education management did not add a lot of managerial resources. Therefore, the efficiency of the early childhood education management of child development centers did not increase. This result is consistent with [Grant \(1965\)](#), [Rogers and Lipsey \(1974\)](#), [Gustley \(1977\)](#), [Blomquist and Parks \(1995\)](#), and [Miller et al. \(1995\)](#), who all claimed that collaboration between local administrative organizations did not increase efficiency. However, the benefits of organizations that were engaged in collaborative relationships were actively affecting their environments by bringing in new resources, including financial resources, professional knowledge, and operating requirements to sustain and to improve their services ([Hall, 2002](#)). Therefore, administrators of local administrative organizations must have greater awareness of the value of collaboration.

6) Political interests did not have an indirect effect on the collaboration between local administrative organizations in early childhood education management through administrators of local administrative organizations.

The testing of Hypothesis 6 showed that building collaboration between local administrative organizations in early childhood education management may result in fewer political votes than if the local administrative organizations ran the educational facilities themselves. By enabling parental involvement in a particular community's early childhood education management, local people will be satisfied; this would consequently result in political popularity for the local administrative organization. This result is consistent with the research of [Sethabutr et al. \(2002\)](#) who claimed that local politicians did not pay much attention to collaboration with other local administrative organizations. Local politicians in several areas prefer to manage this service on their own. Moreover, some politicians and civil servants did not have a good understanding as to why collaboration between local organizations was needed and how it could be carried out.

7) Transaction costs did not have a direct effect on the collaboration between local administrative organizations in early childhood education management.

The results of Hypothesis 7 displayed that various transaction costs (agency costs and information costs) did not hinder collaboration between local administrative organizations in early childhood education management. Maintaining low transaction costs allows for collaboration agreements to be made. This is consistent with [Kruger and McGuire \(2005\)](#), who discussed how transaction costs make collaboration agreements easier.

Conclusion and Recommendation

In this study the Causal Relationship Model was adjusted to align with the empirical data according to theoretical and statistical rationales. If all direct and indirect factors hypothesized by the researchers are

considered, it can be said that only the law, and financial and budget limitations have any direct influence on collaboration between local administration organizations in early childhood education management in Thailand. This finding confirms that the law and financial/budget support are the two most important factors promoting the collaboration between local administration organizations in early childhood education management in contemporary Thailand. The Constitution of the Kingdom of Thailand advocates the decentralization and autonomization of local administrative organizations by having laws that allow local administrative organizations, in various forms, to autonomously prescribe their power and duties. The Government, under the policy of decentralizing the power, duties, and responsibilities to the localities, should promote and encourage local administrative organizations to be strong and to have administrative independence. However, up to now, Thailand's local organizations have not been able to manage their local activities completely on their own. They rely on finances and budget from the central government. Though localities collect some taxes themselves, they are not sufficient to cover all the expenses of local management. The use of a special budget for local administrative organizations should be promoted so that they can join in activities together ([Sethabutr et al., 2002](#)).

It is thus recommended that the Government improve and define rules, regulations, obligations, and measures to encourage the collaboration between local administrative organizations in the provision of early childhood education. Furthermore, the Government should allocate a special budget to persuade the local administrative organizations to build collaboration in the provision of early childhood education. This will help to solve the limitations of finance and budget, and increase the efficiency of educational management at the local level. The financial incentive will also encourage collaboration between these local administrative organizations ([Osterrieder, Bahloul, Wright, Shaffiner, & Mozur, 2006](#); [Parrado Diez, 2006](#); [United Nations Development Programme \[UNDP\], 2006](#)). This type of action has been shown to be successful in France and the United Kingdom, where the central government provides financial support to local governments by means of engagement agreements. Therefore it is recommended to replicate similar measures in Thailand.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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