

A Structural Equation Model of Factors Affecting Effective Academic Affairs Administration of Secondary Schools in Northeast of Thailand

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Abstract

The purposes of this research were 1) to develop components and indicators of effective academic affairs administration of secondary schools, 2) to examine the congruence of the developed models of the components and indicators of effective academic affairs administration of secondary schools, and 3) to determine the congruence of a structural equation model of factors affecting effective academic affairs administration of secondary schools in the Northeast of Thailand with the empirical data. The scope of the research was 1,205 government secondary schools in northeastern Thailand. The population included the 1,205 directors/deputy directors of academic affairs. Stratified random sampling was administered to draw 400 sample informants. A 5-point rating scale questionnaire was developed to collect data from the sample informants. The reliability of the questionnaire was 0.98. Statistics for data analysis included frequency, percentage, mean, S.D., Confirmatory Factor Analysis, and Structural Equation Model (SEM). The results were as follows: 1) The effective academic affairs administration was consisted of 4 components and 16 indicators; academic affairs effectiveness with 5 indicators, academic leadership with 5 indicators, teacher competence with 3 indicators, and public participation with 3 indicators. 2) The developed models of the 4 components and 16 indicators were consistent with the empirical data. The factor loadings of these models ranged between 0.43 – 1.00. They were interpreted as acceptable as the range was higher than 0.30. 3) The developed structural equation model of the factors affecting effective academic affairs administration of the secondary schools in northeastern Thailand was congruent with the empirical data.

Keywords: academic administration, factors, indicators, secondary schools, structural equation model

1. Introduction

Education is a process of human development in all aspects. Education management in the present time gains more cooperation from different sectors. With wider cooperation, more effective school administration is necessary, particularly academic affairs administration. The certain mission of academic affairs administration is to elevate learning achievements of all levels. This requires great attention from school directors or deputy directors (Boonpirom, 2009). Wonganudroj (2001) proposed that academic affairs administration is aimed at developing and revising teaching and learning management to benefit learners the most. The National Education Act B.E. 2542 (1999) and the Amendments (Third National Education Act) B.E. 2553 (2010) has specified a framework of academic affairs administration for schools. Academic affairs administration is important in educational management. Academic affairs administration is regarded as the heart of the school administration. For this reason, school administrators should prioritize the leadership of teachers who are in charge of academic affairs administration. The main aim of academic affairs administration is to provide academic competence for students. Academic affairs administration also indicates standards and quality of schools as it is connected with all the school aspects.

As academic affairs administration is important, evaluation of academic affairs administration is even essential to keep it effective. School directors have to cooperate with stakeholders in evaluating the effectiveness of academic affairs administration. This evaluation looks at all the aspects academic affairs administration is connected with, especially factors affecting its effectiveness. Saensuk (2013) proposed that factors concerning academic affairs administration include 1) directors, 2) teachers, 3) parents and community, 4) school buildings, 5) budgets, and 6) technology for education. Moreover, Ankinandana (2015) found in her study that there were 3 factors directly

affecting academic affairs administration; good teacher attributes, participation from people, and academic leadership of directors. These factors can shape the effectiveness of academic affairs administration. Thus, schools must consider incorporating these factors into the administration of their academic affairs. However, Thai learners' achievements in average have still been unsatisfying. These achievements are presented through the national tests such as the Ordinary National Educational Test (O-NET). This phenomenon is caused by various factors one of which is academic affairs administration of schools in the country. The O-NET results can directly reflect the country's educational system as a whole and academic affairs administration of each school.

As mentioned above, a study on academic affairs administration is necessary as it would provide an insight for further development of school administration. A study of academic affairs administration can benefit both implication and research. For implication, schools can use findings from research to consider factors that affect academic administration. They can gain knowledge on how to handle each factor to push schools to achieve ultimate goals. For research, researchers can gain an insight of a direction to put their research into. Researchers are dynamic builders of a new knowledge body. In this field of study, they serve as feeders of knowledge for schools to adapt their academic affairs administration into the updated or changing trend.

According to the rationale above, the researcher as a school director of a secondary school considered that it was necessary to do research in this field of academic affairs administration. In order to benefit this research to actual implication to academic affairs administration of schools, components and indicators had to be studied. Such components and indicators would be confirmed through their congruence with empirical data. The important of this study was that it would give an insight into effective academic affairs administration of schools in the Northeast of Thailand. The results of this research would be applied to school development planning and learning achievement development.

2. Objectives of the Research

This research had three objectives as follows:

- 1) To develop components and indicators of effective academic affairs administration of secondary schools
- 2) To examine the congruence of the models of the developed components and indicators of effective academic affairs administration of secondary schools
- 3) To determine the congruence of a structural equation model of factors affecting effective academic affairs administration of secondary schools in the Northeast of Thailand with the empirical data.

3. Research Questions

This research was conducted to answer the following research questions.

- 1) What were components and indicators of effective academic affairs administration of the secondary schools in the Northeast of Thailand?
- 2) How were the models of the developed components and indicators congruent with the empirical data?
- 3) How was the structural equation model of factors affecting effective academic affairs administration congruent with the empirical data?

4. Research Methodology

4.1 Design

The design of this research was quantitative.

4.2 Population and Sample

The target scope of the research was the total of 1,205 secondary schools in the Northeast of Thailand under the jurisdiction of Office of the Basic Education Commission (OBEC), Ministry of Education (MOE). The unit of analysis included school administrators. Thus, the population was the 1,205 directors or deputy directors of academic affairs of the schools.

Stratified random sampling was administered to draw sample informants from the population. In do this sampling technique, the schools were divided into 4 clusters by sizes of student populations specified by Bureau of Policy and Planning, Office of the Basic Education Commission (OBEC) in the academic year 2012. The 4 clusters divided by sizes of student populations are as follows:

Small-sized secondary schools (1-499 students)

Medium-sized secondary schools (500-1,499 students)

Large-sized secondary schools (1,500-2,499 students)

Extra-large-sized secondary schools (more than 2,500 students)

The sample size was determined by 16 observable variables. A ratio of 20:1 (samples: an observable variable) was selected. This ratio obtained 320 samples, but the proper minimum number of samples was 400 (Wiratchai, 1999). Finally, 400 sample informants were drawn to participate in this research as shown in Table 1.

Table 1. The 400 sample informants drawn from schools divided by secondary educational service areas and sizes

Secondary Educational Service Area Office	Population by school sizes					Sample by school sizes				
	XL	L	M	S	Total	XL	L	M	S	Total
Area 20	11	10	36	6	63	7	7	23	4	41
Area 22	7	18	54	2	81	5	12	35	1	53
Area 23	8	14	23	0	45	5	9	15	0	29
Area 25	13	6	51	14	84	8	4	33	10	56
Area 27	9	14	34	3	60	6	9	22	2	39
Area 28	13	9	53	8	83	8	6	34	6	55
Area 29	11	27	40	3	81	7	18	26	2	53
Area 31	17	12	18	3	50	11	8	12	2	33
Area 32	13	17	35	1	66	8	11	23	1	43
Total	102	127	344	40	613	66	83	224	28	400

4.3 Research Instrument

A questionnaire was developed to collect data from the sample informants. This questionnaire consisted of 3 sections as follows:

Section 1 Personal information: The design of this section was checklist and gap filling. The target data in this section included genders, age, professional experience, educational levels, administrative positions, and school sizes.

Section 2 Perceptions of factors affecting academic affairs administration of the secondary schools. The design of this section was 5-point rating scale. The target data in this section was levels of perceptions of factors affecting academic affairs administration of the secondary schools. The mean scores indicating the levels of perceptions and interpretations are as follows; 4.51-5.00 (highest), 3.51-4.50 (high), 2.51-3.50 (moderate), 1.51-2.50 (low), and 1.00-1.50 (lowest).

Section 3 Perceptions of effectiveness of academic affairs administration of the secondary schools. The design of this section was 5-point rating scale. The target data in this section was degrees of the effectiveness of academic affairs administration in the secondary schools. The mean scores indicating the degrees of perceptions and interpretations are as follows; 4.51-5.00 (highest), 3.51-4.50 (high), 2.51-3.50 (moderate), 1.51-2.50 (low), and 1.00-1.50 (lowest).

After the questionnaire was developed, the construct validity was examined through the confirmatory factor analysis. It was found that the questionnaire elements were theoretically correct and appropriate for data collection. The content validity of the questionnaire was examined by 7 experts through the Item-Objective Congruence Index. It showed the IOC of 0.57–1.00. The questionnaire was revised according to the experts' suggestions. Also, the reliability of the questionnaire was determined through the Cronbach's Alpha Coefficient. It revealed a reliability of the whole questionnaire of 0.98. The reliability of each separated part was 0.94, 0.95, 0.93, and 0.93 for academic affairs effectiveness, academic leadership, teacher competence, and public participation respectively.

4.4 Data Collection

Official letters of request for cooperation in collecting data were posted to the sampled schools. Copies of the questionnaire were attached to the letters. The informants were requested to complete and return the questionnaire within 6 weeks. The informants returned the questionnaire by post to the address provided.

4.5 Data Analysis and Statistics

Descriptive statistics were used to analyze the data from Section 1 Personal information of the questionnaire.

Personal information was analyzed with frequency and percentage whereas perceptions of factors affecting academic affairs administration of secondary schools were analyzed with mean and S.D.

Inferential statistics included Factor Analysis by means of Confirmatory Factor Analysis and Path Analysis was used to analyze the congruence of the models of the developed components and indicators of effective academic affairs administration of secondary schools with empirical data.

5. Results of the Research

5.1 Personal Information of the Sample Informants

The data collection covered the 400 sample informants. They had different background information. After completing the data collection, descriptive statistics were used to describe this sample group. The result of the descriptive statistics of the personal information among these sample informants is presented in Table 2.

Table 2. Personal information of the sample informants

Personal information	Frequency	%
1. Genders		
1.1 Male	290	72.50
1.2 Female	110	27.50
2. Age		
2.1 Younger than 40 years	46	11.5
2.2 40–45 years	81	20.25
2.3 46–55 years	155	38.75
2.4 Older than 56 years	118	29.5
3. Professional experience		
3.1 1–15 years	59	14.75
3.2 15–25 years	173	43.25
3.3 26–35 years	123	30.75
3.4 Over 35 years	45	11.25
4. Educational levels		
4.1 Bachelor's degree	30	7.5
4.2 Master's degree	319	79.8
4.3 Doctor's degree	51	12.8
4.4 Other	None	None
5. Administrative positions		
5.1 Director	205	51.25
5.2 Deputy director	195	48.75
6. Numbers of informants by school sizes		
6.1 Small-sized	29	7.3
6.2 Medium-sized	223	55.8
6.3 Large-sized	82	20.5
6.4 Extra-large-sized	66	16.5

Table 2 shows that the majority of the sample informants were male (72.50 %), 46–55 years of age (38.75 %), had the professional experience of 15–25 years (43.25 %), held a master's degree (79.80%), served as directors (51.25 %). Most of them belonged to medium-sized schools (55.80 %).

After the overview data of the sample informants was gained, their data given to the questionnaire was analyzed. The data from the questionnaire was classified and analyzed in response to the three research questions. The results of the analyses are presented as follows:

I) What were components and indicators of effective academic affairs administration of the secondary schools in the Northeast of Thailand?

According to the first research objective, it aimed to develop components and indicators of effective academic affairs administration of the secondary schools in the Northeast of Thailand. Also, to answer this research question, the components and indicators were collected through the sample informants' perceptions. They perceived components and indicators as factors that affected the academic affairs administration of their secondary schools.

The result of a synthesis study of components and indicators found in theoretical and literature reviews showed that effective academic affairs administration was consisted of 4 components and 16 indicators (observable variables) as follows:

1) *Academic affairs effectiveness* with 5 indicators; 1.1) higher achievement of learners, 1.2) positive attitudes of learners, 1.3) teacher's work satisfaction, 1.4) academic project achievement, and 1.5) school adaptation to environment.

2) *Academic leadership* with 5 indicators; 2.1) education quality development planning, 2.2) curriculum administration and learning management, 2.3) professional development of teachers and staff, 2.4) learner quality promotion, and 2.5) learning atmosphere and environment management.

3) *Teacher competence* with 3 indicators; 3.1) education levels and teaching experience, 3.2) professional attributes of teachers, and 3.3) teaching behavior of teachers.

4) *Public participation* with 3 indicators; 3.1) participation in school curriculum development, 3.2) participation in learning development, and 3.3) participation in evaluation.

II) How were the models of the developed components and indicators congruent with the empirical data?

According to the second research objective, it aimed to examine the congruence of the models of the 4 components and 16 indicators of effective academic affairs administration of the secondary schools in the Northeast of Thailand. To answer the second research question, the inferential statistics were employed to analyze the congruence of the models of the 4 components and 16 indicators. The results of the data analysis are as follows:

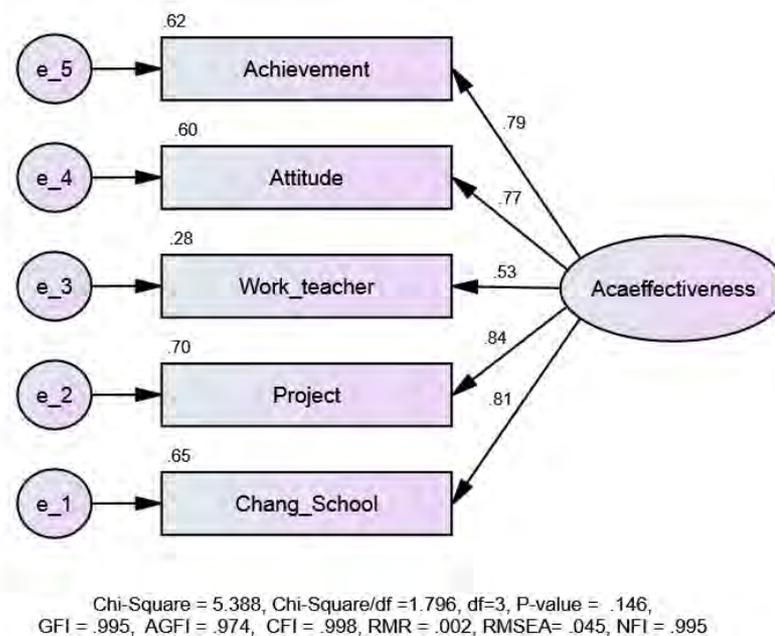


Figure 1. Confirmatory factor analysis of the academic affairs effectiveness model

The *academic affairs effectiveness* model was consisted of the 5 indicators; 1) higher achievement of learners, 2) positive attitudes of learners, 3) teacher's work satisfaction, 4) academic project achievement, and 5) school adaptation to environment.

The result of the confirmatory factor analysis of the *academic affairs effectiveness* model revealed the 5 observable variables above. It indicated that these 5 variables were consistent with the empirical data. This can be confirmed from the Chi-square (χ^2) of 5.388 with a degree of freedom (df) of 3, a statistically significant level (p - value) of 0.146, an RMSEA of 0.045, a GFI of 0.995, and an AGFI of 0.974. When considering the 5 components of the *academic affairs effectiveness* model, all of these variables had an acceptable factor loading between 0.53–0.84 and R^2 between 0.28–0.70.

Therefore, the observable variables of the latent variables of the *academic affairs effectiveness* model can be used to measure *academic affairs effectiveness*. The indicator *school adaptation to environment* showed the greatest factor loading and R^2 .

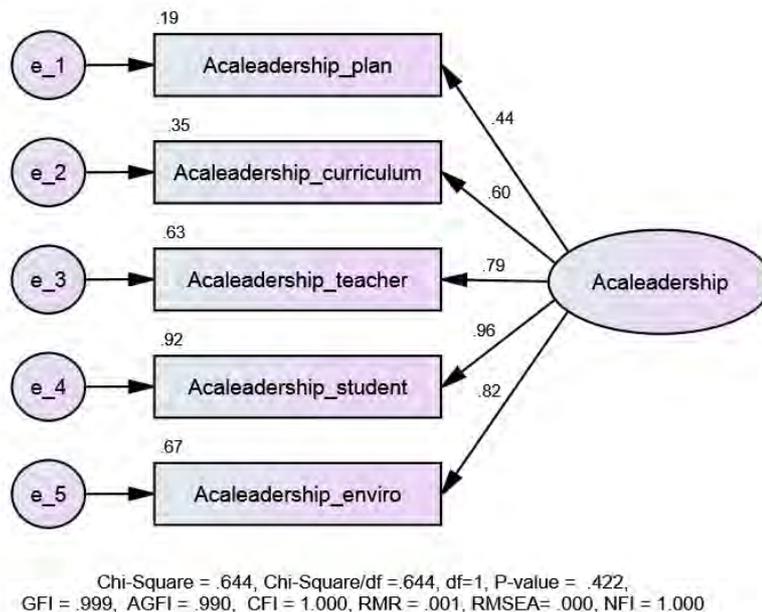


Figure 2. Confirmatory factor analysis of the academic leadership model

The *academic leadership* model was consisted of the 5 indicators; 1) education quality development planning, 2) curriculum administration and learning management, 3) professional development of teachers and staff, 4) learner quality promotion, and 5) learning atmosphere and environment management. The result of the analysis showed that the model was congruence with the empirical data.

The result of the confirmatory factor analysis of the *academic leadership* model revealed the 5 observable variables above. It indicated that these 5 variables were consistent with the empirical data. This can be confirmed from the Chi-square (χ^2) of 0.644 with a degree of freedom (df) of 1, a statistically significant level (p - value) of 0.422, an RMSEA of 0.000, a GFI of 0.999, and an AGFI of 0.990. When considering the 5 components of the *academic leadership* model, all of these variables had an acceptable factor loading between 0.44–0.96 and R^2 between 0.19-0.92. Therefore, the observable variables of the latent variables of the *academic leadership* model can be used to measure *academic leadership*. The indicator *learner quality promotion* contained the greatest factor loading and R^2 . The indicator *learner quality promotion* showed the greatest factor loading and R^2 .

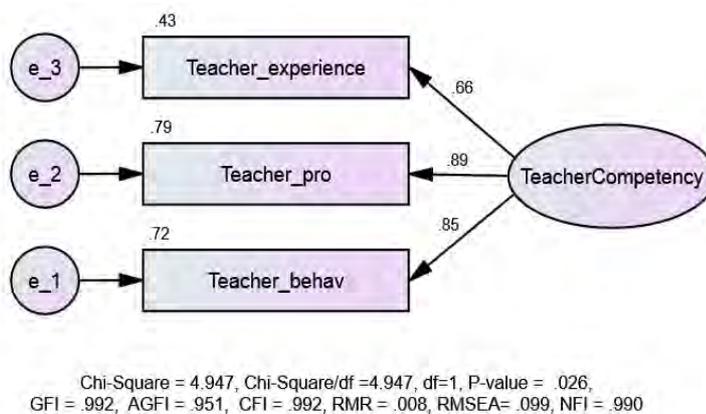


Figure 3. Confirmatory factor analysis of the teacher competence model

The *teacher competence* model was consisted of 3 indicators; 1) education levels and teaching experience, 2) professional attributes of teachers, and 3) teaching behavior of teachers. The result of the analysis revealed that the model was congruence with the empirical data.

The result of the confirmatory factor analysis of the *teacher competence* model revealed the 3 observable variables above. It indicated that these 3 variables were consistent with the empirical data. This can be confirmed from the Chi-square (χ^2) of 4.947 with a degree of freedom (df) of 1, a statistically significant level (p - value) of 0.026, an RMSEA of 0.099, a GFI of 0.992, and an AGFI of 0.951. When considering the 3 components of the *teacher competence* model, all of these variables had an acceptable factor loading between 0.66 - 0.89 and R^2 between 0.43-0.79. Therefore, the observable variables of the latent variables of the *teacher competence* model can be used to measure *teacher competence*. The indicator *learner quality promotion* contained the greatest factor loading and R^2 . The indicator *professional attributes of teachers* possessed the greatest factor loading and R^2 .

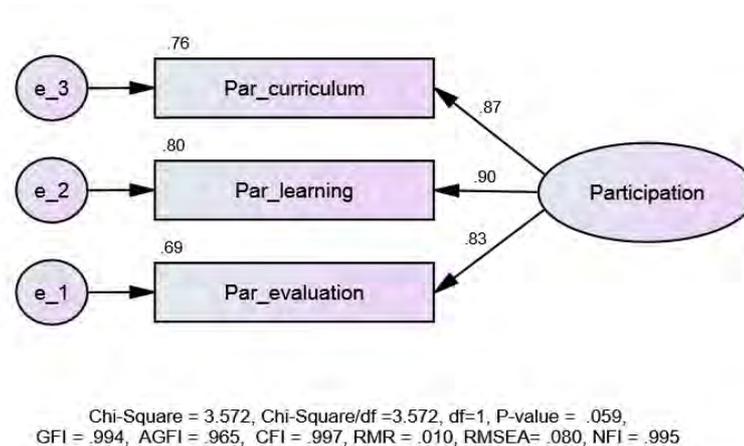


Figure 4. Confirmatory factor analysis of the public participation model

The *public participation* model was composed of 3 indicators; 1) participation in school curriculum development, 2) participation in learning development, and 3) participation in evaluation.

The result of the confirmatory factor analysis of the *public participation* model revealed the 3 observable variables above. It indicated that these 3 variables were consistent with the empirical data. This can be confirmed from the Chi-square (χ^2) of 3.572 with a degree of freedom (df) of 1, a statistically significant level (p - value) of 0.059, an RMSEA of 0.080, a GFI of 0.994, and an AGFI of 0.965. When considering the 3 components of the *public participation* model, all of these variables had an acceptable factor loading between 0.83 - 0.90 and R^2 between 0.69-0.80. Therefore, the observable variables of the latent variables of the *public participation* model can be used to measure *public participation*. The indicator *participation in learning development* had the greatest factor loading and R^2 .

III) How was the structural equation model of factors affecting effective academic affairs administration congruent with the empirical data?

According to the third research objective, it aimed to determine the congruence of the constructed structural equation model of factors affecting effective academic affairs administration of the secondary schools in the Northeast of Thailand with the empirical data. In the analysis of the hypothesis structural equation model of the factors affecting effective academic affairs administration before its revision. The results of this analysis were used to further develop the model till it was congruent with the empirical data.

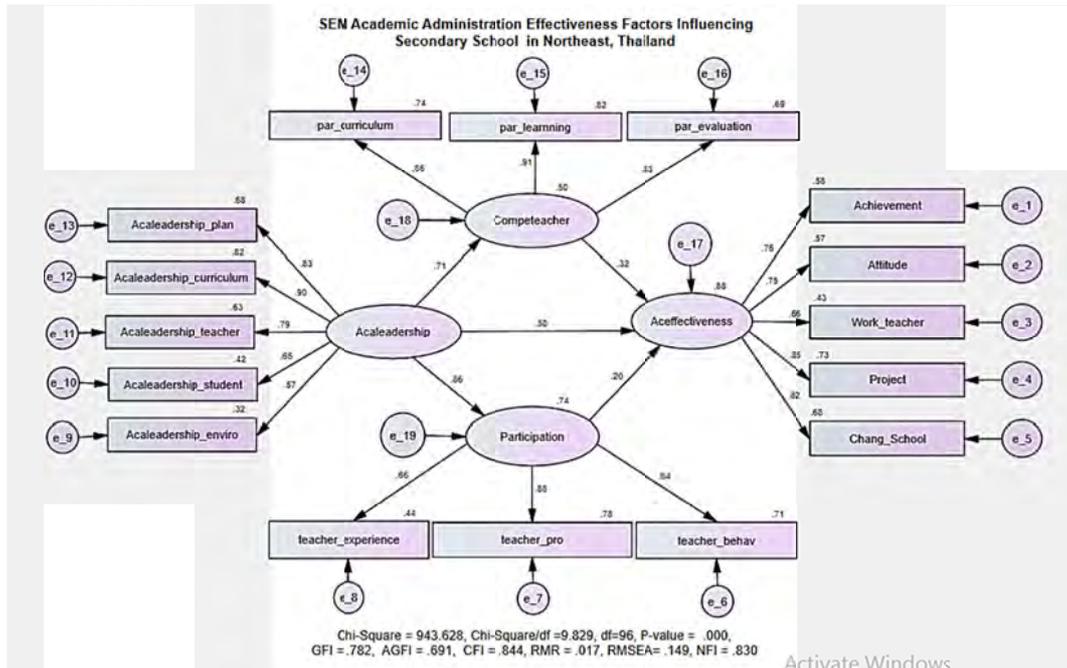


Figure 5. The analysis of the hypothesis structural equation model of the factors affecting effective academic affairs administration before its revision

Figure 5 shows that the constructed model was inconsistent with the empirical data. This was due to the fact that the Chi-square (χ^2) was 943.628 with a statistically significant level (p - value) of 0.00, a χ^2/df of 9.83. This indicated that the Chi-square value was statistically significant with an RMSEA of 0.140, a GFI of 0.78, and an AGFI of 0.69.

After the model was improved from the above results, it was congruence with the empirical data. This was confirmed by the following Chi-square (χ^2) of 71.010 at a statistically significant level (p - value) of 0.085, a χ^2/df of 1.268. This indicated that the Chi-square value was not statistically significant with an RMSEA of 0.026, a CFI of 0.948, a GFI of 0.978, and an AGFI of 0.952 as shown in Figure 6.

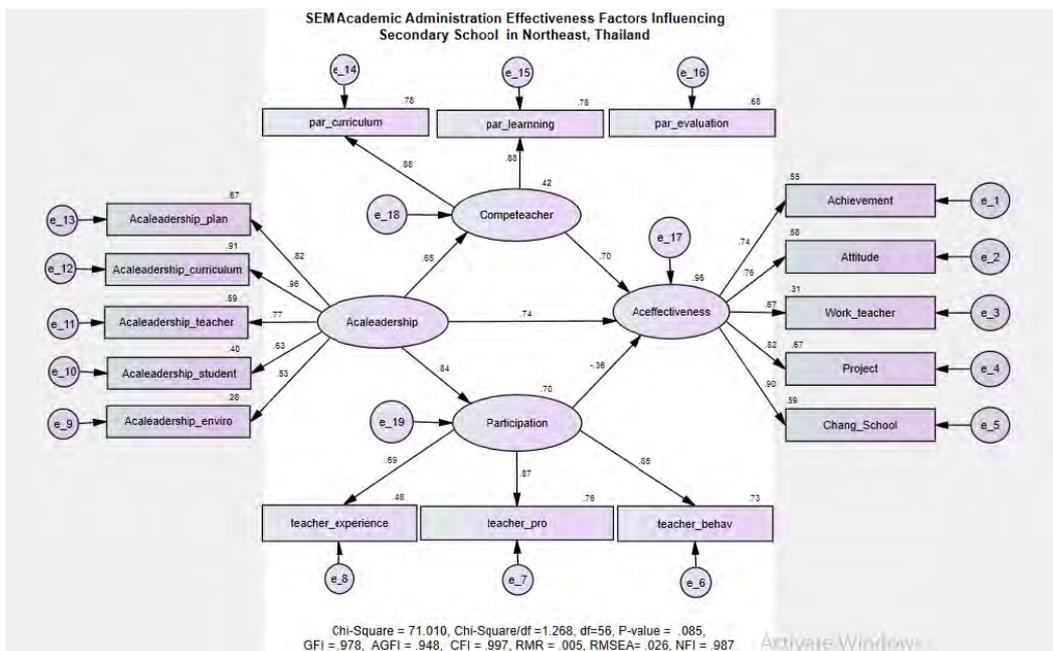


Figure 6. The analysis of the constructed structural equation model of the factors affecting effective academic affairs administration after its revision

6. Conclusion and Discussion

6.1 Components and Indicators of Effective Academic Affairs Administration of the Secondary Schools

The first research objective aimed to develop components and indicators of effective academic affairs administration of secondary schools in the Northeast of Thailand. The result in this research revealed 4 components and 16 indicators (observable variables) of the effective academic affairs administration.

I) The component *academic affairs effectiveness* had 5 indicators; 1) higher achievement of learners, 2) positive attitudes of learners, 3) teacher's work satisfaction, 4) academic project achievement, and 5) school adaptation to environment. This finding was due to some reasons. This finding was consisted with Lunenburg and Ornstein (2004) and Sribantao (2017). Academic affairs administration can be effective when there is collaboration between administrators and stakeholders. They share the same goals in producing students as key outcomes to achieve the goals. Teachers' satisfaction is also a factor to accomplish target needs. The school's abilities to operate to meet pre-set objectives and to adapt to the environment in changing contexts were additional factors to crate *academic affairs effectiveness*.

II) The component *academic leadership* had 5 indicators; 1) education quality development planning, 2) curriculum administration and learning management, 3) professional development of teachers and staff, 4) learner quality promotion, and 5) learning atmosphere and environment management. This finding was in accordance with Leithwood and Jantzi (1999) and Chuanwan (2018). Directors and heads of divisions schools have to push their missions into success. Student quality improvement has to meet set objectives and goals. In so doing, they have to specify visions, goals, projects, and methodologies. They should also plan a budget for student development. The school curriculum development must gain participation from all groups of stakeholders. This provides the school with feedback which reflects its administration.

III) The component *teacher competence* had 3 indicators; 1) education levels and teaching experience, 2) professional attributes of teachers, and 3) teaching behavior of teachers. This finding in the research supported Arends (1998) and Tungduangdee (2016). This was due to some reasons. A school that runs teaching staff management can benefit teaching management. Students can learn from experienced teachers. As a result, overall learning achievement is higher. Furthermore, a school that promotes professional development on a regular basis can gain qualified and desirable teachers. These teachers express their competence through their teaching process. A good teaching process can lead students to meet the goals of a curricula.

IV) The component *public participation* had 3 indicators; 1) participation in school curriculum development, 2) participation in learning development, and 3) participation in evaluation. This research confirmed Phaosri, Puthaprasert, and Yaboonthong (2017) and Gantamas, Jaroensook, and Narkkhwan (2017). This was due to some reasons. Schools in Thailand now provided opportunities for the public to take part in curriculum development and revision. Teachers are allowed to make lesson plans based on learners' interests and aptitudes. Those lesson plans support learners to learn by doing and experiencing. They are required to meet desirable attributes. The public is also invited to participate in evaluation. Results of evaluation are valuable to further revise curriculum in the next academic year.

6.2 Congruence of the Models of the Developed Components and Indicators of Effective Academic Affairs Administration of the Secondary Schools

The 4 models of the 4 components and 16 indicators of effective academic affairs administration of secondary schools in the Northeast of Thailand were all congruent with the empirical data. The reasons of these findings are as follows. For the *academic affairs effectiveness* model, the finding accorded with Lapcharoen, Wichitputcharaporn, and Niyamapa (2018). It was the administrator's responsibility to provide fundamental facilities to support the academic affairs. Good learning atmosphere is needed to motivate students to learn. Both teachers and students have to build good relationship. They should always exchange opinions on learning management. These factors lead the school to achieve its goals of academic affairs administration. For the *academic leadership* model, the finding was in accordance with Newble and Cannon (1995). Academic administration is the heart of a school. It helps the school to manage resources in a proper way. The result of such management is students' learning achievement. For the *teacher competence* model, this finding was in consistence with Newble and Cannon (1995). This was due to the following reasons. Education quality is affected by teachers' abilities in teaching and learning management is all aspects. Teachers should be equipped with certain professional attributes. These attributes affect learning achievements and academic affairs. Attributes are expressed or showed through behaviors. Teaching behaviors reflect actual attributes and indicate actual competence. For the *public participation* model, the finding was related to Wisat (2017) due to some reasons. Academic affairs are related with various aspects of school administration and public participation. Academic

affairs administration can cover all dimensions when it is joined by related parties. Stakeholders who are in the context of the school are good sources of knowledge for curriculum development. After they participate in curriculum development, they should be allowed to be part of learning processes and curriculum evaluation.

6.3 Congruence of the Structural Equation Model of Factors Affecting Effective Academic Affairs Administration with the Empirical Data

The effective academic affairs administration in this research received the greatest total effects from *academic leadership*. This finding was consistent with Leithwood and Jantzi (1999) in that academic leadership is personally included in individual school directors. It is inevitable that *academic leadership* directly affects the quality of students. It reflects competence of school administrators in preparing factors that affect the quality of students. Also, *academic leadership* keeps school administrators leading schools toward their objectives and ultimate goals.

The *teacher competence* component had the second greatest total effects on academic affairs administration. This supported Lapcharoen, Wichitputcharaporn, and Niyamapa (2018). This is due to the fact that *teacher competence* deals with the quality of academic affairs administration. *Teacher competence* is consisted of qualifications, teaching experience, professional attributes, and teaching behaviors. These characteristics are performed in the classroom and then support the effectiveness of academic affairs administration as a whole.

The *public participation* component had the third greatest total effects on academic affairs administration. In line with Khampreecha, Koolrojanapat, and Boonphadung (2019), *public participation* brings more cooperation to academic affairs administration. It opens an opportunity for the board of basic education schools, parents, and communities to play their roles in developing school curricula. They can also take their roles in improving learning processes. It can be concluded that *public participation* is a vital factor for effective academic affairs administration of schools as public organizations.

7. Suggestions

7.1 For Implication

To pursue academic affairs administration found in this research, directors should be equipped with academic leadership. Academic affairs administration can achieve its potential under academic leadership of directors. Participation from all sectors of stakeholders should be increased. This participation can determine the direction of academic affairs administration. It can gear academic affairs administration to effectiveness.

7.2 For Further Research

Next research should be done in various school sizes to study whether school sizes cause different results. More in-depth qualitative research should be done to investigate more actual phenomenon in academic affairs administration. This kind of research should be done in other different education levels.

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References

- Ankinandana, A. (2015). The factors influencing academic administration of the vocational education institutes. *Valaya Alongkorn Review*, 5(1), 143-156. Retrieved from http://acad.vru.ac.th/Journal/journal%205-1/5_1_10.pdf
- Arends, R. I. (1998). *Resource handbook: Learning to teach*. Boston, MA: McGraw-Hill.
- Boonpirom, S. (2009). *Academic administration*. Bangkok: Bookpoint Co., Ltd.
- Chuanwan, C. (2018). Instructional leadership competency assessment for Principals. *EAU Heritage Journal Social Science and Humanity*, 8(3), 264-280. Retrieved from <https://so01.tci-thaijo.org/index.php/EAUHJ SocSci/article/view/155348/114596>

- Gantamas, T., Jaroensook, B., & Narkkhwan, S. (2017). Community participation in secondary school administration under the Office of Secondary Educational Service Area 13. *Journal of Southern Technology*, 10(1), 89-96. Retrieved from https://so04.tci-thaijo.org/index.php/journal_sct/article/view/87237/68990
- Khampreecha, K., Koolrojanapat, S., & Boonphadung, S. (2019). The effects of antecedents of school administrators and community participation on learning achievement of basic education school students in schools under Samutprakan Primary Educational Service Area Office. *SSRU Graduate Studies Journal*, 12(1), 129-137. Retrieved from <https://so05.tci-thaijo.org/index.php/ssrgraduate/article/view/199795/139569>
- Lapcharoen, S., Wichitputcharaporn, W., & Niyamapa, A. (2018). Administrative factors affecting learning organization of the demonstration school of Ramkhamhaeng University. *Educational Management and Innovation Journal*, 1(1), 81-98. Retrieved from <https://so01.tci-thaijo.org/index.php/emi/article/view/132418/99427>
- Leithwood, K., & Jantzi, D. (1999). Transformational leadership: How principals can help reform school cultures. *School Effectiveness and School Improvement*, 1(4), 249-280. <https://doi.org/10.1080/0924345900010402>
- Lunenburg, F. C., & Ornstein, A. C. (2004). *Educational administration concepts and practices*. New York: Thomson Learning, Inc.
- Newble, D., & Cannon, R. (1995). *A handbook for teachers in universities and colleges: A guide to improving teaching methods*. London: Kogan Page.
- Phaosri, S., Puthaprasert, C., & Yaboonthong, Y. (2017). An operational plan to promote participation of the Basic Education Committee in the academic administration toward Educational Development for Secondary Schools in Doi Inthanon Cluster, Chiang Mai Province. *Veridian E-Journal, Silpakorn University*, 10(3), 2069-2086. Retrieved from <https://he02.tci-thaijo.org/index.php/Veridian-E-Journal/article/view/110249/86490>
- Saensuk, N. (2013). *Factors affecting academic administration of schools under jurisdiction of Office of Secondary Educational Service Area 26* (Unpublished master's thesis). Kamphaeng Phet Rajabhat University, Kamphaeng Phet, Thailand.
- Sribantao, A. (2017). *Information systems of technical college: Factor affects to an effective academic Administration* (Unpublished doctoral dissertation). Mahasarakham University, Mahasarakham, Thailand.
- Tungduangdee, P. (2016). *Teacher characteristics and student learning effectiveness in an elementary school extension in Samut Sakhon, Thailand* (Unpublished master's thesis). Thammasat University, Bangkok, Thailand.
- Wiratchai, N. (1999). *LISREL Model: Analytical statistics for research*. Bangkok: Chulalongkorn University Printing House.
- Wisat, P. (2017). *The instructional leadership of administrators affecting effectiveness of academic administration in schools under the office of Sakon Nakhon Primary Educational Service Area 3* (Unpublished master's thesis). Sakon Nakhon Rajabhat University, Sakon Nakhon, Thailand.
- Wonganudroj, P. (2001). *Academic administration*. Bangkok: Bangkok Media Center.

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