

## STRUCTURAL RELATIONS BETWEEN FACTORS INFLUENCING VALUE IN PURSUING STUDIES AT PRIVATE VOCATIONAL SCHOOLS IN BANGKOK, THAILAND.

Olan Karnchanakas<sup>1\*</sup>, Ravewan Shinatrakool<sup>2</sup>, Sawat Udompoch<sup>3</sup>, and Narong Pimsarn<sup>4</sup>

<sup>1</sup>Graduate School, Faculty of Industrial Education, King Mongkut's Institute of Technology  
Ladkrabang, Bangkok 10520, Thailand.

<sup>2</sup>Office of Academic Administration, King Mongkut's Institute of Technology  
Ladkrabang, Bangkok 10520, Thailand.

<sup>3</sup>Independent Consultant, Thongsuk College, Bangkok 10170, Thailand.

<sup>4</sup>Faculty of Industrial Education, King Mongkut's Institute of Technology Ladkrabang,  
Bangkok 10520, Thailand.

### ABSTRACT

This study was aimed at investigating the factors influencing value in pursuing studies at private vocational schools and the level of such factors. The sample consisted of 379 students of 53 private vocational schools, which were selected through stratified random sampling. The instrument used for collecting the data was the questionnaire with reliability of .987 that consisted of three parts: Part 1 was general data; Part 2 was a 5-level rating scale questionnaire that included the factors influencing value in pursuing study at private vocational schools, and Part 3 was about the means of path analysis technique. The findings revealed that the students' opinion toward the factors influencing value in pursuing studies at private vocational schools was at the high level. The students' opinion toward the level of value in pursuing studies at private vocational schools was at the high level. All variables of the structural relations within the model had significantly influenced the value in pursuing studies at private vocational schools. The total effects of all variables ranging from maximum to minimum were house or residence, program options, desire to study at private vocational schools, guardian's preference, scholarships, social reputation, tuitions, academic reputation, gender, advertising, GPA, family income, parent's education level, and school choice. The correlation coefficients of 20 manifest variables showed that only 162 pairs from 190 pairs of correlation were statistical significant, and the rest (28 pairs) had no correlation significance. Most coefficients were positively correlated. Only 21 pairs were negatively correlated, and they had the correlation values from -0.005 to -0.777. The correlation of internal manifest variables or the independent variables had correlation coefficients between -0.777 and 0.073. The maximum correlation coefficient of independent variables was the correlation of rank of

school choice (RANK) and secondary school GPA (S.GPA). The minimum correlation coefficient of independent variables was the correlation of rank of school choice (RANK) and parents' education level (P.EDU). The correlation coefficients of the external manifest variables or the dependent variables were varied in the range of 0.570 to 0.956. The maximum correlation coefficient of dependent variables were the correlation of economic factor (ECOALL) and desire to study at private vocational schools (DESIREAL), theoretical factor (THE\_FAC) and the social factor (SOC\_FAC), THE\_FAC and environment factor (ENV\_FAC), respectively. The minimum correlation coefficient of dependent variables was the correlation of gender (GENDERAL) and advertisement (ADVERALL).

**Keywords:** Value, vocational school, Path Analysis, structural relations.

## INTRODUCTION

The decline in vocational school enrollment is due to a number of reasons. First, an economic crisis occurred in Asia, especially in Thailand in 1997, and after the coup d'état in September 19, 2006 (Thansettakij, 2007). The Thai economy is still in the recovery stage. As a result, some parents lost their jobs, and others suffered from job finding (Thansettakij, 2007). Today, many parents are unable to afford the tuition fees for their children (Thansettakij, 2007). The competition among public and private vocational schools in Thailand is very high. Private vocational schools compete with other private schools, public high schools, and public vocational colleges. In addition, for the past several years the Ministry of Education has issued an annual admissions policy stating that the public high schools and public vocational schools must admit all students who would like to continue studying in the public schools. Because the students who study in public schools pay lower tuitions because of government support, this policy discourages the flow of students from public to private vocational schools. Some of Thai students and their parents believe that obtaining a degree from a university will result in a higher income and social prestige. Thus, parents encourage their children to study in the general high schools if they have a good academic background. Only students with lower academic abilities are encouraged to study in vocational schools.

The concern for the enrollment issues in private vocational schools triggered by the various

reasons as above has prompted the researcher to look into the many factors of value that influence private vocational schools choice. The expected findings of this study were to shed light on planning and marketing as well as on increasing competitiveness of the private vocational schools. Thus, the objectives of this study were to examine the levels of value in pursuing studies at private vocational schools; study the structural relation of factors influencing value in pursuing studies at private vocational schools, and to validate a model of factors influencing value in pursuing studies at private vocational schools.

## CONCEPTUAL FRAMEWORK

The study was based on one theory and two concepts: Concerning the theory of value in pursuing studies at private vocational schools, the basic ideas were modified from Spranger's theory (1928), which consisted of six factors, i.e., economic factor, social factor, political factor, environment factor, religion and belief factor, and theoretical factor.

Based on the concept of factors influencing value in pursuing studies at private vocational schools, the basic ideas were modified from the findings of Choosup (2002), which consisted of 14 factors indicating school choice in private vocational schools. The aforementioned factors are programs options, guardian's preference, academic reputation, social reputation, advertisement, gender, house or residence; tuitions, desire to study in a private

vocational school, parent's educational level, scholarships, GPA, rank of school choice, and family income. It has been suggested that the variables of satisfaction with studying in vocational institutions such as extracurricular activities, GPA, the major

subjects of the study, parents' education level, and satisfaction (Roopsuwan, 2003). From these concepts, the conceptual framework was drawn up as shown in the following diagram.

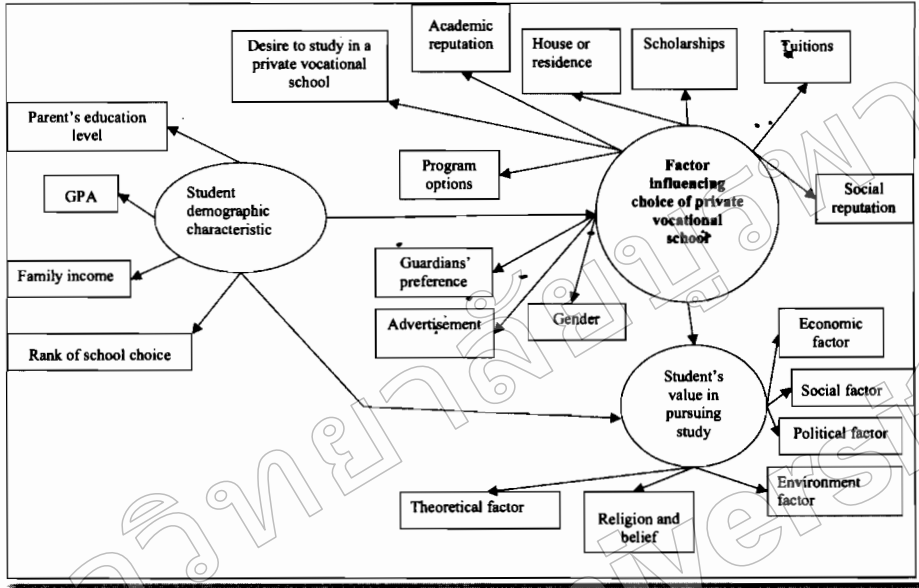


Figure 1. The schematic diagram of the conceptual framework demonstrated the relationship of suspected factors that may affected the student's value in pursuing studying at private vocational schools.

## DEFINITION OF TERMS

*Value in pursuing studies at private vocational schools* means the element power that affects the beliefs, needs, and wants of an individual and consequently prompts him or her on studying in private vocational school or having this type of profession. It was described in term of the principles of six attitudes of persons, namely, economic factor, social factor, political factor, environment factor, religion and belief factor, and theoretical factor.

*Factors influencing choices of private vocational school* means the factors that influence the value determinants in pursuing studies at private vocational schools. They consisted of school demographic characteristics and student demographic characteristics.

*Private vocational school* means the educational institutions organized by private owners,

foundations, churches, etc., to provide programs of career development in commerce.

## RESEARCH METHODOLOGY

The sample in this study included the private vocational schools in Bangkok, Thailand. Most of these schools generally offered two commercial programs, i.e., the 3-year certificate in commercial education, and the 2-year diploma in commercial education. Some schools offered only the 3-year certificate in commercial education. However, the main area of the research was focused on the first-year students at the certificate level of commercial education of private vocational schools in Bangkok. The population consisted of 29,970 students from 53 private vocational schools in Bangkok, Thailand, in the educational year of 2007. The selected student sample included 379 students from 53 vocational

schools in Bangkok, Thailand. The sample process was done by the Stratified Random Sampling method using sample criteria of Krejcie and Morgan (1970). The research instrument used in this research was the questionnaire, which was divided into three parts to apply with the first-year commercial students in Bangkok, Thailand. The questionnaires in part 1 were dealing with the general information of the targeted students, while the questionnaires in part two were concerned with the factors influencing value in pursuing studies at private vocational schools. They were ranked by using rating scales of five levels, which consisted of 61 questions. The questionnaires in part three were dealing with the level of value in pursuing studies at private vocational schools. They were ranked by using rating scales of five levels that consisted of 39 questions.

The instrument included the study of the tendency of theory, research, related documents of related factors influencing value in pursuing studies at private vocational schools was constructed. The questionnaires which were dealing with the factors influencing the value of pursuing studies were subsequently developed by modifying those questionnaires developed by Choosup (2002), and the questionnaires concerning of the level of value from Spranger's Theory (1928). The constructed questionnaires were sent to the experts to examine and define the important role of those theories described in the instrument. The questionnaires were subsequently submitted to another group of experts to examine the content validity. Finally, the questionnaires were modified according to the suggestions of the experts. The validity of questionnaires was extrapolated by submitting the questionnaires to the experts. Two experts edited the language used in questionnaires, and then it was tried out with 30 non-targeted students to determine the reliability by using Cronbach's Alpha Coefficient (Shinatrakool, 1999). The reliability was 0.987. The process of data collection was carried out by requesting a letter from King Mongkut's Institute of Technology Ladkrabang and sent a letter to each of

53 administrators in private vocational schools that located in Bangkok to ask for cooperation in data collection. The 379 questionnaires were sent out to 379 students of 53-targeted schools by mail or by hand delivery around July 2008. Data analysis was done by using SPSS for Windows and LISREL. The factors that influence value in pursuing studies at private vocational schools and the level of value in pursuing studies at private vocational school were analyzed using the SPSS for Windows program to calculate mean, standard deviation. The correlation of factors that influence value in pursuing studies at private vocational schools was determined by Path Analysis of LISREL version 8.72 to prove the validation of the model, while the Goodness of Fit Measurement was used to measure the level of harmony of functions (Viratchai, 1999). Chi-Square test was used to prove the assumption of harmonious functions. If Chi-Square value was high, the model LISREL was not consistent. If Chi-Square value was low, the model LISREL was consistent (Viratchai, 1999). The Goodness of Fit Index (GFI) was a level of harmony of a pair-wise comparison with the convinced data of two models. If Chi - Square was high, when comparing with an autonomous degree, the model must be adjusted downward from the first value; therefore, the new model was more harmonious to the convinced data. The GFI was the ratio of differentiation between harmonious function of the old model to the new model that would be adjusted. GFI value would fall between zero and one. When GFI was closed to one, it indicated the model was harmonious with the convinced data (Viratchai, 1999).

Adjusted Goodness of Fit Index (AGFI) was the adjustable value of GFI that obtained by considering the size of autonomous degree, number of variable, and sample size. When the AGFI value was closed to 1.00, the model was harmonious with the convinced data (Viratchai, 1999).

Root Mean Squared Residual (RMR) was the index showing the remainder by averaging the comparison of level of harmonious with the convinced data of two models. When the RMR was

closed to 1, the model was harmonious with the convinced data (Viratchai, 1999).

**Validate the model of structural relation of factors influencing value in pursuing study at private vocational schools**

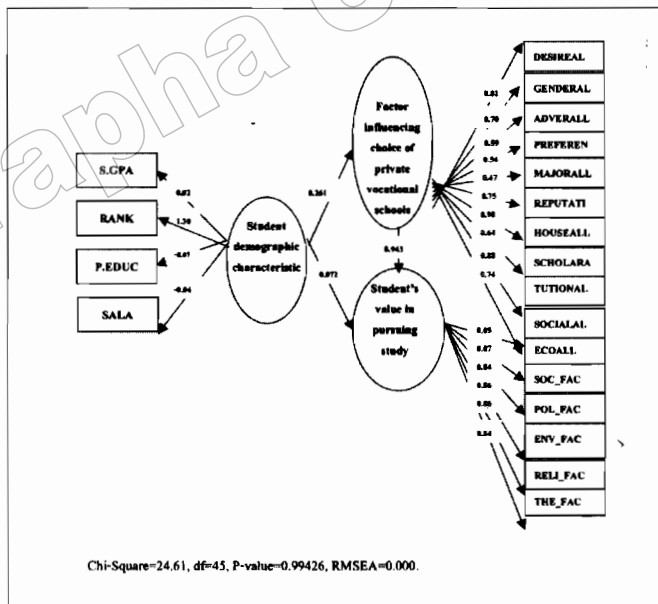
The model of structural relation of factors that influence value in pursuing study at private vocational schools in Thailand was developed. It was designed by taking the analyzed data of the status of factors that indicate value of pursuing private vocational schools which had coincident idea of students of each factor had been set up accordingly to the total factors of the structural correlation analysis. The factors had been categorized based on the coincident idea of students, i.e., program options, guardian's preference, academic reputation, social reputation, advertisement, gender, house or residence, tuitions, desire to study in a private business school, parent's educational level, scholarships, GPA, rank of school of choice, and family income. The designed model of structural relation of factors that influence value in pursuing

study at private vocational school was submitted to the experts and schools' administrators for focus group discussion.

The experts and administrators were recruited according to their qualifications, knowledge, skills, experience in vocational schools administration, and knowledge about the value establishment. The structural relation of factors that influences value in pursuing study at private vocational schools in Thailand were brought into the attention during the focus group discussion. The constructed model of structural relation of factors that influence value in pursuing study at private vocational schools was subsequently modified according to the suggestions and recommendations derived from the focus group discussion. The modified-constructed model was presented at the international conference.

**RESULTS**

Results of the analysis of data obtained from the returned questionnaires are summarized as shown in Figure 2.



**Figure 2.** Schematic diagram showing results of the study that demonstrated the relationships among three factors, demographic factors, factors that influence the choice of selection and value in pursuing study at private vocational schools model.

The gender of students, who studying at private vocational schools, were consisted of male at 58.4% and female at 41.6%. The percentage of those students that their GPA was fallen between 2.1 and 3.0 was 60.8%, and that their GPA was fallen between 3.1 and 4.00 was 30.4 %. They chose to study at these private vocational schools as a second choice at 39.7%, and as the first choice at 34.4%. Most of their parents held bachelor's degree at 48.8%. The proportion of their parents' income between 20,001-25,000 Baht/m was 51.2%, followed by 26.4% at the range of income between 25,001-30,000 Baht/m.

The students' opinion concerning those factors used in the instrument was analyzed. It was found that the conditions of the house or residence areas were ranked at the high level. The subsequent factors were program options, desire to study at private vocational school, guardian's preference, scholarships, social reputation, tuitions, academic reputation, gender, advertising, GPA, family income, parent's education level, and school of choice, respectively. Students' opinion toward the level of value in pursuing studies at private vocational schools as a whole was at the high level. All factors were analyzed by items. It was found that the economic factor was the first priority followed by political factor, religion and belief factor, environment factor, theoretical factor, and social factor, respectively. All variables of the structural relations within the model had significantly influenced the value in pursuing studies at private vocational schools. Once it had been validated, the model fit well to the empirical data that were indicated by the chi-square value (24.61,  $df = 45$ ,  $p = 0.99426$ ,  $GFI = 0.993$ ,  $AFGI = 0.969$ ,  $RMR = 0.011$ ).

The total effects of all variables were ranging from maximum to minimum, i.e., house or residence, tuitions, desire to study at private vocational school, academic reputation, social reputation, gender, scholarships, advertising, guardian's preference, program options, school of choice, parent's education level, family income, and GPA. The levels of value were subsequently taken into consideration.

It was found that the levels of value ranging from maximum to minimum were listed as follows: social factor, environment factor, religion and belief factor, economic factor, political factor, and theoretical factor, respectively. The direct effects of latent variables to value in pursuing studies at private vocational schools ranging from maximum to minimum were listed as follows: school demographic factors to value (94.3%), student demographic to factors (26.1%), and the student demographic to value (7.2%), respectively. The indirect effects of latent variables to value in pursuing studies at private vocational schools were student demographic to value (24.6%).

The correlation coefficients of 20 manifest variables indicated that only 162 pairs out of 190 pairs of correlation were statistical significant and all the rest of 28 pairs had no correlation significance. Most of 169 correlation coefficient values had positive correlation. Only 21 pairs yielded correlation coefficient values indicated negative correlation, where the correlation values ranged from - 0.005 to - 0.777. The correlations between internal manifest variables or the independent variables had correlation coefficient values ranging from - 0.777 to 0.073. The rank of school of choice (RANK) and secondary school GPA (S.GPA) had maximum correlation coefficient. The correlation coefficient values were gradually decreased among individual pairs as follows: S.GPA and salary (SALA), parents' education level (P.EDU) and SALA, RANK and SALA, and S.GPA and P.EDU, respectively. The minimum correlation coefficient value was found between the pair of P.EDU and RANK.

The correlation values between external manifest variables (or the dependent variables) fell between values ranging from 0.570 to 0.956. The maximum correlation coefficient was the correlation between the following pairs, i.e., factor of desire to study at private vocational school (DESIREAL) and economic factor (ECOALL), theoretical factor (THE\_FAC) and social factor (SOC\_FAC), and THE\_FAC and environment factor (ENV\_FAC),

respectively. The minimum correlation coefficient value was the value between the factor of gender (GENERAL) and advertisement (ADVERALL).

## DISCUSSION

The factors that influence value at the high level were determined individually according to results. In terms of housing conditions or residential areas, it was considered as the high priority factor of influencing value in pursuing studies at private vocational schools. Students would like to have some neighbors to go to the same school and have a convenient way to commute. Some students would like to go to school close to their home or residential area because they needed to study in any school that had good program options and easy to commute.

According to the program options' factor, results indicated that it influences the decision at a high level. All students would like to have a diversity of offered business programs that were challenging and meaningful. The good program could enhance the possibility for the students to obtain good jobs, to continue their study in the other institutions or universities in Thailand.

The most important thing that correlated with their decision was that the schools were well equipped with educational facilities and learning materials. They would like to pass professional standard examinations and receive a better pay with a better job. They are able to establish their own business. Students do not care for those schools that offering intensive courses since there are such courses offered all over Bangkok. Thus, students could choose the one that suited for them by themselves.

Guardian's preference of the private vocational school is also play an important role that influences students to enroll in the private vocational school. One reason is that they are alumni of the school and still love the prestige of the school.

The factor dealing with the available scholarships, students studying in private vocational

school have been supported from various sources of funds, i.e., government-per-head subsidy, industrial scholarships. However, the students are not interested in the loans available in vocational schools because their parents have enough financial resources. The factor dealing with social reputation indicates that students consider more about the reputation for social activities. They would like to join with those students who are well known in sports. The students seldom thought about the sufficient equipment and budget for sports because most private vocational schools are well equipped with these facilities. The tuition fee factor does not have much influence value because their parents' incomes are sufficient to afford the schooling expenses. There were no significant additional costs other than tuitions. Another factor was that teachers could find jobs for them while they were studying. They were not interested in the school allowable of making use of their relative's learning materials because most learning materials were out of date and have been used for years. The students prefer the schools with good academic reputation and teachers always improved their ability.

The programs responded to the labor market demand. However, the students do not care about knowledge and ability that met professional standards, because most students nowadays needed just degrees, but not inspiration for quality and ability. The students' gender did not play any role for studying at a private vocational school. It was not an obstacle to their future career. However, the students thought that the programs did not suit them because of their aimlessness in their life. The factor dealing with an advertisement indicated that the secondary school counselors and teachers do play an important role in advising the students. In addition, the advertisement on buses and in public also plays an important role for their school selection. The students seldom knew the schools from mass media such as radio, television, and newspapers because most students seldom read newspapers.

The opinions of students toward the level of

value in pursuing studies at private vocational schools were analyzed from those returned instruments: The factor dealing with economic value revealed that the business programs in private vocational schools were relevant to national economic need. These programs' career growth, and gave the students plenty of opportunities for jobs, resulting in national economic development. The factor dealing with the political view suggested that the school of choice influenced by the attendant of their neighbors. It was thought that it had good teachers, good services, and good care for their students. The students who graduated from vocational schools were target groups of industrial sectors. The students had opportunities to attend the meetings with school administrators to present their ideas. The schools tried to provide what students needed. In addition, they were clearly supported by the government when the students studied in a private vocational school. The factors dealing with students' culture and religion indicated that both of them would lead to constructiveness of knowledge for actual application in their jobs. It is believed that one should conduct one's life to conform to technology, and religion was also important for students so that they could live happily in society. Moreover, peace of mind enables students to concentrate better on learning. One good thing is that the school is always organizing cultural shows and Thai traditional culture activities during academic year.

The environmental factors do play an important role in learning process. The students wanted to gain more knowledge acquired from vocational schools to earn money during their studying. The students liked the school with a unique uniform, and it was convenient for them to borrow books from the library. They were satisfied with learning experiences. The school had internet facilities and E-mail address for all students to contact their teachers. The school library had been adequately equipped for researching.

The students needed teachers to help them in learning process and to solve various problems that

confronting them. The students thought that learning at private vocational schools involved both theories and practice. The school provided professional knowledge, expertise, skills, ethics, and the school organized professional standard examinations every year. Therefore, studying in a private vocational school enabled the students to understand better than studying in an academic-based school. Moreover, studying in a vocational school enabled students to gain knowledge in class as well as out of class as required. The social factor also plays an important role for those students studied in a private vocational school because they thought that their friends were very helpful. They had good access to computers and technology in their schools. They liked the size of the school. They liked schools' environment, and the teachers were always available to advice and help.

In order to develop the value in pursuing studies at private vocational schools, the results of this study should bring into consideration. The advertisements that placed on buses should focus on several items, i.e., the long history of school academic reputation, courses are always challenging and meaningful, the school program options should relevant to labor market demand, and the graduates always get good jobs. The marketing department should find out the name list from alumni, and send letters for asking parents/guardians to send their cousins/relatives to study at their schools. The students would like to have social activities with several students, which were well achieved in sport career. Therefore, counselors and teachers of secondary schools should advise their students to study at a private vocational school. Neighborhood was one of the most important parts for students to choose the school for studying. Thus, the marketing strategy would enhance the advertisement, which focused on the double entry for schools' surrounding students. Tuition fees are also important. Parents/guardians can afford the schooling expenses, or in other way round, teachers can find jobs for students while they are in schools. The marketing strategy must show that the school has government support

or industrial support, or per-head subsidy, and is well equipped with equipment and learning materials. Moreover, those students who graduated from the school can develop their own business such as SME. The maximum value of correlation coefficient of internal manifest variable suggested that the high priorities were school of choice and secondary school GPA, while the maximum value of correlation coefficient of external manifest variable was student's desire to study at private vocational school and the economic factor. These indicated that marketing strategy should focus on the GPAs. The GPA has no affect on studying at private vocational schools. The professional standard students could get good jobs in other countries during economic crisis.

This study was based on the idea of Spranger (1928) on value in pursuing studies, which was the abstracted idea. There should be a qualitative study to gain an authentic qualitative data. Moreover, the other idea on value in pursuing studies should be used such as the idea of Hossler and Gallagher (1987), which focused on student's school of choice. Choosup (2002) and Roopsuwan (2003) based the study of factors that influence value in pursuing studies on studies, which analyzed the factors affecting value in pursuing studies that do not cover other factors. Other factors concerning value in pursuing studies at trade and industrial schools, and arts and crafts schools should be taken into consideration. The development of the model for value in pursuing studies was a limited study. There should be a study in other factors in order to find out the value in pursuing studies pattern of the private vocational schools, which would be clearer in the future. The results of the study revealed that housing or residential conditions and program options play important roles in this study. It is recommended that further research concerning the specific educational programs should be conducted. The retention of students in school should be conducted for private vocational schools. If private vocational schools try to survive, they must try to retain their current students.

## REFERENCES

- Choosup, A. 2002. *Selected Variables Influencing School Choice by Students in Private Vocational Schools in Thailand*. Illinois State University, Chicago, Illinois, USA.
- Roopsuwan, P. 2003. *Student Satisfaction in Thai Private Vocational Schools*. Illinois State University, Chicago, Illinois, USA.
- Hossler, D. and Gallagher, K.S. 1987. *College Choice: A study of African American and White students*. Available on URL: [http://www.findarticles.com/p/articles/mi\\_m0FCR/is.../ai\\_n16726395](http://www.findarticles.com/p/articles/mi_m0FCR/is.../ai_n16726395). Retrieved on October 10, 2007.
- Krejcie, R.V. and Morgan, D.W. 1970. Determining sample size for research activities. *Educational and Psychological Measurement* 30(3):607-610.
- Shinatrakool, S. 1999. *Educational Research*. King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand (in Thai).
- Spranger, E. 1928. *Encyclopedia of Psychology*. Oxford University Press, New York, USA.
- Thansettakij. 2007. Political issues on Thai Economy. Available on URL: <http://www.thannews.th.com>. Retrieved on September 10, 2007 (in Thai).
- Viratchai, N. 1999. *LISREL*. Chulalongkorn University press, Bangkok, Thailand (in Thai).