

## The Factors Affecting the Characteristics of Self-Directed Learning of the Students from Faculty of Education, Silpakorn University

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### Abstract

The purposes of this research of studying the factors affecting self-directed learning of the students from Faculty of Education, Silpakorn University were to: 1) study the characteristics of self-directed learning of the students from Faculty of Education, Silpakorn University 2) compare the characteristics of self-directed learning of the students from Faculty of Education, Silpakorn University based on the variables: gender, year of study, learning program, and learning outcome and 3) to analyze the factors affecting self- directed learning of the students from Faculty of Education, Silpakorn University.

The sample group consisted of 400 students: the first to fifth year of Faculty of Education, Silpakorn University in the 2<sup>nd</sup> semester, academic year 2012 by Stratified Random Sampling. The research instrument was a questionnaire with five levels of rating scale based on the factors affecting self-directed learning of the students from Faculty of Education, Silpakorn University. The statistical analysis employed were frequency, percentage, mean, standard deviation, t- test, ANOVA, and LISREL which was used for analyzing the correspondence between the model and the empirical data.

The results of the study were:

1) The sample group had the characteristics of self-directed learning at the highest level ( $\bar{X} = 3.80$ ) and (S.D. = 3.96). When analyzing each topic, the mean of opportunity of learning was the highest ( $\bar{X} = 4.28$ ) along with fondness for learning ( $\bar{X} = 3.96$ ) and self- concept of being an effective learner ( $\bar{X} = 3.94$ ).

2) The analysis of comparing mean of the characteristics of self-directed learning based on the variable of learning program and the analysis of comparing mean based on the variable of learning outcome were significantly different at the 0.05 level. When comparing mean based on the variable of gender and the variable of year of study, they were not different.

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3) The model of factors affecting the characteristics of self-directed learning corresponds to the empirical data:  $\chi^2 = 62.262$ ,  $df. = 53$ ,  $p = .077$ ,  $GFI = .978$ ,  $AGFI = .950$ , and  $RMR = .009$ .

### Significance of the Study

National Education Act B.E. 2542 (1999) and Amendments (Second National Education Act B.E. 2545 (2002)) in Section 6 has been identified that education shall aim at the full development of the Thai people in all aspects: physical and mental health; intellect; knowledge; morality; integrity; and desirable way of life so as to be able to live in harmony with other people. Education is essential to develop humans, so this objective obviously encourages developing the quality of humans. The Faculty of Education, Silpakorn University, a part of the educational system, has specified the objectives in the strategy plans (2012 – 2015) including 1) to develop the graduates with great profession, morality, and social responsibility 2) to support the leadership of constructing educational knowledge, researches, and innovations 3) to conserve and support Thai culture and wisdom in regional and international level 4) to serve the academic field of education and other related fields as well as the learning center for community and 5) to provide the quality of education at all levels to be equivalent to international standard.

To achieve the educational objectives depends on the stakeholders defined as instructors, learners, society, etc. Learners are the most important ones proceeding to achieve the education objectives and apply their achievement to develop the country. The learners need to have a lot of characteristics including creative thinking, self-discipline, love of learning, confidence, etc. All these characteristics are called “Self-Directed Learning”.

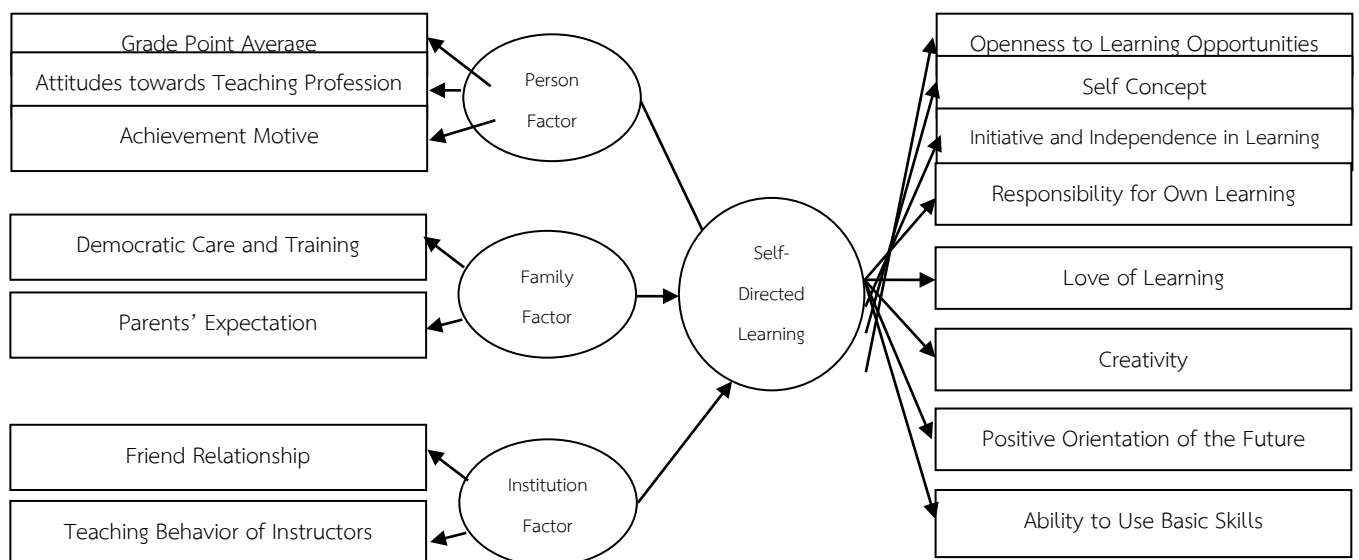
Self-directed learning is the important characteristic encouraging self-learning. Guglielmino (1977) classified into 8 subordinate characteristics that are 1) openness to learning opportunities, 2) self-concept as an effective learner, 3) initiative and independence in learning, 4) responsibility for own learning, 5) love of learning, 6) creativity, 7) positive orientation of the future, and 8) ability to use basic study skills and problem-solving skills.

According to these characteristics, if the learners have all of them, they will learn more effectively. From the study of researches relating to self- directed learning, it was concluded that there are three factors which encourage having the characteristics of self- directed learning consisting of person factor, family factor, and institution factor (Naruemon Tuenma, 1996; Sirirat Sumpunyuth, 1997; Adisak Panawong, 1999; Sunton Suthonglor, 1999; Patchari Ma- Saengsom, 2001; Suthikarn Yamnil, 2001; Petchthida Boonnoon, 2002; Hathaithip Pak- Insri, 2002; Suthasini Jaiyen, 2002).

As a part of social system, the students of Faculty of Education, Silpakorn University have developed teaching profession and have been good teachers. Moreover, if they have the characteristics of self- directed learning, Thai education can be developed to international standard. Consequently, the researcher had an interest in studying the factors affecting self- directed learning of the students from Faculty of Education, Silpakorn University to develop learning process for the students to have the characteristics of self- directed learning.

### Research Frame

The researcher studied the concepts, the theories, and the researches relating to self- directed learning and found that the factors affecting the characteristics of self- directed learning were person factor, family factor, and institution factor. The research frame can be shown as follow.



## Purposes of the Study

The purpose of this research was to study the factors affecting self- directed learning of the students from Faculty of Education, Silpakorn University. The specific purposes of this research were as follow.

1. To study the characteristics of self- directed learning of the students from Faculty of Education, Silpakorn University.
2. To compare the characteristics of self- directed learning of the students from Faculty of Education, Silpakorn University classified into the variables of gender, year of study, learning programs, and learning outcome.
3. To analyze the factors affecting self- directed learning of the students from Faculty of Education, Silpakorn University.

## Research Procedure of the Study

### Population and Sample

The population consisted of 1,481 students, the first to the fifth year of Faculty of Education, Silpakorn University in the 2<sup>nd</sup> semester, academic year 2012 from 10 learning programs: Thai, English, Social Studies, Early Childhood Education, Lifelong Education, Educational Technology, Psychology, Elementary Education, Sports Science, and Teaching Chinese as a Foreign Language.

The sample group consisted of 400 students, the first to the fifth year of Faculty of Education, Silpakorn University in the 2<sup>nd</sup> semester, academic year 2012 from 10 learning programs: Thai, English, Social Studies, Early Childhood Education, Lifelong Education, Educational Technology, Psychology, Elementary Education, Sports Science, and Teaching Chinese as a Foreign Language by Stratified Random Sampling.

## Research Variables

Independent variables were the variable of person factor, the variable of family factor, and the variable of institution factor.

Dependent variable was the characteristics of self- directed learning of the students from Faculty of Education, Silpakorn University.

### The research Instrument

The research instrument was the questionnaire: the factors affecting self-directed learning of the students from Faculty of Education, Silpakorn University, divided into 8 parts which comprised Part 1: General Information of the Informants, a checklist to survey personal status including gender, year of study, learning programs, and grade point average, Part 2: Attitudes towards Teaching Profession, Part 3: Achievement Motive, Part 4: Democratic Care and Training, Part 5: Parents' Expectation, Part 6: Friend Relationship, Part 7: Teaching Behavior of Instructors. Part 2 to Part 7 were rating scale. Part 8: Characteristics of Self- Directed Learning as Guglielmino (1977) classified into 8 subordinate characteristics that are 1) openness to learning opportunities, 2) self-concept as an effective learner, 3) initiative and independence in learning, 4) responsibility for own learning, 5) love of learning, 6) creativity, 7) positive orientation of the future, and 8) ability to use basic study skills and problem- solving skills. It was rating scale.

The instrument had content validity by having the evaluation of Item Objective Congruence: IOC (.67 – 1.00) and the analysis of Cronbach's Alpha Coefficient Reliability. The results were as follow.

**Table 1 : Coefficient Reliability of the Questionnaire**

Variables	Reliability
Attitudes towards Teaching Profession	.860
Achievement Motive	.901
Democratic Care and Training	.884
Parents' Expectation	.837
Friend Relationship	.907
Teaching Behavior of Instructors	.917
Characteristics of Self- Directed Learning	.935
<b>Total</b>	<b>.968</b>

### Collection of Data

The researcher used the questionnaire which had been experimented to collect data of the students in bachelor's degree, the first to the fifth year of study from

10 learning programs, Faculty of Education, Silpakorn University. 100% of questionnaires given (400 questionnaires) were sent back for analysis.

### Data Analysis

1. To analyze for the quality of questionnaire, Cronbach's Alpha Coefficient was used to analyze for reliability.

2. To analyze research variables, the statistical analysis employed to analyze general information of the informants with descriptive statistics: frequency, percentage, mean, and standard deviation.

3. To analyze for comparing mean based on the characteristics of self- directed learning classified into the variable of gender, year of study, learning programs, and learning outcome with t-test Independent and One way ANOVA.

4. To analyze the factors affecting the characteristics of self- directed learning, LISREL was used to analyze for the correspondence between the model and the empirical data. Chi- Square was used to analyze for fitted correspondence between the model and the empirical data. In addition, Goodness of Fit Index: GFI, Adjusted Goodness of Fit Index: AGFI, Root Mean Squared: RMR, and Largest Standardized Residuals were included in the analysis. The direct and indirect effect size of the factors affecting the characteristics of self- directed learning of the students from Faculty of Education, Silpakorn University was also analyzed.

### Conclusion

1. The sample group, students, Faculty of Education, Silpakorn University, had the characteristics of self- directed learning at the highest level ( $\bar{X} = 3.80$ , S.D. = .36). When analyzing in each item, the mean of openness to learning opportunities was the highest ( $\bar{X} = 4.28$ ) along with love of learning ( $\bar{X} = 3.96$ ) and self- concept as an effective learner ( $\bar{X} = 3.94$ ).

2. The analysis of comparing mean based on the characteristics of self- directed learning classified into the variables of gender and year of study were not significantly different while the variables of learning programs and learning outcome (grade point average) were significantly different at the 0.05 level.

3. The model of factors affecting the characteristics of self- directed learning corresponded to the empirical data:  $\chi^2 = 62.262$ , df. = 53, p = .077, GFI = .978, AGFI = .950, and RMR = .009.

When analyzing the effect score of the variables of the characteristics of self- directed learning, the variable which had direct effect on the characteristics of self- directed learning at the highest level was institution factor (DE = .601); this means, friend relationship and teaching behavior of instructors encouraged the students to have the characteristics of self- directed learning, along with family factor (DE =.369). Person factor having direct effect on the characteristics of self- directed learning was not statistically significant at the 0.05 level shown in Table 2 and Picture 2.

**Table 2: The Results of Variable Correlation Analysis and Statistic Results of the Effect on the Model of the Characteristics of Self- Directed Learning of the Students from Faculty of Education, Silpakorn University**

Effect Cause	SDL		
	TE	IE	DE
PER	.080 (.267)	-	.080 (.267)
FAM	.369* (.166)	-	.369* (.166)
INS	.601** (.157)	-	.601** (.157)

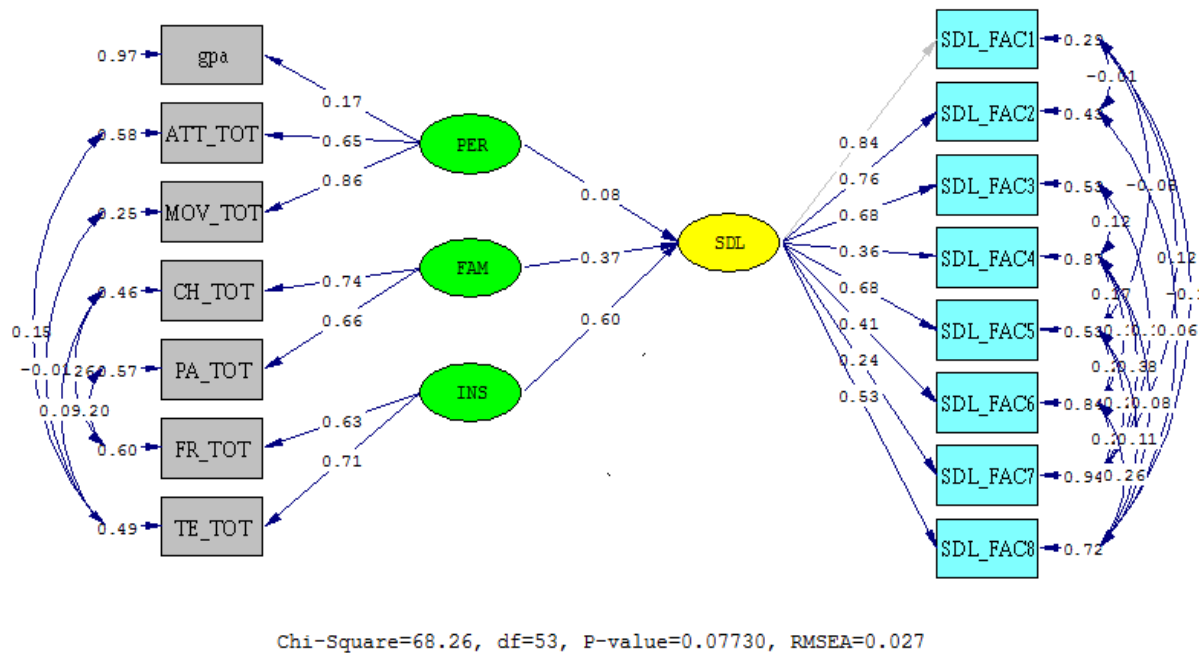
  

Statistic Results									
Chi- Square = 68.262	p= .0773	df = 53	GFI=.978	AGFI=.950	RMR=.009				
Variable	SDL1	SDL2	SDL3	SDL4	SDL5	SDL6	SDL7	SDL8	GPA
Validity	.707	.572	.466	.129	.466	.165	.055	.277	.027
Variable	ATT	MOV	CH	PA	FR	TE			
Validity	.417	.745	.541	.434	.403	.507			
Structural Equation Variables									
SDL									
R-SQUARE	.881								

Correlation Matrix				
Latent Variable	SDL	PER	FAM	INS
SDL	1.000			
PER	.841	1.000		
FAM	.779	.789	1.000	
INS	.876	.782	.577	1.000

\*\* p<.01, \* p <.05



Picture 2: the Model of the Characteristics of Self- Directed Learning of the Students, Faculty of Education, Silpakorn University

### Discussion

1. The students, Faculty of Education, Silpakorn University were the sample group having the characteristics of self- directed learning at high level. The learning style had an influence on self- directed learning in positive effect as Rodney (2007) stated that self- constructed knowledge and skills was necessary for lifelong learning and made students have problem- solving skills. It was very important to practice students for living in the world which is always changing. Natthakan Muen- Sa (2005) also stated that When students had self- acceptance, systematic plan, learning motive, self- evaluation, chances of new experience, learning flexibility, and self- expression, they will be encouraged to have self- directed learning. In addition, Saowakon Wongsupachainimit (2003) stated that students aimed to graduate, so they had a lot of learning enthusiasm and intention to complete their objective. This means, they had openness to their chosen learning, had a good plan based on their interest which can motivate students' learning satisfaction, and had participation in any learning activity. These had the effect on learning responsibility, love of learning and self- concept as an effective learner.

2. The analysis of comparing mean based on the characteristics of self-directed learning classified into the variable of gender and year of study were not significantly different. Correspondingly, Saowakon Wongsupachainimit (2003) claimed that adult students had self-responsibility, well-organized living, self-control. Both men and women had the same objective which was graduation; therefore, they had their learning enthusiasm and intention to complete their objective. Jintana Silparat (2002) claimed that gender did not have effect on self-learning. The context of education offered the independence of learning for all genders. Saowakon Wongsupachainimit (2003) also added that students had their learning enthusiasm and intention to complete the same graduation objective. The range of age between years of study, students' thinking and decision-making were not obviously different. These did not have effect on students' learning enthusiasm and intention. While considering variable of learning programs and learning outcome (grade point average), they were different. Saowakon Wongsupachainimit (2003) identified that students with high and medium learning outcome had the characteristics of self-directed learning higher than those who had low learning outcome. They have more self-concept as an effective learner, creativity, self-learning, and responsibility for their own learning. Furthermore, Murray (2010) stated that there were direct and indirect factors encouraging self-directed learning relying on learning programs, degree of education and other factors.

3. Friend relationship and teaching behavior of instructors caused the students to have high self-directed learning. Saowakon Wongsupachainimit (2003) claimed that friend relationship really stimulated students to have ability of thinking and learning enthusiasm because they spent a lot of time together on learning, having learning participation, exchanging knowledge, opinions, and experiences. Jintana Silparat (2002) stated that instructors had to provide problem-solving method to practice the students to integrate and connect any information to construct their new knowledge. The instructors also supported students' self-learning and changed themselves to be supporters, counselors, and facilitators for students to have self-directed learning. Natthakan Muen-Sa (2005) added that the characteristics of instructors with nice learning environment, various activities and appropriate learning media made students learn intentionally without feeling bored. These encouraged them to acquire self-directed learning.

## Suggestion

### Suggestion for the Use of the Research Results

1. The research result was found that friend relationship and teaching behavior of instructors as the variables of institution factor encouraged students to have high characteristics of self- directed learning; therefore, the activities supporting good relationship between the instructors and the students should be launched for higher characteristics of self- directed learning of students in Faculty of Education.

2. The research result was found that achievement motive and attitudes towards teaching profession as the variables of person factor encouraged students to have high characteristics of self- directed learning; therefore, the projects and activities supporting positive attitudes towards teaching profession should be established for higher characteristics of self- directed learning of students in Faculty of Education.

### Suggestion for the Studies in the Future

1. There should be a study of the model of factors affecting self- directed learning of the students, Faculty of Education, Silpakorn University comparing students in four- year curriculum and students in five- year curriculum.

2. There should be more variables in the study of factors affecting self- directed learning of the students, Faculty of Education, Silpakorn University particularly in person factor such as parents' incomes, parents' degree of education, etc.

## Bibliography

- Adisak Panawong. 1999. **Self-Directed Learning of Non-formal Distance Secondary Education Students in Sakon Nakhon Province in the Year 1997**. Master Thesis in Education (Adult Education). Mahasarakham: Mahasarakham University.
- Guglielmino, L. M. 1977. Reliability and Validity of the Self-Directed Learning Readiness Scale and the Learning Preference Assessment. In **H.B.Long & Associates, Expanding Holizons in Self-Directed Learning**. (pp. 209-222). Norman, OK: Public Managers Center, College of Education, University of Oklahoma.
- Hathaithip Pak- Insri. 2002. **Factor related to Self-Directed Learning characteristics of Student at the Faculty of Veterinary Science, Chulalongkorn University**.

- Master Thesis in Education (Higher Education). Bangkok: Srinakharinwirot University.
- Jintana Silparat. 2002. **The Relationship between the Desired Characteristic and Self-Directed Learning Readiness Level of Primary School Teachers in Suphan Buri Province.** Master Thesis in Education (Nonformal Education). Nakhon Pathom: Silpakorn University.
- Naruemon Tuenma. 1996. **Relationships between personal factors, college environments and self-directed learning readiness of nursing students, nursing colleges under the jurisdiction of the Ministry of Public Health.** Master Thesis in Nursing Science (Nursing Education). Bangkok: Chulalongkorn University.
- Natthakan Muen- Sa. 2005. **Development of a Casual Relationship Model of Self-Directed Learning of Matthayomsuksa Five Students.** Master Thesis in Education (Educational Research Technology). Chonburi: Burapha University.
- Patchari Ma- Saengsom. 2001. **A Study of Some Factor related to Self-Directed Learning Readiness.** Master Thesis in Education (Educational Research and Statistics). Bangkok: Srinakharinwirot University.
- Petchthida Boonnoon. 2002. **A Study of Some Factor related to Self-Directed Learning in using Computer of Secondary School Teachers under the Department of General Education in Bangkok.** Master Thesis in Education (Educational Research and Statistics). Bangkok: Srinakharinwirot University.
- Rodney A. S. 2007. Evaluating the self-directed learning readiness of engineering undergraduates: a necessary precursor to project-based learning. **World Transactions on Engineering and Technology Education.** Vol.6, No.1: Pages 59-62.
- Saowakon Wongsupachainimit. 2003. **The Synthesis of Research Studies in Adult Self-Directed Learning.** Master Thesis in Education (Nonformal Education). Chonburi: Burapha University.
- Sirirat Sumpunyuth. 1997. **Self-Directed Learning characteristics of Students in Distance Education System of Sukhothai Thammathirat Open University.** Master Thesis in Education (Adult Education). Bangkok: Srinakharinwirot University.

Suntorn Suthonglor. 1999. **Self-Directed Learning characteristics of Students at Ratjabhat Institute Suan Dusit.** Master Thesis in Education (Educational Psychology). Bangkok: Srinakharinwirot University.

Suthasini Jaiyen. 2002. **Variable related to Self-Directed Learning Abilities of Students in Distance Education School in Khet Bangkhen, Bangkok.** Master Thesis in Education (Educational Psychology). Bangkok: Srinakharinwirot University.

Suthikarn Yamnil. 2001. **Self-Directed Learning Readiness of Librarians in Central Region. Thailand.** Master Thesis in Education (Adult and Continuing Education). Nakhon Pathom: Silpakorn University.