



CAREER DECISION-MAKING SELE-EFFICACY AMONG HIGH SCHOOL
STUDENTS IN SELECTED PUBLIC AND PRIVATE SCHOOLS IN
BANGKOK, THAILAND

Mr. Oleksiy Kostko

A Thesis of the Twelve-Credits/Course
ED7000 Master's Thesis

Submitted in Partial Fulfillment
of the Requirement for the Degree of
Master of Education
in Educational Administration
Assumption University

September 2008

Title:
**CAREER DECISION-MAKING SELF-EFFICACY AMONG HIGH SCHOOL
STUDENTS IN SELECTED PUBLIC AND PRIVATE SCHOOLS IN
BANGKOK, THAILAND**

Mr. Oleksiy Kostko
ID 4629654

**A Thesis of the Twelve-Credits/Course
ED7000 Master's Thesis**

**Submitted in Partial Fulfillment
of the Requirement for the Degree of
Master of Education
in Educational Administration
Assumption University**

September 2008





มหาวิทยาลัยอัสสัมชัญ
ASSUMPTION UNIVERSITY

**Graduate School of Education
Assumption University**

Thesis Examination Approval

The Thesis Examination Committee considered the thesis entitled:

“Career Decision-Making Self-Efficacy among High School Students in Selected Public and Private Schools in Bangkok, Thailand”

presented by

Mr. Oleksiy Kostko

ID. No. 4629654

on October 10, 2008

in partial fulfillment of the requirements for a Master of Education Degree in:

Educational Administration

The result is:

- ☐ Excellent
- ☒ Good
- ☐ Pass
- ☐ Fail

S. Laksana

Dr. Sangob Laksana
Chair

Suwatt Eamoraphan

Assoc. Prof. Dr. Suwattana Eamoraphan
Member/Outside Reader

Athipat Cleesuntorn

Dr. Athipat Cleesuntorn
Member/Advisor

Wipa Mhupiew

Dr. Wipa Mhupiew
Member/Inside Reader

ACKNOWLEDGEMENTS

I would like to express my greatest appreciation and thanks to my advisors Dr. Athipat Cleesuntorn and Dr. Robert J. Ciszek for their expertise, words of encouragement, and endless time and patience while working with me through my educational endeavors. To Dr. Sangob Laksana for guiding me through statistical methods those I used in my study. His suggestions and knowledge were much needed and appreciated. I thank Assoc. Prof. Dr. Pornchulee Achava-Amrung for her final review and valuable suggestion that clarified my views on the research in general. I would like to express my deep appreciation to Assoc. Prof. Dr. Kitima Preedeedilok for her encouragement and guidance.

My great thanks to the principal of Udomsuksa school Dr. Kamonwan Chaiwanichsiri Chanseree, the principal of Boadendecha school Dr. Chownan Maruttavong, and the director of the Demonstration School of Ramkhamheng University Dr. Sthimas Boonsamer for helping me conduct the surveys.

I would also like to take the time to thank my family and friends for being supportive of me throughout my schooling. Their comforting words and support were deeply valued.

TABLE OF CONTENTS

	Page
Cover Page.....	i
Copyright.....	ii
Thesis Committee's Approval	iii
Acknowledgements.....	iv
Table of Contents.....	vi
List of Tables.....	ix
List of Figures	x
Abstract.....	xi
Chapter I Introduction	1
Background of the Study	1
Statement of the Problem	5
Research Questions	7
Research Objectives	7
Research Hypothesis	8
Significance of the Study	8
Theoretical Framework	9
Conceptual Framework	11
Scope of the Study	14
Definition of the Terms	14

TABLE OF CONTENTS (Continued)

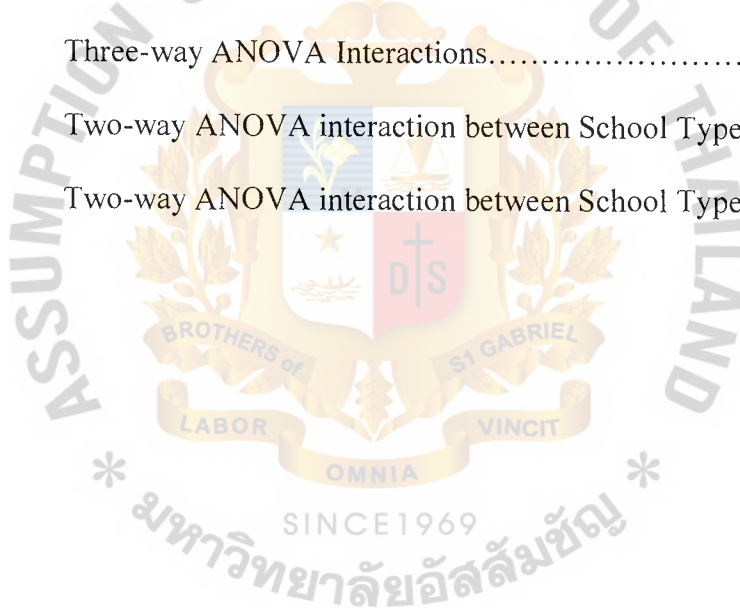
		Page
Chapter II	Review of the Related Literature	
	Trends	17
	Local Practices	19
	Realistic Focus	21
	Career Maturity Constructs.....	22
	Role of Self-Efficacy in Career Development.....	23
	Career Decision Making Self-Efficacy.....	27
	Age and Career Decision Making	29
	Gender and Career Decision Making	30
	School type and Career Decision Making	31
	With The Right Assessment.....	32
	Summary.....	33
Chapter III	Research Design and Methodology	
	Population	36
	Sample	36
	Instrumentation	37
	Data Analysis	39

TABLE OF CONTENTS (Continued)

	Page
Chapter IV Presentation, Analysis, and Interpretation of Data.....	40
 Chapter V Findings, Conclusion, Discussion, and Recommendations	
Introduction.....	49
Findings.....	50
Conclusions.....	50
Discussion.....	53
Recommendations.....	55
Bibliography	56
Appendices	
Appendix 1: Instrument (English Version).....	63
Appendix 2: Instrument (Thai Version).....	64
Appendix 3: Letters.....	65

LIST OF TABLES

		Page
 Tables		
1.	Demographic Profiles of the Respondents.....	41
2.	Private and Public Schools' Subscale Means for CDMSE.....	42
3.	Male and Female Subscale Means for CDMSE.....	43
4.	Grade 10, 11 and 12 Subscale Means for CDMSE.....	44
5.	Three-way ANOVA Main Effects	45
6.	Three-way ANOVA Interactions.....	46
7.	Two-way ANOVA interaction between School Type and Gender. ..	47
8.	Two-way ANOVA interaction between School Type and Grade.....	48



LIST OF FIGURES

	Page
Figures	
1. Conceptual Framework.....	13
2. SCCT Framework.....	26



ABSTRACT

Thesis Title : Career Decision-Making Self-Efficacy Among High School Students in Selected Public and Private Schools in Bangkok, Thailand

Student's Name : Mr. Oleksiy Kostko

Thesis Major Advisor: Dr. Athipat Cleesuntorn

Thesis Co-Advisor : Dr. Robert J. Ciszek

Level of Study : Master of Education

Program of Study : Educational Administration

Faculty : Faculty of Education

Year : 2008

Career development is a lifelong process that can be fostered through education programs and interventions at all levels, but specifically during the last years of high school. It is very common for school graduates to ponder about their choice of major and to pick a specific career during the last years of high school. Therefore it is extremely important for schools to offer career related activities and guidance aimed to help students make more informed and constructive educational and career choices. The literature review in this study compares and contrasts research of factors that influence career decision-making among different groups stressing early interventions in a field of career development.

The objective of this study was to collect and evaluate high school students' opinions on their future plans evaluating their adulthood readiness through examining their decision-making self-efficacy. The purpose is to make secondary education clearer and more effective to the students as well as to the administrators. Recommendations were made for educators and counselors to help aid them in their role of assisting students in building up their career choices based on their beliefs, self perceptions and interests.

The high school students were evaluated on career awareness through an evaluation of their future plans, attitudes, and current opinions on exploring careers and acquire basic knowledge and skills that can foster confidence in making job-oriented decisions after high school graduation. Surveys were conducted among high school students in public and private schools. The results indicate that scores on the CDESES-SF were somewhat reliable (internal consistency reliability = .70) with this sample of Thai high school students. The results showed that school type and gender were related with regard of career decision-making self-efficacy beliefs, as well as relationship was found within school type and grade level. Differences in career decision-making self-efficacy beliefs within grade level and gender found no significant relationship. The study was conducted to show the needs for professional training as a part of school curricula where the current job demand is the key factor in creation of outlines for Career Training courses.

Chapter I

Introduction

Background of the Study

People who know, from their early school days, which career they want to pursue when they grow up are rare. For most people, the image of how they see themselves five or ten years after high school only becomes clearer after several trials and errors. Many spend years studying in colleges and universities only to decide their interests are not there.

In November 2006, the International Labor Organization revealed that the number of unemployed 15 to 24 year-old youth has risen sharply by 15%, from 74 million to 85 million in the last decade, leaving one third of the world's young people without jobs according to UNESCO (UNESCO, Bangkok, 2006). The transition from the world of learning to the world of work is a thin line especially when we consider the importance of lifelong learning. The key issues of graduate unemployment are:

a. Mismatch of qualifications with employers' needs

This easily can be overcome by conducting needs assessment; developing more relevant curricula; implementing appropriate pedagogical approaches to link educational institutions and industries; identifying and defining qualifications based on real needs; assessing and ensuring the quality of competencies; certifying qualified institutions and trainees.

b. Lack of supply and demand information on the labor market

Bridging the information gap between educational/training institutions and employers, and between people looking for work and employers, is a practical strategy for many countries.

c. Lack of proper career guidance and information

An early start, beginning in the first year of secondary school with follow-up program interventions throughout their studies, will help students be aware of career options and opportunities. One component of the program may involve employers giving talks on different types of careers to students in the schools. Career counselors can be assisted through training workshops and provided with tools, manuals, annual labor supply/demand reports. Alumni mentorship programs can be created to link students with successful alumni working in career fields of similar interest. Job fairs and exhibitions can be held to engage employers and youth. Online community portals to facilitate collaboration for career counselors, students, new graduates and employers can include an interactive website for posting questions and answers, links to the various career guidance tools and manuals, and labor demand/supply statistical reports. The creation and maintenance of the websites can be managed by A Youth Employment Network with strong collaboration with the Ministry of Education and Ministry of Labor.

d. Lack of exposure of students to the real world of work

Visits to job sites and job placements/training as part of the school curricula can be incorporated into the school curricular or career counseling programs to expose

students to workplace environment and requirements. However, such initiatives are more acceptable and common in vocational and technical institutions compared to regular formal school programs.

e. Lack of soft skills

Soft skills such as social skills, interpersonal relationships, motivation, critical thinking, communication, creativity, language skills and so on are essential to be incorporated into school programs.

f. Economic issues

Incorporate analyses of the trends in labor market needs as part of the economic projections and plans, and communicate this clearly to the education and training sectors (UNESCO, Bangkok, 2006).

International trends

The relevant educational policies on career training in France, Germany, Japan, the Netherlands, Sweden, United Kingdom and the United States include expanded pre-school programs and support for higher attainments in general education. The focus here is on vocationally-oriented reform in secondary schooling. The reform includes upgraded curricula, work experience for students, apprenticeship, and school-employer links (Stern and Wagner, 1999).

Japan and Germany have both developed compulsory education with high participation, as well as high means and low variances of achievement. But their upper-secondary education systems differ radically: in Japan, schooling is full-time

with standardized curricula; in Germany, high schooling is part-time and curricula largely vocational (Stern and Wagner, 1999).

Educators would rather see a unity between general and vocational curricula in full-time schooling, so that vocational students receive technical education rather than just occupational training, and general students can learn how to apply theoretical principles to practical problems. The changing of traditional ways in those two types of education is reflected in the introduction of: 'integrated' senior high schools in Japan; apprenticeship-based routes to public vocational qualifications in France; greater educational content in Dutch apprenticeships; and mandatory work experience in Swedish upper secondary education (Ryan, 2000).

In Washington State, in the US found great support for students to receive career preparation in school. School-to-Work Transition was meant to be part of local school curriculum (Hughes and Bailey, 2001) In the survey, 74 percent said careers and the skills necessary for work should be introduced to students before high school, and 87 percent said high schools should provide career preparation to every student before they graduate. Nearly everyone, 96 percent, stated that an education system that includes School-to-Work Transition is "highly desirable" or "desirable." (Hughes and Bailey, 2001) Research indicates that participation in School-to-Work can improve high school students' attendance, grades, and graduation rates. School-to-work students are also more likely to attend college. School-to-Work also contributes significantly to students' career preparation, through exploration activities and work-based learning experiences. Participation in

School-to-Work brings benefits for young people in terms of constructing planful behavior, maturation, self-confidence, and an understanding of the importance of school. Some studies show that once they choose to enter the labor market, school-to-work graduates are more likely to gain employment and earn higher wages than comparable groups (Hughes & Bailey, 2001)

Statement of the problem

Thai youth account for half of total unemployment in the country, and a large share works in mid-low skilled sectors and occupations. Lack of the right skills or poor access to effective job search and employment services might become a barrier to entering the labor market. According to some estimates, 70% of Thai workers find jobs through personal networking and only 10% through Internet or employment services (Jimenez, Social Monitor 2007).

Skills shortages remains one of the main problems of the Thai labor force. The 2006 Investment Climate Assessment shows that skills shortages and mismatches as major problems of Thai companies. Thai companies pay large premium wages to employees with technical skills training, which mean that demand for highest skilled labor in Thailand is not appropriately met. Thai companies face difficulties to fill vacancies for professional jobs (Jimenez E. *Investing in Young People is Critical for Thailand's Social and Economic Development*, 2007). The Investment Climate Assessment shows that intensity of hard-to-fill vacancies is very high compared to neighboring countries such as

Indonesia, Malaysia and the Philippines. Around 95 percent of manufacturing plants surveyed have had vacancies for professional and production workers in the last two years. As the second figure reflects, it takes longer (more than six weeks) in Thailand than in any other country in the region to fill a vacancy for a skilled production worker or a professional. More than 80 percent of managers cited as a reason for this the fact that applicants lack appropriate basic and technical skills.

The majority of young job-seekers in Thailand rely on informal networks and contacts to search for jobs. On the other hand, public employment services, education and training institutions and job fairs play a very small role in assisting young women and men. As a result, many young workers enter the labor market unprepared, feel discouraged and often end up in the informal sector after unsuccessful attempts in seeking employment in the formal sector. Improving the flow of information on job vacancies and skills and better job search counseling could potentially play an important role. Various models of providing career training could be explored, including vocational training and coordinated programs through public and private partnerships (Jimenez E. *Investing in Young People is Critical for Thailand's Social and Economic Development*, 2007).

High school students in Thailand should have greater opportunities in career development. The career choices of high school students should be clearer and gradually well developed. By the time the students graduate from secondary school, they are expected to have their career choices formed in the way that they would be able to join the workforce, acquire technical training, or continue their education.

There should be a significant difference between the last three higher grades closer they approach to graduation from the school.

The tests should be constructed based on self-evaluation, helping students see their own perspective on the ability to make career-related decisions. There should be more career-oriented tests conducted among upper grade students.

Research questions

The primary research questions are:

1. Is there any difference in male and female high school students' career decision-making self-efficacy depending on whether they study in private or public school?
2. Is there any difference in grades 10-12 high school students' career decision-making self-efficacy depending on their gender?
3. Is there any difference in grades 10-12 high school students' career decision-making self-efficacy depending on whether they study in private or public school?

Research objectives

The objectives of the study are:

1. To determine and evaluate differences in high school students' career decision-making self-efficacy by school type and gender.
2. To determine and evaluate differences in high school students' career decision-making self-efficacy by grade level and gender.

3. To determine and evaluate differences in high school students' decision-making self-efficacy by school type and grade level.

Research Hypotheses

The following hypotheses will be examined and tested:

1. There is a significant relationship between school type and gender in career decision-making self-efficacy of high school students.
2. There is a significant relationship between grade level and gender in career decision-making self-efficacy of high school students.
3. There is a significant relationship between school type and grade level in career decision-making self-efficacy of high school students.

Significance of the study

This study's ultimate goal is to measure the students' education and career trends and perceptions. By assessing self-efficacy of high school students, we may increase their career self-awareness whether or not they score high in the test.

Nowadays, administrators should be aware of students' self-belief factors that are crucial in the development of a holistic person. Knowing yourself, acknowledging norms and believing in performing actions that are aligned with those norms, is an important attribute for one entering into adulthood. Most of the recent findings show that policy makers rarely measure local student perceptions focusing on the societal trends on a national or worldwide scale. By satisfying the school-career transition

process's needs, educators can dramatically change the schooling system culture, bringing it up to a maximum satisfaction for the students as for themselves.

Theoretical framework

Career Exploration Theories

Career exploration is now viewed as an essential part of career development, and an important element in career decision-making (Blustein, et al., 1989). Career exploration is a complex process individuals engage in to obtain and enhance self and environmental knowledge, and to achieve career goals. Career exploration includes: the gathering of information and knowledge about job searching, planning, opportunities, and career options. It involves talking to people about opportunities, learning about necessary abilities and skills, and acquiring education for advancement (Betz, N. & Vuyten, K., 1997).

Blustein (1997) believed that the motivation to explore careers is mostly intrinsic and develops from natural curiosity, self-determination, and desire. When individuals incorporate their own needs, wants, values, and aspirations in their career exploration, it enriches the career-learning experience (Betz, N., Klein, K., & Taylor, K., 1996).

John Holland suggested that "people can function and develop best and find job satisfaction in work environments that are compatible with their personalities" (McMahon and Patton, 2006). Holland based his theory of personality types on several assumptions:

1. People tend to choose careers that are reflective of their personalities.
2. Because people tend to be attracted to certain jobs, the environment reflects their personalities.

Frank Parsons (McMahon and Patton, 2006), proposed that a choice of a vocation depended upon:

1. Accurate knowledge of oneself.
2. Thorough knowledge of job specifications.
3. The ability to make a proper match between the two (McMahon and Patton, 2006).

Krumboltz's Social Learning Theory

Much growth takes place as a result of learning and imitating the behavior of others. John D. Krumboltz developed a theory of career decision-making and development based on our social learning, or environmental conditions and events, genetic influences, and learning experiences. People choose their careers based on what they have learned; Krumboltz theorized (Patton and McMahon, 2006). Certain behaviors are modeled, rewarded, and reinforced.

Bandura's Self-Efficacy Theory

Bandura proposed a theory where self-efficacy expectations refer to a person's beliefs concerning his/her ability to successfully perform a given task or behavior (Bandura, 1977). Self-efficacy expectations are learned and can be modified by four sources of information: 1) performance accomplishments, that is,

experiences of successfully performing the behaviors in question; 2) vicarious learning or modeling; 3) verbal persuasion, for example, encouragement and support from others, and 4) emotional arousal, that is, anxiety or "coeffect". According to Bandura, in connection with the behavior, the greater the coeffect the lesser the self-efficacy will be. By increasing attention to the sources of efficacy, information should decrease anxiety in relationship to the behavior.

Evaluation of Bandura's self-efficacy theory showed great support in the career development domain, and Dr. Betz was the first to develop a standardized measure of self-efficacy designed to measure individuals' confidence in their ability to be involved in career decision-making tasks.

Career Maturity Theory

Crites' (1978) model of career maturity assumes that "good" career decisions are supported by competence in five career choice processes and by mature versus immature attitudes regarding the career choice process. These five competencies are: 1) accurate self-appraisal, 2) gathering occupational information, 3) goal selection, 4) making plans for the future, and 5) problem solving.

Conceptual framework

The idea to measure self-efficacy expectations was proposed by Bandura (1977). It refers to a person's beliefs concerning his/her ability to successfully perform a given task or behavior. They were formulated by Bandura (1977) to be

the major constructs of behavior and behavior change. Bandura (1977) specified four sources of information for self-efficacy expectations through which we can study and modify the latter. These sources of information include: 1) performance accomplishments, that is, experiences of successfully performing the behaviors in question; 2) vicarious learning or modeling; 3) verbal persuasion, for example, encouragement and support from others; and 4) emotional arousal, that is, anxiety, in connection with the behavior.

The concept of self-efficacy expectations provided the basis for development of CDMSE (Taylor & Betz, 1983). The framework for deciding how to define and operationalize the skills required in career decision-making was taken from Crites' (1978) model of career maturity (Taylor & Betz, 1983). Crites (1978) hypothesized that "good" career decisions will be facilitated by competence with respect to five career choice processes and by mature versus immature attitudes regarding the career choice process. Because self-efficacy theory is defined in relationship to competence in specific behavioral domains, Crite's five career choice competencies were used to define the domain of interest, that of competent career decision-making (Taylor & Betz, 1983). These five competencies and, subsequently, the subscales of the CDMSE, were: 1) accurate self-appraisal, 2) gathering occupational information, 3) goal selection, 4) making plans for the future, and 5) problem solving. Fouad and Smith, (1996) adapted the CDSE for use with middle school students. Twelve items were selected to keep the conceptual meaning of the scale. Some of the items were adapted to be understandable to students in 7th and 8th grades and ranging in age

from 12 to 15. The target group represented a variety of ethnic groups: 58% Hispanic, 17% African American, 17% Caucasian, 3% Asian, 3% American Indian and 2% of other ethnicities. The internal consistency reliability coefficient was 0.79.

The conceptual framework (Figure 1.) represents five major components that represent input, process. As the input, a set of questions will define the dependent variables which are the five competencies (Crites, 1978). For this process, the analysis of career decision making self-efficacy is used. The output is the cumulative data that is compared to the demographic differences that reflect the research questions.

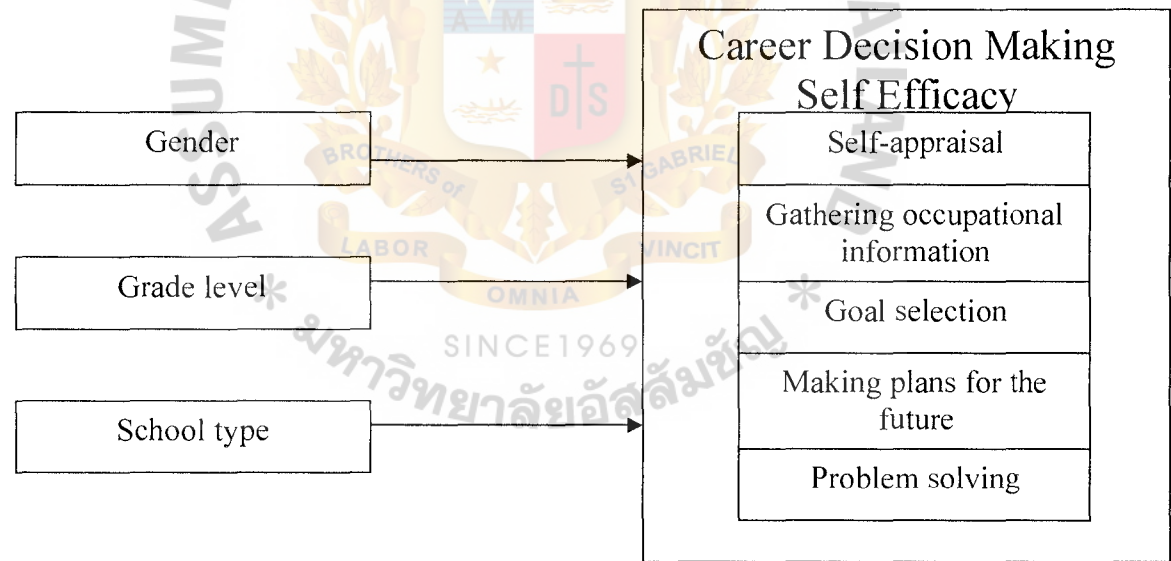


Figure 1. Conceptual Framework

Scope of the study

This study analyzed respondents from secondary schools in The Bangkok Metropolitan Area using grade (10-12), gender (male-female) in from the public and private sectors. The study's findings are based on descriptive statistics and comparative analysis. The demographic data included gender, grade, and type of school.

The research was conducted in three senior grades in a private and a public school. Demographical factor such as age was not considered. The validity of the CDMSE was considered as measured by Faud & Smith (1996).

Definition of terms

In this study, certain terms were used:

Career Decision Making Self-Efficacy Scale (CDMSES-12): Refers to the twelve item scale that measures an individual's degree of belief that he/she can successfully complete tasks necessary in making career decisions developed by Fouad & Smith (1996) for use with middle school students.

CDMSES Competencies (factors):

1. Gathering occupational information: Refers to a person's self-belief in one's ability to gather information about the jobs that fit one's interests. It's one of the factors for the model of career maturity developed by Crites (1978).

2. Goal selection: Refers to a person's self-belief in one's ability to select future goals. Goal selection is one of the factors for the model of career maturity developed by Crites (1978).

3. Making plans for the future: Refers to a person's self-belief in one's ability to make future plans. Making plans for the future is one of the factors for the model of career maturity developed by Crites (1978).

4. Problem solving: Refers to a person's self-belief in one's ability to solve problems related to a future career. Problem solving is one of the factors for the model of career maturity developed by Crites (1978).

5. Self-appraisal: Refers to a person's self-belief in one's ability to grow socially. It's one of the factors for the model of career maturity developed by Crites (1978).

Gender: Refers to the respondents' being male or female.

Grade level: Refers to the respondents' being in grade 10-12 (Mathayom 4-6).

Public schools: Refers to secondary schools that are owned by the government and managed by persons designated by the Ministry Of Education of Thailand in The Bangkok Metropolitan area and offering education at grades 10-12 (Mathayom 4-6).

Private schools: Refers to secondary schools that are owned and managed by a private person in The Bangkok Metropolitan area and offering education at grades 10-12 (Mathayom 4-6).

School type: Refers to a private secondary school or public secondary school that offers education levels of grades 10-12 (Mathayom 4-6).



Chapter II

Review of the Related Literature

Trends

The Department of Non-Formal Education was established in the Ministry of Education on March 24, 1979. The Department was firmly upgraded from “Adult Education” which may be drawn back to the period of the late 1930’s when the government began to realize a need for other types of education with the aim to improve the literacy rate of Thai people. At that time, the literacy rate of those who were 20 years and older was 32 percent (www.moe.go.th, August 2007).

Non-formal education programs and activities provided by the Department of Non-formal Education can be categorized into three main areas: basic education, vocational education and skills training, as well as information services. Secondary education in Thailand is divided into two three-year phases and is designed to provide students with knowledge and working skills suitable for their ages, needs, interests and aptitudes. Flexibility is allowed so as to make career training relevant to local conditions and requirements. Students who have completed the lower level of secondary education and wish to continue their studies may do so at the upper secondary level or at vocational schools or other specialized institutions. The secondary curriculum was revised in 1990, with more periods for optional studies, including foreign languages and career-oriented subjects. Many thematic projects have been launched since, including projects on secondary schools for the

promotion of quality of life and society, on the development of school environment, on the promotion of entrepreneurial competencies and activities, on the establishment of school-based sports centers, and on the setting up of special science schools.

Vocational education was adapted since there is a necessity to adapt the educational system to the development and labor needs of the country. Various types of specialized courses and training programs are offered and administered by the Department of Vocational Education and the Rajamangala Institutes of Technology. There are two programs to suit the student's academic background. One is a three year Lower Certificate Courses program which entails an additional two years that become equal to a diploma level of vocational studies. Also, one can enroll in a degree course at the Rajamangala Institutes of Technology or certain vocational institutes attached to the Ministry of University Affairs. (Ministry of Education of Thailand, 2004)

According to H. E. Mr. Chaturon Chaisang, Minister of Education, Thailand, "The Year 2006 has been proclaimed as the Year of Teaching and Learning Reform in Thailand which aims to reform teaching and learning methodologies to achieve another level of quality in education. Our objectives are to possess critical thinking and problem solving skills as well as to inculcate moral, ethical, and religious values in Thai children. Key measures include revision of curricula and pedagogical methods, intensive and specific retraining of teachers on new ways of classroom management, as well as upgrading vocational educational standards which aim to

increase the number of vocational students to serve the expansion of industrial and community needs.”(Chaisang, 2006)

In many communities, transition programs are a part of major school reform. The literature taken as a whole indicates that school-to-work transition cannot be accomplished as an activity separate from the school reform movement. It is a vital component in any effective change of any educational system.

Local practices

ISB (International School of Bangkok) has developed and uses a Counseling Program for High School Students. It covers academic issues, career orientation, college placement planning, transition program, etc. ISB students are given choices to have an individual account through Naviance, a web based program for students' recording personal profile information, resume creation and many other features. My Personality Type is a survey for students to explore their personality and investigate careers that match particular personality profiles. The emphasis is for students to learn more about themselves and the process of investigating numerous options in planning their high school program and ultimately determining college majors for career preparation (www.isb.ac.th/Counseling_Program, August 2007).

The Guidance Counseling Office is part of the student services of the Ramkhamhaeng Advent International School (RAIS), whose basic function is to facilitate the students to explore their personal identities and potential abilities, as well as ensuring the emotional health and stability of all RAIS students. Their goal

is to assist students to make the most of their school years and to help them make wise decisions about the future. This is done by providing assistance to facilitate student growth and development in various aspects of living, such as educational planning, career choice, personal relationships, and living with one's self and others in the society (<http://www.rais.ac.th>, August 2007).

The RIS Guidance Program is an integral part of the Ruamrudee International School (RIS) educational program. It facilitates students' intellectual, emotional, social, and physical development. This is accomplished through individual and group counseling, evaluation of learning and emotional difficulties, and consultations between the school counselor and parents, teachers, and administrators.

Its goals are:

- a. To promote understanding of children as individuals and encourage adaptation of instructional content and teaching methods to meet their individual needs.
- b. To identify individual student's strengths and weaknesses.
- c. To help teachers evaluate the important role they play in children's lives.
- d. To assist in implementing the principles of educational psychology, child development, learning theory, and counseling in the classroom.
- e. To help children in the development of self-understanding and appropriate interpersonal relationship skills.
- f. To guide children in the development of problem-solving and decision-making skills.

- g. To coordinate the school's efforts with those of the home by working with parents individually and in groups.
- h. To help students explore future educational and career paths that match students' values, strengths, and interests (<http://www1.rism.ac.th>, August 2007).

By addressing career issues, we might need to pay attention to students' career awareness which is an important ingredient to their career maturity and ability to make the right choice in the future. Adolescents, if exposed to a self-evaluation career test, will have a better understanding of their own career readiness through self-evaluation. They will learn what the society expects them to perform or be able to do. Continuous self-evaluations will trigger students' learning and improve their decision –making skills.

Realistic Focus

The third component of career training projects requires some new techniques for teaching/learning. Many studies found that career training students perform better than similar students in the same high schools. An evaluation of the first two career academies in California (USA) in the early 1980s found that their students in grades ten through twelve had better attendance, earned more credits, received higher grades, and were more likely to graduate than the other groups (Reller, 1984). From 1985 through 1988, a similar evaluation of the ten career academies in California showed even more significant advantages of career academies (Dayton and Stern, 1989).

There are many benefits to students from having this kind of realistic focus. Since learning takes place in an authentic context, students learn and evaluate their skills and knowledge. They also learn many skills associated with team work and client interaction. Doing authentic projects provides a higher level of satisfaction to students than working on artificial problems since they can see the impact of their work on people and organizations. Finally, the results of their efforts may bring them professional recognition or awards which are much more motivating than just grades (Kearsley & Shneiderman, 1999).

With an attempt to learn more about students' career awareness, focus groups were devised. The purpose of these groups was to find how students make career decisions in high school, what is helpful in making a career decision, and what would improve the career-counseling program in high school.

Career Maturity Constructs

Socially speaking, the high school is a transition path from childhood into adulthood, and within the independence and self-acknowledgment, pupils start to perceive themselves as independent human beings. Therefore, a persistent educational guidance what one experiences in elementary school, in high school will find it coming to a halt with a great velocity. Globalized society expects high school graduates to possess soft skills and international values that are poorly prioritized in school curricula. These can be used in almost any career and can include teamwork, problem solving, communication, leadership, and interpersonal skills. Any

organization will also expect that entrants come to the job with motivation, initiative, positive attitude, ethics, and analytical qualities (Denham, 2007). Some schools, e.g. ISB School of Illinois, USA, have developed competency keys for career development characterized by three areas/domains (www.isbe.net/career, August 2007). High school students are supposed to:

- Have competencies in self-knowledge
- Have competencies in educational and occupational exploration
- Have competencies in career planning

It resembles a more stratified Crites' (Crites, 1961) model for postulating Career Maturity. Crites outlined five dimensions of career decision making as goal selection, career exploration, problem-solving capabilities, planning skills, and realistic self-appraisal skills.

Role of Self-Efficacy in Career Development

Krumboltz, Mitchell, and Jones (1976) social learning theory of career development incorporates Bandura's (1977) theory of social learning into career development. The theory was designed to focus on the learning process that leads to the beliefs such as self-efficacy beliefs and interests and how these contribute to the career decision-making process (Isaacson & Brown, 2000).

Mitchell and Krumboltz (1996) identified four factors that influence career decision making. First is the influence of inherited characteristics such as race, gender, intelligence and coordination. These abilities may set limits on an

individual's career opportunities (Isaacson & Brown, 2000; Mitchell & Krumboltz, 1996; Zunker, 2002). The second set of factors is environmental conditions and events that the individual can't control. Events such as a hurricane or changes in major government policies can affect one's career-related activities and preferences. The next source of factors is derived from the individual's learning experiences.

Mitchell & Krumboltz (1996) observed two different types of learning experiences, instrumental learning and associative learning. Instrumental learning experiences "occur when an individual is positively reinforced or punished for the exercise of some behavior and its associated cognitive skills" (Mitchell & Krumboltz, 1996). Associative learning experiences "include negative and positive reactions to pairs of previously neutral situations" (Zunker, 2002). Associative learning experiences occur through observations, written materials, and visual media.

The final source of factors that influence career decision-making is task-approach skills. Task-approach skills are those skills that the individual has developed as a result of "learning experiences, genetic characteristics, special abilities and environmental influences" (Mitchell & Krumboltz, 1996). Krumboltz indicated that an individual is continually and constantly encountering learning experiences. Rewards or punishments that in turn produce unique qualities in an individual follow these experiences (Isaacson & Brown, 2000).

Bandura (1977, 1986) proposed a model of social learning theory. Self-efficacy, as a main attribute of the theory, is defined as the cognitive structure of

cumulative learning experiences. Self-efficacy is evident in society's everyday lives through a person's fears and needs. While avoiding threatening situations, he or she believes his or her coping skills have been exceeded (Bandura, 1977). Rather than being in an unsafe position, people will generally choose to get involved in activities and behave confidently when they judge themselves. Bandura described the dimensions and major sources of information that drive the expectations of personal efficacy.

Lent, Brown and Hackett (1995, 1996, 2002) developed a perspective on career development that is called social cognitive career theory (SCCT). "This perspective is intended to complement or build conceptual linkages with other theories of career development" (Lent, Brown & Hackett, 1996). SCCT includes those aspects of Bandura's (1986) general social cognitive theory that have proven "to be most relevant to the process of interest information, career selection and performance" (Lent, Brown & Hackett, 1996). This theory is based on three social cognitive mechanisms. These mechanisms are self-efficacy beliefs, outcome expectations, and goal representations (Lent, Brown & Hackett, 1995) (Figure 2).

In SCCT, self-efficacy beliefs are not considered to be a passive or fixed variable but a continually evolving set of beliefs that adjusts to the current performance domain (Lent, Brown & Hackett, 1995, 1996, 2002; Zunker, 2002). "Outcome expectations are also regarded as personal beliefs about expectations or consequences of behavioral activities" (Zunker, 2002). SCCT also includes the concept of goals because they can be considered as a way to sustain behavior to

increase the chance that a desired outcome may be achieved (Lent, Brown & Hackett, 1995; Zunker, 2002).

Self-efficacy, outcome expectations, and personal goals are considered the “big three building blocks within the triadic causal system that can determine the course of career development and its outcome” (Zunker, 2002).

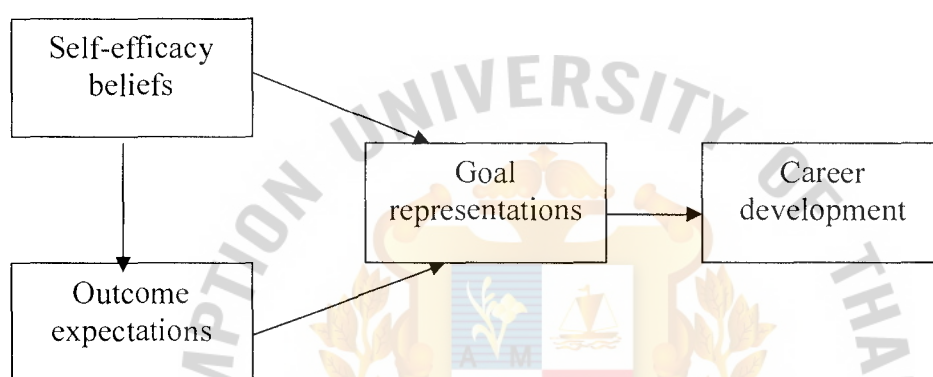


Figure 2. SCCT Framework

From all the variables involved in this career decision-making model, one named “decision-making self-efficacy” (Taylor and Betz, 1983) has been the most widely researched since Taylor and Betz developed a Career Decision Making Self Efficacy Scale to measure self-efficacy beliefs that apply to career decision making tasks and behaviors. The scale items were picked from Crites’ model of career maturity and career decision making. Betz and Taylor suggested that low career decision self-efficacy could negatively influence an individual’s career exploratory behavior and the development of career decision skills.

Career Decision Making Self-Efficacy

Shortly after being criticized as too “heavy loaded”, CDMSES was followed by its Short Form (CDMSES-SF) that has been developed and reorganized and rewritten several times during a short period of time without a significant change of the method (Betz et al., 1996). CDMSES consist of critically important indicators that can identify career development factors for middle school students, whose interests are beginning to form and who are making choices that will have strong influences on later decisions (Fouad A & Smith L., 1996). Future research on efficacy-based interventions with at risk students, particularly in Math and Science, whose career interests are innate and more likely to be developed using self-efficacy interventions (Hackett, 1995). Gender was often included into assessment because of extensive evidence of gender differences documented in the literature (Hackett, 1995). Relative to age, self-efficacy beliefs have been found to grow when the children grow older. Bandura (1997) noted that low self-efficacy is related to antisocial behavior and aggression that can be traced later in high school years and are mostly responsible for school dropouts.

As far as construct validity of the CDMSES is concerned, consistent reporting of the relationships between respondents' age, academic success, and gender are lacking in the literature. The latest research conducted with Chinese high school students revealed that gender was unrelated to career decision self-efficacy (Hampton, 2006) although a few studies (Betz & Taylor, 1983) have shown the absence of sex differences in CDM self-efficacy. First identified and studied by

Taylor and Betz (1983) and then later supported by Taylor & Popma (1990), results revealed a lack of sex differences in CDM self-efficacy. However, Bright (1996) included gender as a potentially influential variable on the CDMSE of undergraduate students. Differences between genders are obviously significant in self-efficacy for traditionally male and female occupations (Betz & Hackett, 1981). Women choose a more traditionally female career because of the perceived difficulty in combining a nontraditionally female career with the responsibilities of home and family (Stickel & Bonett, 1991).

An empirical research study has been conducted to investigate career awareness among adolescents with a permanent hearing loss in Australia (Punch, 2005). The short form of the CDMSES was used successfully signifying the key factors that influence the career development of that population. The sample group was taken among year 10, 11 and 12 classes in the Australian states of Queensland and New South Wales.

A study on cross-cultural equivalence of the Career Decision-Making Self-Efficacy Scale -- Short Form among Australian and South African high school students proves that the CDMSES-SF does not assume cultural equivalence and despite the subscale reliabilities (Creed, 2003). The study was able to confirm that the CDMSES-SF has high internal reliability when used with high school age students across two national samples. The internal reliabilities using the full 25 items were both higher than .90. The results of exploratory factor analyses indicated that the CDMSES-SF cannot be utilized as a multifactor scale, relying on the results

from Australian and South African high school students, although this last recommendation needs to be tested across other cultures (Creed, 1999).

Lent et al. (1994) proposed a hypothesis that gender and race differences arise largely through unequal access to opportunities, supports, and socialization processes. In another study of Creed (2003), three hundred and sixty-seven secondary school students from year levels 8–12 using CDMSES-SF, it was found that age, gender, career decidedness (certainty), work commitment and career decidedness (indecision) were the main predictors of career maturity knowledge (Creed & Patton, 2003).

Most research has shown that use of multiple regression analysis did not find that gender was a significant predictor of CDMSE. There is a need to further examine relationships between CDMSES scores and other variables related to career development such as age and gender. As many items in the CDMSES had high loading on several factors (Taylor & Betz, 1983) the authors later developed a short form of the CDMSES (CDMSES-SF), which contained 25 items that were taken from the original CDMSES.

Age and Career Decision Making

Luzzo (1993) evaluated 233 undergraduate students who participated in a study that proposed to determine the value of CDMSE in predicting the career decision-making self-efficacy of undergraduate college students. This study indicated that there is a significant, positive relationship between CDMSE and age

($M = 24.74$, $SD = 7.29$). This finding indicates that self-efficacy expectations may increase somewhat with age. In a study of the effect of various background characteristics on 418 college students, Peterson (1993) reviewed the age variable. This study categorized age as follows: 18; 19-20; 21- 23; 24-30, and; 31-48. There were significant differences in CDMSE based on age. This study showed that students 31 to 48 years old had a higher level of CDMSE than students who were 19 to 23 years old. Those students who were 24 to 30 years old had a higher perception of CDMSE than students 19 to 20 years old.

Gender and Career Decision Making

Betz and Hackett (1981) studied the differences between genders and suggested that a woman will have different career behaviors than men because a woman typically lacks the strong expectations of personal efficacy for many career-related barriers. This results in women failing to fully realize their capabilities and talents in career pursuits. Differences between gender in self-efficacy for traditionally male and female occupations are more apparent (Betz & Hackett, 1981). Women choose a more traditionally female career because of the perceived difficulty in combining a nontraditional female career with the responsibilities of home and family. Gender was also an important predictor in Creed's work, and evidence that young women are better informed in relation to career related knowledge (Creed and Patton, 2003).

Bright (1996) studied gender differences of the CDMSE of undergraduate students. The use of multiple regression analysis did not find that gender was a significant predictor of CDMSE. Male and female college students (Taylor & Betz, 1983) generally reported equivalently strong career decision-making self-efficacy expectations. No sex differences on either the subscales or the total CDSE score were evident for students attending a private liberal arts college. Among students attending a large state university, females reported greater self-efficacy with regard to Goal Setting and Planning tasks, but their total CDSE score was not significantly greater than that of males. Also Hampton in his study of CDESES-SF among Chinese High School Students found that gender was unrelated to career decision self-efficacy (Hampton, 2006). Thus, the data suggested a lack of sex differences in self-efficacy expectations with regard to career decision-making tasks.

School Type and Career Decision Making

Based on case studies that compare private and public secondary education in Thailand, private school students generally outperform public school students on standardized math and language tests. Mostly it's because private school students in countries like Thailand come from more advantaged backgrounds than their public school counterparts (Jimenez, 2005). Analysis of the relative performance of public and private schools in Thailand shows that private schools are, on average, more effective and less costly than public schools in improving student performance in mathematics.

Certain public secondary schools in Thailand have an entrance examination and offer a greater number of academic subjects than their private counterparts. Therefore, in those public schools, student academic performance is more likely to be higher than in the private schools. Peterson's (1993) study on the career decision-making self-efficacy of unprepared college students indicated that those students who had obtained higher grade point averages (3.50 – 4.0) had higher scores on CDMSE than those who had lower grade point averages (1.00 – 2.99).

With The Right Assessment

Recent review of the prior literature shows a great concern in regard career training and its development domain. Among many of theorists working in this area, Bandura has been a major theorist in terms of investigation and theory application (Fouad and Smith, 1996).

Fouad, Smith, and Enochs (1997) adapted the CDMSES for use with middle school students. Twelve items were selected without a change of its conceptual meaning to be understandable to students in 7th and 8th grades and ranging in age from 12 to 15. The test had an authentic focus on math and science and assessed math-science self-efficacy, math-science outcome expectancies and math-science intentions. Cross-cultural equivalence has to be considered when researchers examine the decision-making self-efficacy outside of the US. Lonner (1981) stated four types of cultural equivalence: being functional, conceptual, psychometric, and linguistic. While the US studies found three factors for each of the two national

samples, the factors for the Australian sample did not approximate those for the South African sample in cross-cultural research conducted by Creed (1999).

Therefore, Fouad's self-efficacy scale was written and adapted with the cooperation of middle school teachers (Fouad and Smith, 1996). Data analysis found the lack of a significant relationship between age and gender variables and self-efficacy.

Although this could have resulted from the students' low socioeconomic status, the path from gender to self-efficacy is through the learning experiences and the low socioeconomic status of the group that was tested maybe provided them with fewer learning experiences (Fouad and Smith, 1996).

Results of self-efficacy interventions indicated that the CDMSE scores of students who received an intervention increased after a time period compared to CDMSE scores of students who did not receive an appropriate intervention and remained relatively stable. Luzzo and Day (1999) evaluated the effects of Strong Interest Inventory feedback on career decision-making self-efficacy and found that the group that received the CDMSE treatment has shown significantly greater CDSE-SF scores on the post-test in comparison to the other groups.

Summary

One of the primary concerns of the Thai educational system is upgrading vocational educational standards in order to increase the number of vocational students to serve the expansion of industrial and community needs. It's more evident that career development starts from primary school and continues through life.

Career orientation is one of the answers to the societal workforce needs. Career-trained students tend to perform better than similar students in the same high schools. Even though high school students provided with instrumental learning experiences and positively reinforced or punished for the exercise of certain career related behavior, it's often created a lot of pressure and made students unmotivated.

Career training is costly and difficult to implement in every secondary institution but there exist other ways to prepare the students for the world that awaits them after the school. One of the tools that help students increase career awareness is to build on a self-efficacy basis, and along with evaluation of students state of career awareness, helps them to understand the societal expectations and trends in career choice development.

Some of the factors that influence career decision making are predefined and constant as to the function of their conceptual meaning. Even nowadays in the world of mixed races and constant issues regarding gender equality, many studies try to measure diminishing differences that still exist in a society. Therefore, some of the factors such as race and gender are theoretically supported and closely studied. These abilities still set limits on an individual's career opportunities.

The SCCT theory of Lent, Brown & Hackett is based on cognitive factors as self-efficacy beliefs, outcome expectations, and goal representations. In, self-efficacy beliefs are continually evolving and adjust to the current performance domain. Taylor and Betz developed a Career Decision Making Self Efficacy Scale to measure self-efficacy beliefs that support Bandura's theory and were constructed

according to Crites' model of career maturity and career decision making. Since the CDMSE scale was constructed for college students, Fouad, Smith, and Enochs selected twelve items from the original CDMSES for use with middle school students. Studies show that CDMSE tests improve students' self-believes and therefore should be studied further within different groups and environments.



Chapter III

Research Design and Methodology

This chapter contains the methodology of this research that determines a relationship between career decision self-efficacy and gender and grade level for high school students from public and private schools. Descriptive statistics and comparison analysis by a three-way ANOVA was used to answer the research questions.

Population

The target group for this research was all high school students of grade 10 (mathayom 4), grade 11 (mathayom 5) and grade 12 (mathayom 6). The population for this research was 154,325 students in government and private schools in Bangkok Metropolitan Area (www.onec.go.th/english, March 2008). Only schools with upper secondary education were considered for the sample. One of them was used as a “try-out”. Ramkhamheng International School that represents public education was used as a try-out school. The results of the test had shown consistent reliabilities in the range of .72-.76 for the 12 items of the CDMSE scale.

Sample

The sample was randomly chosen by two separate draws. First, through a district draw Wanthonglang district was selected among 50 Bangkok districts. The

population in Wanthonglang district was 3,782 students in government and 988 students in private schools. Then, one public and one private school were drawn from all 28 high schools in the district. The entire population of the 10th, 11th and 12th grades of Udomsuksa School and Boadendecha School were included in the survey. The student survey was distributed in the summer of 2008 to 750 students in grades 10-12 of Bodendecha and Udomsuksa schools. The schools' administration, teachers and students were very cooperative in this survey. Only 28 students fail to correctly complete the test and so their results were excluded from the survey.

Instrumentation

The student survey instrument was distributed by groups comprised of teachers of the host schools. The groups included teachers that were in charge of the surveyed classes. The role of the teacher groups was to explain the research goals and objectives of the student survey.

The CDMSES was translated into Thai language by a translation bureau ABC Co. and back translated into English by Ms. Ruja Sukput, an English teacher from Ratchapat University, Nakhonprathom (Brislin, 1980). The back-translated English version was compared with the original version for meaning accuracy by a native English speaker who is a graduate student in Educational Administration. A demographic sheet was developed in Thai language. It contains the participants' age, gender and grade.

The items constructed for the student questionnaire measured students' career decision self-efficacy and was used with middle and high school students. The validity of the survey scale was proved as reported by Fouad et al. (1996); a value of coefficient alpha was 0.79. The survey was pilot tested on public school students from Ramkhamheng Demonstration School. The first section of the student questionnaire was to collect the demographic information, i.e. grade and gender.

The second section included The Career Decision Making Self-Efficacy-12 item (CDMSE) scale that measures the level to which an individual believes he or she can successfully complete tasks that are necessary in making career decisions (Fouad and Smith, 1996). Participants were asked to respond to statements on a 5-point Likert-type scale ranging from strongly disagree to strongly agree, where higher scores correspond with higher levels of career decision self-efficacy as continuous data. The instrument includes the header, "Indicate the degree to which you agree or disagree that you could do each statement below".

The twelve items represent five CDMSE factors as follows: self-appraisal – items 4,5,10; gathering occupational information – items 1,11,12; goal selection – 3,9; making plans for the future – 2,7; problem solving – 6,8.

Altogether, there were two pages in the survey. The participants were given a half an hour time to complete the survey. An additional fifteen minutes were spent for the introduction and interpretation of the terms. The completed questionnaires were collected the same day after the end of the 50 minute period.

Data analysis

To describe the sample's demographic traits, was conducted a comparison analysis by gender. Grade level was classified into three groups, grades 10, 11 and 12. Differences in age were not considered.

In this study to determine CDMSE, the following interval scale (Betz, 2003) was used as a guide for the interpretation of the responses to coincide with the five response categories provided by the CDMSE 12 item scale:

1.00 – 1.50 Strongly Disagree

1.51 – 2.50 Disagree

2.51 – 3.50 Neither Agree Nor Disagree

3.51 – 4.50 Agree

4.51 – 5.00 Strongly Agree

The results were compared and described using their means and standard deviations. An analysis of variance ANOVA was conducted to assess the relationship and analyze differences between type of school, gender, and grade with student-reported career decision making self-efficacy. The main purpose of using the three-way ANOVA in this study was to find significant differences in interaction between school type, gender and grade related to students' CDMSE. The three-way ANOVA is based on the means at each level of one of the factors, averaging across the other two.

Chapter IV

Presentation, Analysis and Interpretation of Data

The data in this research had been collected from 722 respondents from three upper high school grades in one private and one public school in Bangkok Metropolitan Area. The researcher used validated questionnaires on the respondents' demographic profiles and translated version of Fouad's Career Making Self-Efficacy 12 item scale that had previously been adapted for high school students.

Data analysis of the findings is represented in the following manner:

1. Demographical characteristics of samples under study.
2. Descriptive data analysis used to identify and analyze the Career Decision Making Self-Efficacy in the sampled private and public schools.
3. Relationship data analysis used to analyze the Career Decision Making Self-Efficacy.

1) Demographical characteristics of sample under study.

The structure of demographical characteristics included respondents' gender, grade and school type. From the sample drawn, the demographical profiles of the respondents are as shown in Table1. Public school had more respondents due to the number of students enrolled. In total there were 311 respondents from the private school, with 132 males and 179 females. From the public school there were 411 respondents among whom 204 were male and 207 were female. Altogether there

were 336 male and 386 female respondents. Data indicated that majority of the respondents were female at 54% and 46% were male.

Table 1. Demographic Profiles of the Respondents

Groups	Private school		Public school	
	Male	Female	Male	Female
Grade 10	54	71	74	78
Grade 11	38	50	65	64
Grade12	40	58	65	65
Total school Male/female	132	179	204	207
Total School private/public	311		411	
Total	722			

2) Descriptive data analysis used to identify and analyze the Career Decision Making Self-Efficacy in the sampled private and public schools.

Means and standard deviations were calculated for CDMSE scale and its subscales: Self-Appraisal; Gathering Occupational Information; Goal Selection; Making Plans for Future; and Problem Solving. Tables 2-4 represent means and standard deviations distributed by School Type, Gender and Grade accordingly.

Problem Solving factor was found to be the lowest (neither agree nor disagree) and public school showed the lowest Problem Solving mean of 3.184. The strongest factor was Goal Selection with its highest mean in Grade 11. Further analysis was required in order to find relationship between School Type, Gender and Grade level.

The analysis showed that in the private school the respondents had greater self-beliefs in making decisions towards future careers (Table 2.). Mean CDMSE of private school respondents was 46.66 when public school reported 46.40. The main input to the greater CDMSE was from Self-Appraisal and Problem Solving. In Private school students tended to have Self-Appraisal beliefs mean of 4.085 whether public school reported 3.985. Problem Solving mean in the private school was 3.365 against public school’s 3.184 with the highest standard deviation (0.71).

Table 2. Private and Public Schools’ Subscale Means for CDMSE

School type		Self-Appraisal	Gathering Occupational Information	Goal Selection	Making Plans for the Future	Problem Solving	CDMSE
Private	Mean	4.085	3.688	4.222	4.085	3.365	46.66
	N	311	311	311	311	311	311
	Std. Deviation	.6287	.6411	.6135	.5861	.7369	5.236
Public	Mean	3.985	3.753	4.328	4.080	3.184	46.40
	N	411	411	411	411	411	411
	Std. Deviation	.6020	.5970	.5514	.5975	.6859	5.047
Total	Mean	4.028	3.725	4.283	4.082	3.262	46.51
	N	722	722	722	722	722	722
	Std. Deviation	.6152	.6168	.5810	.5922	.7135	5.127

Factors like Gathering Occupational Information, Goal Selection, and Making Plans for the Future were reported higher in the public than in the private school. Gender showed a greater difference in CDMSE (Table 3.). Male respondents had CDMSE mean of 46.29 when female respondents showed 46.71 that contradicted the majority of the findings that studied gender (Betz, 2006). Self-

Appraisal, Gathering Occupational Information, Goal Selection, and Making Plans for the Future were greater for female respondents.

Table 3. Male and Female Subscale Means for CDMSE

Gender		Self-Appraisal	Gathering Occupational Information	Goal Selection	Making Plans for the Future	Problem Solving	CDMSE
Male	Mean	4.017	3.688	4.249	4.079	3.262	46.29
	N	336	336	336	336	336	336
	Std. Deviation	.5991	.6586	.6348	.5889	.7227	5.262
Female	Mean	4.038	3.758	4.312	4.085	3.262	46.71
	N	386	386	386	386	386	386
	Std. Deviation	.6295	.5768	.5287	.5958	.7063	5.005
Total	Mean	4.028	3.725	4.283	4.082	3.262	46.51
	N	722	722	722	722	722	722
	Std. Deviation	.6152	.6168	.5810	.5922	.7135	5.127

CDMSE reported to be greater in higher grades (Table 4). Grade 12 had greater CDMSE mean (46.61) than Grade 11(46.56) and Grade 11 had greater mean than Grade 10 (46.40). This confirms previous findings that with age students acquire stronger beliefs in career decision making (Bandura, 1977).

Self-Appraisal mean was greater in Grade 12 (4.054) than Grade 11 (4.020) than Grade 10 (4.013). Gathering Occupational Information mean was greater in Grade 12 (3.770) than Grade 10 (3.740) than Grade 11 (3.659). Goal Selection mean was contradictory greater in Grade 11 (4.346) than Grade 12 (4.281) than Grade 10(4.235). Problem Solving mean was greater in Grade 11 (3.297) than Grade 12(3.296) than Grade10 (3.206) reporting the respondents as being uncertain (below 3.510) in problem solving beliefs. Making Plans for the Future mean was reversed

and seemed to drop with higher grade and showed grade 10 (4.132) greater than Grade 11 (4.118) than Grade 12 (3.989).

Even though Making Plans for the Future had a negative effect on CDMSE mean report for Grade level, CDMSE was greater in higher than in lower grades.

Table 4. Grade 10, 11 and 12 Subscale Means for CDMSE

Grade		Self-Appraisal	Gathering Occupational Information	Goal Selection	Making Plans for the Future	Problem Solving	CDMSE
10	Mean	4.013	3.740	4.235	4.132	3.206	46.40
	N	277	277	277	277	277	277
	Std. Deviation	.5872	.5883	.5905	.5693	.6249	4.871
11	Mean	4.020	3.659	4.346	4.118	3.297	46.56
	N	217	217	217	217	217	217
	Std. Deviation	.6204	.6530	.5655	.5863	.7471	5.088
12	Mean	4.054	3.770	4.281	3.989	3.296	46.61
	N	228	228	228	228	228	228
	Std. Deviation	.6446	.6127	.5807	.6163	.7776	5.476
Total	Mean	4.028	3.725	4.283	4.082	3.262	46.51
	N	722	722	722	722	722	722
	Std. Deviation	.6152	.6168	.5810	.5922	.7135	5.127

3) Relationship data analysis used to analyze the Career Decision Making Self-Efficacy.

Objective 1,2,3. Data analysis used to analyze the relationship in Career Decision Making Self-Efficacy between School Type, Gender and Grade.

To investigate the relationship between School Type and Gender in Career Decision Making Self-Efficacy analysis of variance ANOVA was used. It examined whether CDMSE of the School Type was the same at every level of Gender and vice

versa, averaging over levels of Grade Level. The Main Effects showed no significance for CDMSE (Table 5).

Table 5. Three-way ANOVA Main Effects

Measure Main Effect	df	Mean Square	F	Sig.
School Type	1	11.003	.424	.515
Self-Appraisal	1	1.532	4.097	.043
Gathering Occupational Information	1	.624	1.669	.197
Goal Selection	1	2.363	7.286	.007
Making Plans for the Future	1	.001	.003	.959
Problem Solving	1	6.220	12.489	.000
Gender	1	40.350	1.556	.213
Self-Appraisal	1	.204	.546	.460
Gathering Occupational Information	1	.949	2.538	.112
Goal Selection	1	1.522	4.694	.031
Making Plans for the Future	1	.005	.013	.909
Problem Solving	1	.070	.140	.709
Grade	2	9.830	.379	.685
Self-Appraisal	2	.184	.492	.612
Gathering Occupational Information	2	1.048	2.803	.061
Goal Selection	2	.757	2.335	.098
Making Plans for the Future	2	1.192	3.438	.033
Problem Solving	2	1.035	2.079	.126

The comparison of marginal means for School Type over levels of Gender and Grade $F(1,710)=0.424$, $p=0.51$, for Gender over School Type and Grade $F(1,710)=1.556$, $p=0.21$ and for Grade over School Type and Gender $F(2,710)=0.379$, $p=0.685$. For the subscale some factors were significant on a few levels.

The Self-Appraisal found significant relationship only in the School Type $F(1,710)=4.097$, $p<0.05$. The Gathering Occupational Information was not significant. The Goal Selection was found significant in the School Type

$F(1,710)=7.286$, $p<0.01$ and Gender $F(1,710)=4.694$, $p<0.05$. The Making Goals for the Future was found significant in the Grade $F(2,710)=3.438$, $p<0.05$. The Problem Solving was found very significant in the School Type $F(1,710)=12.489$, $p=0.000$. The results on two-way interaction showed a significant relationship with $F(1,710)=3.945$, $p<0.05$ in School Type* Grade two-way interaction (Table 6.) This fact supported the objective 1. Significant subscale factors were Self-Appraisal ($F=7.106$, $p<0.01$) and Goal Selection ($F=14.423$, $p=0.00$). The school Type* Grade showed significance in two-way interaction as well ($F=5.926$, $p<0.01$).

Table 6. Three-way ANOVA Interactions

Interaction \ Measure	df	Mean Square	F	Sig.
School Type* Gender	1	102.308	3.945	.047
Self-Appraisal	1	2.656	7.106	.008
Gathering Occupational Information	1	.005	.014	.907
Goal Selection	1	4.677	14.423	.000
Making Plans for the Future	1	.192	.553	.457
Problem Solving	1	.014	.029	.866
School Type* Grade	2	153.688	5.926	0.003
Self-Appraisal	2	1.040	2.782	.063
Gathering Occupational Information	2	2.158	5.773	.003
Goal Selection	2	.707	2.180	.114
Making Plans for the Future	2	.744	2.145	.118
Problem Solving	2	.718	1.442	.237
Gender * Grade	2	4.200	.162	.851
Self-Appraisal	2	.172	.460	.631
Gathering Occupational Information	2	.721	1.929	.146
Goal Selection	2	.149	.460	.632
Making Plans for the Future	2	.366	1.054	.349
Problem Solving	2	1.269	2.548	.079
School Type * Gender * Grade	2	26.475	1.021	.361
Self-Appraisal	2	.046	.122	.885
Gathering Occupational Information	2	.053	.141	.868
Goal Selection	2	.873	2.692	.068
Making Plans for the Future	2	.581	1.676	.188
Problem Solving	2	1.200	2.410	.091

This Fact supported the objective 3. Only Gathering Occupational Information was found significant in subscale for School Type* Grade two-way interaction ($F=5.773$, $p<0.01$). The Gender and Grade two-way interaction was found to be not significant in proceeding three-way ANOVA analysis (objective 2). Also this analysis has shown no significance in three-way interaction between the School Type, Gender and Grade level. As a follow up test for three-way ANOVA in this study was chosen a two-way ANOVA (Table 7-8.)

Table 7. Two-way ANOVA interaction between School Type and Gender

Measure				
Interaction	df	Mean Square	F	Sig.
School Type	1	4.245	.162	.687
Self-Appraisal	1	1.317	3.524	.061
Gathering Occupational Information	1	.861	2.267	.133
Goal Selection	1	2.843	8.684	.003
Making Plans for the Future	1	5.91E-005	.000	.990
Problem Solving	1	5.658	11.251	.001
Gender	1	48.376	1.849	.174
Self-Appraisal	1	.193	.515	.473
Gathering Occupational Information	1	.975	2.569	.109
Goal Selection	1	1.675	5.115	.024
Making Plans for the Future	1	.028	.081	.776
Problem Solving	1	.016	.031	.860
School type * Gender	1	125.749	4.806	.029
Self-Appraisal	1	2.821	7.551	.006
Gathering Occupational Information	1	.008	.021	.885
Goal Selection	1	5.393	16.474	.000
Making Plans for the Future	1	.325	.925	.337
Problem Solving	1	.108	.215	.643

As two of the three dependent variables are dichotomous (2x2x3) and Grade Level didn't show significance in Main Effects interaction it was reasonable to

perform two-way ANOVA and closer study the significance of the interactions School Type* Gender and School Type* Grade. The two-way ANOVA for School Type and Gender showed significance in interaction with $F=4.806$, $p<0.05$ (Table 7), when Main Effects were found insignificant as in the three-way analysis (School Type $F=0.162$, $p=0.69$; Gender $F=1.849$, $p=0.17$). The subscales that had been found significant in School Type* Gender two-way multivariate interaction were Self-Appraisal ($F=7.551$, $p<0.01$) and Goal Selection ($F=16.474$, $p<0.001$). The two-way ANOVA showed that interaction between School Type and Grade were significant at $F=5.975$, $p<0.01$ (Table 8).

Table 8. Two-way ANOVA interaction between School Type and Grade

Interaction \ Measure	df	Mean Square	F	Sig.
School Type	1	21.793	.838	.360
Self-Appraisal	1	2.013	5.365	.021
Gathering Occupational Information	1	.552	1.474	.225
Goal Selection	1	1.652	4.957	.026
Making Plans for the Future	1	.006	.019	.892
Problem Solving	1	6.376	12.749	.000
Grade	2	9.828	.378	.685
Self-Appraisal	2	.228	.609	.544
Gathering Occupational Information	2	.911	2.436	.088
Goal Selection	2	.706	2.117	.121
Making Plans for the Future	2	1.158	3.340	.036
Problem Solving	2	.935	1.869	.155
School type * Grade	2	155.408	5.975	.003
Self-Appraisal	2	1.118	2.979	.051
Gathering Occupational Information	2	2.073	5.540	.004
Goal Selection	2	.660	1.979	.139
Making Plans for the Future	2	.826	2.383	.093
Problem Solving	2	.764	1.527	.218

There was only Gathering Occupational Information subscale item found significant in two-way subscale multivariate interaction ($F=5.540$, $p<0.01$).

Chapter V

Findings, Conclusion, Discussion, and Recommendations

Introduction

The purposes of this study were: (1) to determine and evaluate differences in high school students' career decision-making self-efficacy by school type and gender University; (2) to determine and evaluate differences in high school students' career decision-making self-efficacy by grade level and gender; (3) to determine and evaluate differences in high school students' decision-making self-efficacy by school type and grade level. The study included those high school students that enrolled in private and public education in grade 10-12 summer 2008 1st semester at Udomsuksa private school and Bodindecha public school in Bangkok.

This research study examined the career decision-making self-efficacy among high school students in private and public schools. The Career Decision Making Self-Efficacy – 12 item test (CDMSE-12) was distributed to high school students during the summer 1st semester of 2008. A total of 750 surveys were returned to the investigator. Twenty-eight surveys were excluded because the participants didn't complete the test or made uncorrectable mistakes. Therefore this study includes 722 participants that yielded a response rate of 93.02%. The reliability analysis of this study provided a Cronbach Coefficient Alpha for the subscale as 0.70.

Findings

The following were the findings of the study based on the data collected from 722 respondents from the sampled private and public secondary that answered to research hypotheses:

1. There is a significant relationship between school type and gender in career decision-making self-efficacy of high school students.
2. There is a significant relationship between grade level and gender in career decision-making self-efficacy of high school students.
3. There is a significant relationship between school type and grade level in career decision-making self-efficacy of high school students.

There was found a significant relationship ($F=4.806$, $p<0.05$) between differences in private and public schools and differences in gender results on Career Decision Making Self-Efficacy.

There was found no significant relationship between differences in grade level and differences in gender results on Career Decision Making Self-Efficacy.

There was found a significant relationship ($F=5.773$, $p<0.01$) between differences in private and public schools and differences in grade level results on Career Decision Making Self-Efficacy.

Conclusion

Looking at Career Decision Making Self-Efficacy, there are five important factors-qualities that contribute to the process of effective career decision making

(Crites, 1978). Accurate self-appraisal, gathering occupational information, goal selection, making plans for the future, and problem solving are currently one of the important pillars of the right career decision making that will benefit as individuals as societies. Lets discuss these factors and how our respondents' School Type, Gender, and Grade level differ considering above factors.

Self-Appraisal

The Self-Appraisal factor fell into 3.51-4.50 category with the average above 4. It means that all the respondents on average had agreed with believing themselves being able of actions of their own interest and improvement. This factor was found different for School Type variable and indicated that private school respondents had a significantly higher Self-Appraisal than their counterparts from public school. The differences in Self-Appraisal of Gender and Grade level were found no significance.

Gathering Occupational Information

The Self-Appraisal factor fell into 3.51-4.50 category with average below 4. All the respondents on average had agreed with believing themselves being able of actions towards finding more information on occupations they are interested in. This factor was found having no significant differences in School Type, Gender and Grade levels.

Goal Selection

Goal Selection factor as well fell into 3.51-4.50 category with the average above 4. All the respondents on average had agreed with believing themselves being able of actions towards goal setting. This factor was found different for School Type and Gender variables. It indicated that the public school respondents had significantly higher Goal Selection beliefs than the respondents from the private school as well the female respondents had higher scores than the male respondents. The interaction of these two variables yielded even higher significance confirming that there is a strong relationship between School Type and Gender in Goal Selection. Grade level differences in Goal Selection were found no significance.

Making Plans for the Future

Making Plans for the Future factor fell into 3.51-4.50 category with the average above 4. All the respondents on average had agreed with believing themselves being able of actions towards making future plans. This factor was found different for Grade level variable and indicated that the respondents from the lower grades had higher beliefs in planning for their future than the respondents from the higher grades. This factor found no significance with the School Type and Gender.

Problem Solving

Problem Solving factor fell into 2.51-3.50 category. All the respondents on average had neither agreed nor disagreed with believing themselves being able of

solving problems related to career development. This factor was found highly significant for School Type variable and indicated that the private school respondents had significantly higher beliefs in themselves solving problems related to career decision making than the respondents from the public school. Problem Solving had no significance for Gender and Grade level variables.

Discussions

It is valuable to see career decision making the way the current researchers and psychologist do, observing the important trends and qualities that contribute to make successful decisions that would probably strongly affect the lives of individuals. The career related qualities, abilities and attitudes are at the front line of the human behavior. In the age of information mind explores greater experiences than ever before making self-beliefs of an utmost value (Kearsley & Shneiderman, 1999). We don't need to wait long until certain knowledge or skill will be available to us.

Based on the high school students subscale mean scores on the CDMSE-12 items, the students in this study possess a favorable level of CDMSE. This finding indicates that the high school students in this study have level of confidence in their abilities to make career decisions where they feel very good about making these types of decisions (Betz et al., 1996).

Private school students' Career Decision Making self-beliefs were not significantly different from their public school counterparts even though on four of

five of the subscales measured on the CDMSE-12 item indicating a greater level of career decision-making self-efficacy for public school than private. Only problem solving had a greater result for private school students but still no significance was found.

The other research showed that students attending a large state university scored higher than students attending a private liberal arts college (Betz & Taylor, 2006). The lowest mean was on the Problem solving scale that was mostly resulted over respondents from the private college.

Other studies (Luzzo, 1993; Betz et al., 1996) had indicated a positive relationship between CDMSE and age. The findings of this study supported these previous findings even though the differences weren't significant.

Females scored higher than males on four of five of the subscales measured on the CDMSE-12 item indicating a greater level of career decision-making self-efficacy for females than males. Betz and Hackett (1981) studied the differences between the genders and suggested that females will have different career behaviors than men because a woman typically lacks the strong expectations of personal efficacy for many career-related barriers. This study does not support that statement. Previous studies (Fouad & Smith, 1996; Betz & Taylor, 2006) that performed a comparison of the effect of gender on CDMSE did not find significant differences. The findings of this study indicate the same. There were no significant differences between females and males.

The study confirmed the relationship in career decision making self-beliefs between private-public secondary school students and their grade level and gender.

Recommendations

School administrators and policy makers should make themselves more aware of how the career decision making develops in young adolescents, what are essential factors that contribute to career decision making and what steps must be done to facilitate the career development among students that about to leave the secondary school and make their first decision towards future career.

When viewing Career decision making of young Thai adolescents through the lens of CDMSE there are certain points the researcher considers addressing:

- The need of gradual career development in school;
- The need of improving student problem solving skills in public schools;
- The need of improving goal setting skill among male adolescents;
- The relationship between gender and grade level in Career decision Making;
- Gathering occupational information among high school students;
- Goal selection of students from various grade levels.

Bibliography

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: W.H. Freeman and Company.
- Betz, N., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counseling Psychology*, 28, 399-410.
- Betz, N., Klein, K., & Taylor, K. (1996). Evaluation of a short form of the career decision making self efficacy scale. *Journal of Career Assessment*, 4, 47-57.
- Betz, N. & Vuyten, K. (1997). Expectations influence career exploration and decidedness. *The Career Development Quarterly*, 46, 179-189.
- Betz, N. & Taylor, K. (2006) Manual for the career decision self-efficacy scale and CDSE- short form. Department of Psychology, The Ohio State University, 1835 Neil Avenue Mall, Columbus, OH 43210-1222
- Blustein, D., Devenis, L., & Kidney B. (1989). Relationship between identity formation process and career development. *Journal of Counseling Psychology*, 36, 196-202.
- Blustein, D. (1997). A context-rich perspective of career exploration across the life roles. *Career Development Quarterly*, 45(3), 260-274.

- Bright, J. (1996). Gender and role salience in the prediction of undergraduates' career decision-making self-efficacy. *Dissertation Abstracts International*, 57, 3904 (UMI No. 9705679).
- Brislin, R. (1980). Translation and content analysis of oral and written materials. In H. C. Triadis & G. W. Berry (Eds.), *Handbook of cross-cultural psychology* (pp. 398-444). Boston: Allyn & Bacon.
- Chaisang, C. (2006) SEAMEO Singapore, Statement by H E Mr. Chaturon Chaisang, Minister of Education, Thailand 2006. United Nation Educational, Scientific and Cultural Organization, Sector of External Relations and Cooperation. UNESCO, Paris.
- Creed, P. & Patton, W. (2003) Predicting Two Components of Career Maturity in School Based Adolescents . *Journal of Career Development* 29(4):pp. 277-290.
- Creed, P., Patton, W. & Watson, M., (1999) *Cross-cultural equivalence of the Career Decision-Making Self-Efficacy Scale – Short Form: An Australian and South African comparison*, Griffith University – Gold Coast, Queensland Australia.
- Crites, J. (1961). A model for the measurement of vocational maturity. *Journal of Counseling Psychology*, 8, 255-259.
- Crites, J. (1978). *Career Maturity Inventory*. Monterey, CA: CTB/McGraw Hill.

- Dayton, C. & Stern, B, 1989. *California Partnership Academies: 1987–88 Evaluation Report*, Policy Paper No. 89-9-1. Berkeley, CA: Policy Analysis for California Education.
- Denham, T., *Careers in Transition*,
<http://jobsearch.about.com/od/careeradvice/a/summer.htm>, (2007).
- Fouad, N., Smith, L., (1996) A Test of a Social Cognitive Model for Middle School Students: Math and Science. *Journal of Counseling Psychology* 43(3):pp.338-346.
- Fouad, N., Smith, L., & Enochs, L. (1997). Reliability and validity evidence for the middle school self-efficacy scale. *Measurement and Evaluation in Counselling and Development*, 30, 17-31.
- Forty-seventh session of the International Conference on Education (2004). *Ministry of Education of Thailand National report*. Geneva 8-11 September.
- Hackett, G. (1995). Self-efficacy in career choice and development. In A. Bandura (Ed.), *Self-efficacy in changing society* (pp. 232-258). New York: Cambridge University Press.
- Hampton, N. (2006). Scale-Short Form in Chinese High School Students. A Psychometric Evaluation of the Career Decision Self-Efficacy. *Journal of Career Development* 33 (2), 142-155.
- Hughes, K., Bailey, T. & Mechur, M. (2001). School-to-Work: Making a Difference in Education. *A Research Report to America*.

- Isaacson, L., & Brown, D. (2000). *Career information, career counseling, and career development*. Needham Heights, MA: Allyn & Bacon.
- Jimenez, E. (2007) *Investing in Young People is Critical for Thailand's Social and Economic Development*, March 12, 2007, Singapore.
- Jimenez, E. (2007) Social Monitor 2007: Youth in Thailand– Challenges Facing a New Generation, Thailand.
- Jimenez, E. (2005). The relative efficiency of public and private schools in developing countries.
<http://wbpro.oxfordjournals.org/cgi/content/abstract/6/2/205>, website
- Kearsley, G. & Shneiderman B., *Engagement Theory: A framework for technology-based teaching and learning*, 1999.
- Lent, R., Brown, S., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45, 79-122.
- Lent, R., Brown, S., & Hackett, G. (1995). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45, 79-122.
- Lent, R., Brown, S., & Hackett, G. (1996). Career development from a social cognitive perspective. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development* (3rd ed., pp. 373-421). San Francisco: Jossey-Bass.

- Lent, R., Brown, S., & Hackett, G. (2002). Social Cognitive Career Theory. In D.Brown & Associates (Eds.), *Career choice and development* (4th ed., pp. 255 - 311). San Francisco: Jossey-Bass.
- Lonner, W. (1981). Psychological tests and intercultural counseling. In Pedersen P., Draguns J., Lonner E., & Trimble J. (Eds.), *Counseling across cultures*. Honolulu: East-West Centre and University of Hawaii.
- Luzzo, D. (1993). Value of career decision-making self-efficacy in predicting career decision-making attitudes and skills. *Journal of Counseling Psychology*, 40, 194-199.
- Luzzo, D. & Day, M. (1999). Effects of Strong Interest Inventory feedback on career decision-making self-efficacy and social cognitive career beliefs. *Journal of Career Assessment*, 7, 1-17.
- McMahon, M. & Patton, W. Eds (2006). *Career Counselling. Constructivist Approaches*. London: Routledge.
- Mitchell, L., & Krumboltz, J. (1996). Krumboltz's learning theory of career choice and counseling. . In Brown D., Brooks L. & Associates (Eds.), *Career choice and development* (3rd ed., pp. 233-280). San Francisco: Jossey-Bass.
- Ministry Of Education of Thailand, 2004, National report.
- Peterson, S. (1993). Career decision-making self-efficacy and social and academic integration of underprepared college students: Variations based on background characteristics. *Journal of Vocational Education Research*, 18(1), 77-115.

- Punch, J., *Career development of adolescents who are hard of hearing: career maturity, career decision making and career barriers among high students in regular classes*, July 2005, web search findings of Griffith University, Gold Coast, Australia.
- Reller, D. (1984). *The Peninsula Academies: Final Technical Evaluation Report*. Palo Alto, CA: American Institutes for Research in the Behavioral Sciences.
- Ryan, P. The School-to-Work Transition: A Cross-National Perspective. King's College University of Cambridge. *Journal of Economic Literature*. March 2000.
- Stern, D., and Wagner, D., eds. *International Perspectives on the School-to-Work Transition*. Creskill, NJ: Hampton Press, 1999.
- Stickel, S., & Bonett, R. (1991). Gender difference in career self-efficacy: combining a career with home and family. *Journal of College Student Development*, 32, 297-301.
- Taylor, K., & Betz, N. (1983). Applications of self efficacy theory to understanding the treatment of career indecision. *Journal of Vocational Behavior*, 22, 63-81.
- Taylor, K. & Pompa, J. (1990). An examination of the relationships among career decision making self-efficacy, career salience, locus of control, and vocational indecision. *Journal of Vocational Behavior*, 37, 17-31.
- Thongtip, C. (2006) Thailand Country Report, 30 - 31 October 2006.

UNESCO, Report of meeting on “A multi-stakeholder approach to address graduate (un)employment”, 16-17 November 2006, Bangkok, Thailand.

www.isb.ac.th/Counseling_Program, career, ISB Thailand, (August 2007)..

www.isbe.net/career, (August 2007) Competency keys for career development.

www.moe.go.th, (August 2007) Statistics.

www.onec.go.th/english, (March 2008) Statistics.

www.rais.ac.th/history.html, Ramkhamhaeng Advent International School (RAIS), (August 2007).

www1.rism.ac.th, Ruamrudee International School (RIS), (August 2007).

Zunker, V. (2002). *Career counseling: Applied concepts to life planning* (6th ed.). Pacific Grove, CA: Brooks/Cole.



Appendix 2

Instrument (Thai Version)

การตัดสินใจเลือกอาชีพ

คุณเห็นด้วยหรือไม่เห็นด้วยว่าคุณจะสามารถทำตามข้อความข้างล่างนี้ได้ โปรดวงกลมระดับความเห็นด้วยของคุณ โดยที่

1. ระดับชั้น	ม4	ม5	ม 6
2. เพศ	ชาย	หญิง	

SA = เห็นด้วยอย่างยิ่ง

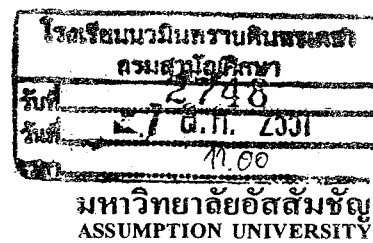
A = เห็นด้วย

N = เห็นด้วยหรือไม่เห็นด้วย

D = ไม่เห็นด้วย

SD = ไม่เห็นด้วยอย่างยิ่ง

1.	หาข้อมูลเกี่ยวกับอาชีพที่คุณสนใจ 5 อาชีพในห้องสมุด	SA	A	N	D	SD
2.	วางแผนเป้าหมายการศึกษาของคุณในอีกสามปีข้างหน้า	SA	A	N	D	SD
3.	เลือกหนึ่งอาชีพที่คุณสนใจจากรายชื่ออาชีพที่คุณกำลังพิจารณาอยู่	SA	A	N	D	SD
4.	ระบุอาชีพที่เหมาะสมกับคุณที่สุดได้	SA	A	N	D	SD
5.	ตัดสินใจได้ว่าอะไรคือสิ่งที่คุณให้ความสำคัญมากที่สุดในการประกอบอาชีพ	SA	A	N	D	SD
6.	ปฏิเสธความพยายามของพ่อแม่หรือเพื่อนที่จะสนับสนุนให้คุณเลือกอาชีพที่เกินความสามารถหรือไม่เหมาะสมกับคุณได้	SA	A	N	D	SD
7.	บอกถึงทักษะในการทำงานของอาชีพที่คุณอยากทำได้	SA	A	N	D	SD
8.	เลือกอาชีพที่ผู้ประกอบอาชีพส่วนใหญ่เป็นคนละเพศกับคุณ	SA	A	N	D	SD
9.	เลือกอาชีพที่ตรงกับความสนใจของคุณ	SA	A	N	D	SD
10.	ตัดสินใจได้ว่าควรเลือกเรียนอะไรจึงจะทำให้คุณประสบความสำเร็จในอาชีพอย่างที่คุณตั้งใจไว้	SA	A	N	D	SD
11.	ค้นคว้าหาคำตอบแทนโดยเฉลี่ยของอาชีพใดอาชีพหนึ่งได้	SA	A	N	D	SD
12.	พูดคุยกับผู้ที่ได้ประกอบอาชีพในสาขาที่คุณสนใจ	SA	A	N	D	SD



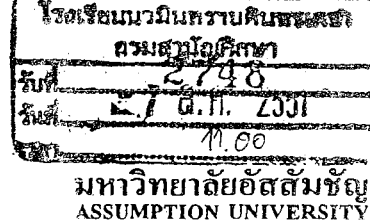
- 7 a.A. 2551

รับเรื่องพร้อมเอกสารแล้ว

5

~~CONFIDENTIAL~~

8 25.0 31



July 30, 2008

Principal
Udomsuksa School
329 soi 94
Ladprao Rd.
Wanthonglang
Bangkok 10310

Dear Sir or Madam:

Mr. Oleksiy Kostko is a student in the Master of Education Program of the Graduate School of Education, Assumption University. He is conducting a thesis study on “Grade and Gender Differences in Career Decision-Making Self-Efficacy among High School Students in Selected Public and Private Schools in Bangkok, Thailand”. The student would like to collect data at your school.

I would greatly appreciate all the support that you can provide for Mr. Oleksiy Kostko. I am confident that his research will contribute greatly to the field of education. Please.. accept my sincere gratitude for your support and much needed assistance in this matter.

Very truly yours,

P. Achava-Amrung
Assoc. Prof. Dr. Pornchulee Achava-Amrung
Dean, Graduate School of Education

Graduate School of Education
Tel: 66 2 3004553 ext. 3717
Fax: 66 2 3004143

เรียน ผู้อำนวยการเพื่อทูลเกล้าฯ ถวาย
.....การบรรณ
ความเห็นรอง ผอ.กลุ่มบริหารงบประมาณ
เห็นควรแจ้ง
☒ กลุ่มบริหารวิชาการ ☐ กลุ่มบริหารทั่วไป
☐ กลุ่มบริหารงานบุคคล ☐ กลุ่มบริหารงบประมาณ
☐
.....รอง ผอ.กลุ่มบริหารงบประมาณ
- 7.3.2 2551

คำสั่งผู้อำนวยการ

☒ 775117

☒ English

☒ 2

รับเรื่องพร้อมเอกสารแล้ว

ผู้อำนวยการโรงเรียน

7 A. 255

