

Chapter 1

Introduction

Education, essential for people in general, helps make a person wise and rounded. It also helps men and women to become cultured and to have a good understanding of their roles and responsibilities in society. Well-educated citizens of a nation are likely to help bring out available natural resources to make them most fruitful and most effective. It is thus an important endeavour of the national government to provide educational systems and management to meet the needs at an appropriate level, as well as to put an emphasis on their provision. Thus education is an essential factor for human resource development. It has a direct effect on the progress and advancement of the nation as a whole, especially with respect to higher learning, where the production of manpower for specialized fields is urgently needed to meet the nation's needs in social and economic development.

Manpower is especially needed for graduate studies. It is quite obvious from the national education development schemes in the past that universities and institutions of higher learning have increasingly accepted a larger number of new students every year. For instance, the Seventh Development Scheme of Tertiary Education in Thailand (1991-1996) had set forth quantitatively an increase of graduate students in all specialized fields. There were, for instance, an 8% increase per year for those in the field of Science and Technology and a 5% increase per year for Humanities and Social Sciences. For the Eighth Development Scheme of Tertiary Education (1997-2001), it is set forth that an average 5.5% increase of graduate students per year is expected through a limited system for new incoming graduate students.

Education at the graduate studies level is quite importantly distinct from that of the undergraduate studies level. That is, graduates at the undergraduate level are chiefly produced to meet the needs of society whereas those at a graduate studies level are trained to be more advanced in terms of their specialization and expertise to be better leaders and change agents in society. It is therefore necessary to have

appropriate measures or standards in screening more qualified candidates capable of meeting requirements and successfully completing graduate study programs with minimal educational waste. At present the screening procedures for graduate studies candidates in general place an emphasis on the candidate's academic competence.

Prince of Songkla University is no exception. In general practices of screening candidates for graduate studies, scores of preliminary examinations are mainly considered. However, the literature on related studies has shown that several academics have proposed that other qualifications of the candidates should also be taken into consideration. Such qualifications should include educational background, work experience, gender, age, marital status, domicile, institutions or universities of bachelor's degree, duration of period from finishing bachelor's degree until enrolling in the Master's degree, full time or part time status, income, etc. All of them are in line with the Seventh National Development Scheme of Tertiary Education indicating policy and measures on admission of students to the university for the improvement of the admission system procedures of students to be of greater efficiency, equity and justice, based on an individual candidate's socio-economic background and intelligence (Seventh Development Scheme of Tertiary Education, 1991-1996 : 19). From such a policy, Prince of Songkla University has provided a response to the nation's needs by increasing enrolments for graduate students in various fields. And at the same time it has taken into account the operations of graduate studies programs for higher quality to the utmost. However, statistics from the Student Admission and Records have shown that at Prince of Songkla University's Pattani Campus during the academic years of 1990-1994 there were 34 graduate students (7.04%) who had not completed their degree requirement in a time limit of degree completion to become left-over ones. (Student Admission and Records Bulletin, 1997 : 5).

It may be said from the statements mentioned above that the Thai government has attempted to place a great deal of emphasis on the significance of education for the outcomes to be effectively fruitful and of high quality. As an educational agency producing bachelor's degree graduates, a university is to take into consideration the efficiency of the operations concerning the admission process. It is the special interest of the present investigator to examine what factors are directly or indirectly related to

the academic achievement of these former graduate students who had already completed their Master's degree requirement from the entire Prince of Songkla University. The factors under study include educational background, work experience, gender, age, marital status, domicile, occupation, faculty, study plan (plan A, requiring a thesis and plan B, not requiring a thesis), institutions or universities of bachelor's degree, bachelor's GPA, duration of period from finishing bachelor's degree until enrolling in the Master's degree, type of study (full time or part time status), and total years of graduate studies. The study also aims to examine whether or not and to what extent these factors are related to the academic achievement of graduate students as well as what factors could be good predictors for such academic achievement. The implications of the findings of such a study like this would be expected to be useful for future research studies.

Review of Literature

The literature regarding related factors affecting academic achievement of graduate students may be concluded and presented in order as follows. Definition of graduate studies, academic achievement, its definition and theories, factors affecting academic achievement, research studies on factors on student status, and academic achievement in undergraduate studies programs.

1. Graduate Studies Defined

Education at the graduate study level is higher and more advanced than at the undergraduate level, as defined by Wijiit Srisa-arn (Office of Graduate Studies, 1980 : 57) as "the term itself derived from "Graduate Study," which refers to "education offered after the completion of undergraduate study programs by students." This means that it is an education provided for those who have completed a university education or an education higher than an undergraduate level. The type of education might include an education of an advanced diploma or postgraduate Master's degree and a doctorate degree. In general graduate studies may be characterized as follows: (Srisa-arn, W. 1979 : 22-26)

1) Specialization – One of the trends for graduate studies in part aim to produce specialists in a particular field of study. The main objects are to enhance in-depth studies in specialized fields of professionalism.

2) Another type of graduate study is research-oriented; the study is done only through conducting research work.

3) The third type of graduate study is called “professionalization”, usually being in the form of one-year certificate training provided for keeping abreast with the professional standard.

4) The last type of graduate study is done through a scholarship to train academic specialists equipped with academic knowledge as leaders in the specialized fields. At present this type of quality is very much needed in graduate studies.

2. Achievement and Theories of Academic Achievement

Achievement refers to knowledge, understanding, ability or success derived from work cumulatively gained through great efforts. The outcomes of such attempts are based on intelligent and physical abilities leading to success. Concepts and ideas on achievement have been contributed by several psychologists and educators in the past. For instance, Good (1973) explained that persons of certain types should be more successful than others even though they were of similar intelligence and physical skills. However, some other psychologists believed that this might be attributable to the fact that such persons desire more success than others. In other words, being successful for one person may be more important an aim in leading to a way of life than another’s goals in life. For example, McClland, having an interest in studying people’s personal needs for success, made use of the Thematic Apperception Test (TAT) to measure are individual’s need for success. These findings showed that the subjects with high scores tended to set their life goals and behaviours related to success by themselves rather high.

Academic achievement has been defined as the mental competence students gain in the past from direct and indirect experiences from teachers. The term

“achievement” has been given various meanings by a number of educators, such as the following

Decho Savananond (1977 : 3) concludes that achievement refers to success accomplished through a great deal of effort to reach the set goal, or may refer to the extent of success gained in a particular aspect or success accomplished in general.

Paisal Wangpanich (1983 : 30-31) states that academic achievement may be defined behaviours or abilities from the outcomes of instruction where a learner shows that his growth is gained from direct training or teaching. That is to say, it is an array of behaviours of students as the outcome of what they have learned. Such behaviours include memorization, understanding, analysis, application, synthesis and appraisal.

Arom Petchuen (1984 : 46) states that academic achievement refers to outcomes or results comprising cognitive competence, emotions, values and morality all derived from instruction, training or experience gained at school, home and other surrounding environments.

For international sources on academic achievement, the following comments have been made.

Good (1973 : 7) regards achievement as accomplishment or work effectiveness in a given area of functional skills or cognitive skills. The term academic achievement is defined as an access to knowledge, academic skill development derived from test scores, drills/training or scores earned from work or assignment given by teachers or both of these.

Eyesenck, et al. (1972 : 16) argues that achievement means a multitude of success or accomplishment in doing a piece of work with a set of effort which might have resulted from work done physically or mentally. Academic achievement is, therefore, defined as a multitude of success from an individual’s learning manifested in terms of an indicator of it. Academic achievement may be derived from non-testing procedures, such as observation and checking of work assigned or as school grades. School grades could be derived through complex procedures and a long interval of evaluation or through a published achievement test. It is generally found that a school

grade is chosen as a popular index of academic achievement because it looks and sounds more reliable than other forms. This is generally so since several related factors have been taken into account of the procedures before a final grade is derived. School grades are better than any other forms of showing success or failure resulting from the test scores of an only-one-shot procedure.

The definitions and meanings mentioned above may be put in a nutshell, that is, academic achievement is a mixture of characteristics and abilities of a person better developed or enhanced and derived from instruction and training. Such characteristics comprise cognitive as well as non-cognitive capacities manifested in terms in scores or a grade-point average (GPA), which can be practically observed and measured by any achievement test.

3. Factors Affecting Academic Achievement

In instructional management what is most desired by teachers is to enable students to learn it to the utmost both theoretically and practically. Factors or variables affecting academic achievement are manifold. According to Bloom (1976 : 167-176), such variables not only depend on intelligence but also on other variables. They may include

- 1) Cognitive behaviours, being learners' competence including aptitudes and personal background;
- 2) Affective characteristics, being environments and motivations driving learners to acquire new experience. These may include interests, attitudes toward school subjects and the instructional system, self-perception and personality;
- 3) Teaching quality, referring to advice, instructional participation, reinforcement from teachers, error correction and feedback from self performance.

Bloom concludes that variables of cognitive and effective and teaching quality could help explain the variance in academic achievement accurately up to 50%, 25% and 25% respectively. However, if the cognitive and effective variables were combined and other variables kept constant, they could explain the variance in

academic achievement accurately up to 65%. When all these variables are combined, they could help explain the variance in academic achievement accurately up to 90%.

In a study on factors indicating academic achievement concerning success or failure, Klausmeir and Ripple (1961: 28-29) proposed that a model of factors affecting academic achievement should consist of learner characteristics, teacher characteristics, physical characteristics, learner-teacher behaviour, group characteristics, and external motivation. Klausmeir concluded that learner characteristics comprise the most important variable of all in explaining academic achievement. Learner characteristics are composed of the following:

- 1) Intellectual readiness concerning intelligence and cognitive abilities as well as learners' previous knowledge background;
- 2) physical readiness concerning skill capacity and health,
- 3) mental states including interests, attitudes, values and personalities,
- 4) gender,
- 5) age, and
- 6) family and social background.

In other words, factors affecting academic achievement consist of learner characteristics, teaching quality and other environments.

4. Related Studies

To date, a sizable amount of research on the subject all the undergraduate level is available in Thailand with only a few for the graduate study level. Below is a short list of research work at hand.

Thani Nongnuch (1984 : 386) conducted a study at Ubolrajanthani Teachers College on factors affecting academic achievement of senior students at a Higher Certificate program (Por. Kor. Sor Soong), senior students at a two-year undergraduate program and senior students at a four-year undergraduate program.

It was found that the GPA of upper secondary education was significantly related to the academic achievement in the Teachers College.

Orapin Choochum and Achara Sukharom (1988: 60) conducted a study of a sample of 311 first-year graduate students at Srinakarinwirote University Prasarnmit on the relationships between university entrance exam scores, BA academic achievement, personal problems, attitudes and study habit and MA academic achievement. It was found that the sample with different gender and work experience showed a difference in academic achievement. BA academic achievement and age were correlated with MA academic achievement. BA academic achievement was positively related to MA academic achievement ($r = 0.36$) while age was negatively related to MA academic achievement ($r = -0.12$). Work experience, duration of time between BA graduation and entering the MA program and income were not related to MA academic achievement.

Metta Kuning (1997 : 42) carried out a study of 627 undergraduate students who entered Prince of Songkla University, Pattani Campus in 1993 and completed their 4-year degree program. It was found that gender, age, domicile, and GPA at upper secondary education were significantly related to BA academic achievement. The results of multiple regression analysis indicated that age and GPA at high school were positively related with BA academic achievement. GPA was the most important predictor for academic achievement in the BA education.

Montarat Choopinit (1997 : 90-92) conducted a study of 297 samples of fourth-year students of four-year undergraduate program at Rajabhat Institute Nakhon Sri Thammarat in 1996. It was found that GPA at high school was significant positively related to BA academic achievement.

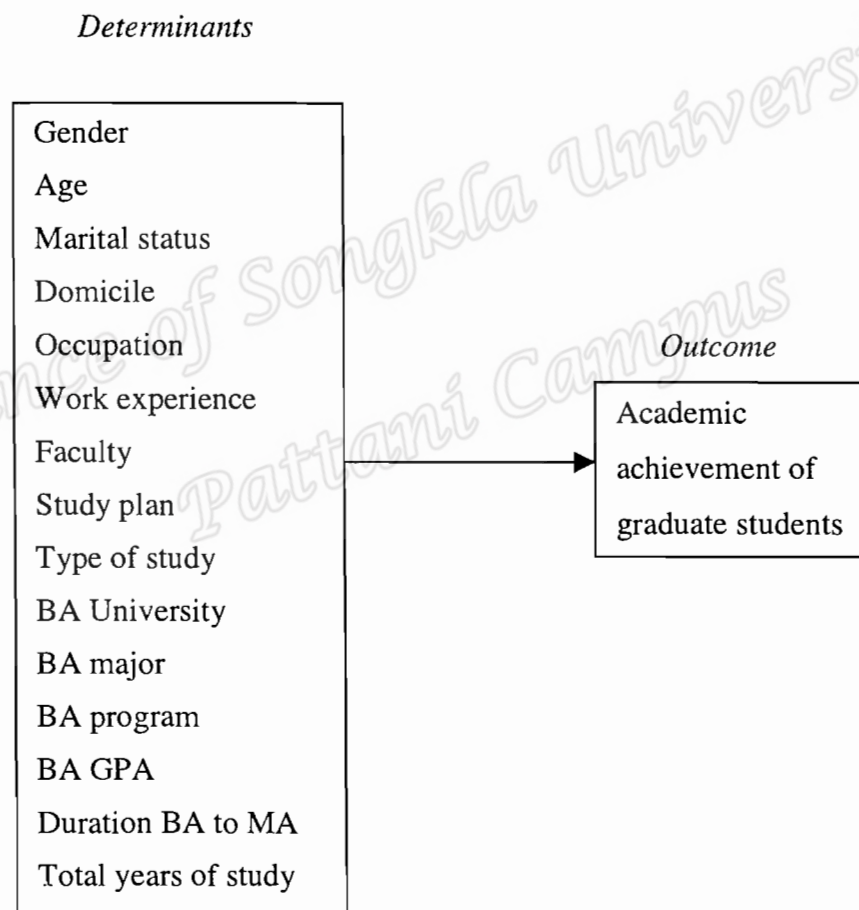
From a few studies on the subject mentioned above, it may be concluded that GPA at a lower level of education is probably a good predictor for academic achievement at a higher level of education. That is, GPA in upper secondary education is a good predictor for BA academic achievement. And likewise, GPA at a bachelor's degree level is also a good predictor for MA academic achievement. In addition, student status also affects academic achievement.

Walailak Attathirawong's study (1995 : 46) on factors affecting academic achievement among freshmen in state universities reveals that different faculties to which students belong resulting in different academic achievement could be due to

different teaching methods, different content difficulties of each faculty. This finding confirms the study's finding by Porntip Thavornjak (1982 : 23). It can be concluded that different faculties to which students belong could affect students' academic achievement.

We now show the relationships between academic the achievement of graduate students and factors effected to academic achievement. The conceptual model of this study is as follows.

Figure 1.1: Relationships between academic achievement and several factors



Research Objectives

This study has two objectives as follows.

1. To investigate the association in academic achievement with each of several determinants.
2. To construct a model for predicting the academic achievement of graduate students.

Thesis outline

This thesis contains five chapters. Chapter 1 has explained why we have chosen to investigate this particular topic, reviewed some relevant literature, and described the objective of the investigation. In Chapter 2 the methods used in this study are described. These methods comprise the study design, the method of data selection, the data collection and data management, and the method of statistical analysis. Chapter 3 gives preliminary results, including a descriptive summary of all variables, box plots and 95% confidence intervals, the correlation coefficient between each of the continuous determinants (age, experience, BA GPA, duration from BA to MA, total years of graduate study) and the outcome. Chapter 4 describes a multiple regression model for prediction of academic achievement, by stepwise multiple regression analysis. Finally, conclusions and discussion are presented. The limitations of the study and suggestions for further research are described in Chapter 5.