

Factors Affecting Academic Achievement of Nursing Students at the Nursing Colleges under the Jurisdiction of Praboromarajchanok Institute

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บทคัดย่อ

การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาปัจจัยที่มีความสัมพันธ์กับผลสัมฤทธิ์ทางการเรียนของนักศึกษาวิทยาลัยพยาบาลสังกัดสถาบันพระบรมราชชนก กระทรวงสาธารณสุข และวิเคราะห์อิทธิพลของปัจจัยที่ส่งผลต่อผลสัมฤทธิ์ทางการเรียนของนักศึกษา วิทยาลัยพยาบาลสังกัดสถาบันพระบรมราชชนก กระทรวงสาธารณสุข กลุ่มตัวอย่างในการวิจัยครั้งนี้คือนักศึกษาพยาบาลชั้นปีที่ 4 ที่สำเร็จการศึกษาในปีการศึกษา 2550 วิทยาลัยพยาบาล สังกัดสถาบันพระบรมราชชนก กระทรวงสาธารณสุข จำนวน 1,307 คน ได้จากวิธีการสุ่มแบบแบ่งกลุ่ม (Cluster sampling) เครื่องมือที่ใช้ในการวิจัยประกอบด้วยแบบสอบถามแบบเลือกตอบ 5 ตัวเลือกและแบบสอบถามปลายเปิด ผลการวิจัยสรุป ดังนี้

1. ปัจจัยที่มีความสัมพันธ์กับผลสัมฤทธิ์ทางการเรียนของนักศึกษาวิทยาลัยพยาบาลสังกัดสถาบันพระบรมราชชนก กระทรวงสาธารณสุข อย่างมีนัยสำคัญทางสถิติที่ระดับ .05 ได้แก่ พฤติกรรมการเรียนของนักศึกษา ($r = .378$) การเตรียมความพร้อมในการสอบของนักศึกษา ($r = .351$) ความสัมพันธ์กับกลุ่มเพื่อน ($r = .250$) และพื้นฐานความรู้เดิม ($r = .182$)

2. ปัจจัยที่มีอิทธิพลและสามารถพยากรณ์ผลสัมฤทธิ์ทางการเรียนของนักศึกษาวิทยาลัยพยาบาลสังกัดสถาบันพระบรมราชชนก กระทรวงสาธารณสุขได้แก่พฤติกรรมการเรียนของนักศึกษา (X_3) การเตรียมพร้อมในการสอบของนักศึกษา (X_5) ความสัมพันธ์กับกลุ่มเพื่อน (X_4) และโดยสามารถพยากรณ์ได้ร้อยละ 61.90 สมการพยากรณ์ในรูปคะแนนดิบ $Y = 2.851 + .205 (X_3) + .082 (X_5) + .078 (X_4)$

คำสำคัญ: ปัจจัยที่อิทธิพลต่อผลสัมฤทธิ์ทางการเรียน ผลสัมฤทธิ์ทางการเรียนของนักศึกษาพยาบาล พฤติกรรมการเรียนของนักศึกษา การเตรียมพร้อมในการสอบของนักศึกษา ความสัมพันธ์กับกลุ่มเพื่อน

ABSTRACT

The purpose of this study was to explore factors relating to and affecting academic achievement of the nursing students at the nursing colleges under the jurisdiction of Praboromrajchanok Institute for Health Workforce Development. The factors studied included grade point average at high school, attitude toward nursing study, students' academic behaviors, friend relationship, preparation for examination, teaching behaviors, college services, and readiness of clinical settings. The population was composed of all senior nursing students from 29 Boromarajonani Colleges of Nursing under the jurisdiction of Praboromrajchanok Institute for Health Workforce Development in the academic year 2007. A cluster sampling technique was used to recruit 1,708 students from 15 colleges of nursing. A questionnaire with two parts of questions was used in this study: closed ended and opened ended questions. The former focusing on 'factors affecting academic achievement

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of nursing students' asked about factors that might affect academic achievement. The latter asked about students' attitudes toward their studying-behaviors, teaching strategies, and preparation for examination. Data were analyzed using descriptive statistics (mean and standard deviation), Pearson's product moment correlation coefficient and stepwise multiple regression. The results showed that factors significantly ($p < .05$) correlated with academic achievement of the nursing students were students' academic behaviors ($r = .378$), preparation for examination ($r = .351$), friend relationship ($r = .250$), and grade point at high school ($r = .182$). Factors significantly ($p < .05$) predicting academic achievement of nursing students were students' academic behaviors ($\beta = .842$), preparation for examination ($\beta = .566$), and friend relationship ($\beta = .409$). In addition, students' academic behaviors, preparation for examination, and friend relationship were accounted for 61.90 percent of variance in academic achievement of nursing students, $F(1, 1076)$, $p < .05$.

Keywords: academic achievement, nursing students, students' academic behaviors, preparation for examination, and friend relationship

Background

The main purpose of higher educational administration and development is to enable the students to gain both academic and professional competencies. The core competencies of nursing graduates should comprise intelligence quality, thinking process, reasoning, and self-concept, which in turn lead to behaviors. The success of higher educational administration and development as perceived by the students requires instructors' support to enable them to improve their behavioral, mental, and psychosocial aspects. It can be concluded

that higher educational administration and development have to focus on the sustainable development of the whole person (Payutto, 1996). This conclusion is congruence with the National Education Act of B. E. 2542 (1999). The education shall aim at the whole development of the Thai people in all aspects including physical and mental health; intellect; knowledge; morality; integrity; and desirable way of life so as to be able to live happily with other people. In addition, the educational administration shall provide students the opportunities to increase their knowledge and skills congruent with real situations and society needs in the future. The sustainable development should focus on students' authentic practice, and experience based knowledge.

Nursing educational administration focusing on students, the learning processes should include activities facilitating the students to have authentic practice, and experience based knowledge. Teaching in nursing prepares student nurses to be competent in nursing knowledge and clinical practice. Therefore, teaching strategies should include both theory and practice that are correlated.

Academic achievement is believed to be one of important indicators for teaching outcomes. It is the knowledge developed by the teaching processes of each nursing institute. However, it is also recognized that academic achievement is not affected only by academic institute but also natural learning processes, which depends on individual differences.

Praboromarajchanok Institute consists of 29 colleges of nursing, which have the responsibility to produce knowledgeable and competent nurses for the health care system in Thailand. The administrators of each college realized an importance of academic achievement of the student nurses. Knowing factors affecting academic achievement of student nurses graduating from the colleges of nursing,

Praboromarajchanok Institute would help the colleges to improve their students' academic achievement. Therefore, this study was conducted to identify these factors. The results can be used as guidance for nursing educational administration and development of these colleges. In addition, the results can facilitate nursing instructors to prepare student nurses for their Nursing License Examination.

Objectives

The purposes of this study included the followings:

1. To study the relationships among previous knowledge, attitudes toward study nursing, academic behaviors, relationship with friends, teaching behaviors, institute services, readiness of clinical setting, students' preparation for examination and academic achievement of the nursing students.
2. To analyze the factors affecting academic achievement of the nursing students.

Hypotheses

1. There were the relationships among

previous knowledge, attitudes toward nursing study, student studying behaviors, relationship with friends, teaching behaviors, institute services, readiness of clinical setting, students' preparation for examination and academic achievement of the nursing students.

2. Previous knowledge, attitudes toward nursing study, student studying behaviors, relationship with friends, teaching behaviors, institute services, readiness of clinical setting, students' preparation for examination affect academic achievement of the nursing students.

Conceptual Framework of the Study

The researchers studied and integrated theory and knowledge related to academic achievement. The theory and knowledge used in this study included Bloom's Teaching – Learning Process, Gagne's Learning Theory, the Educational Production Function (Alexander, & Simmons, 1975), and the research results founded that previous knowledge, student studying behaviors, and teaching behaviors could predict academic achievement of college students (Maytee, 1991). Figure 1 showed the framework of this study.

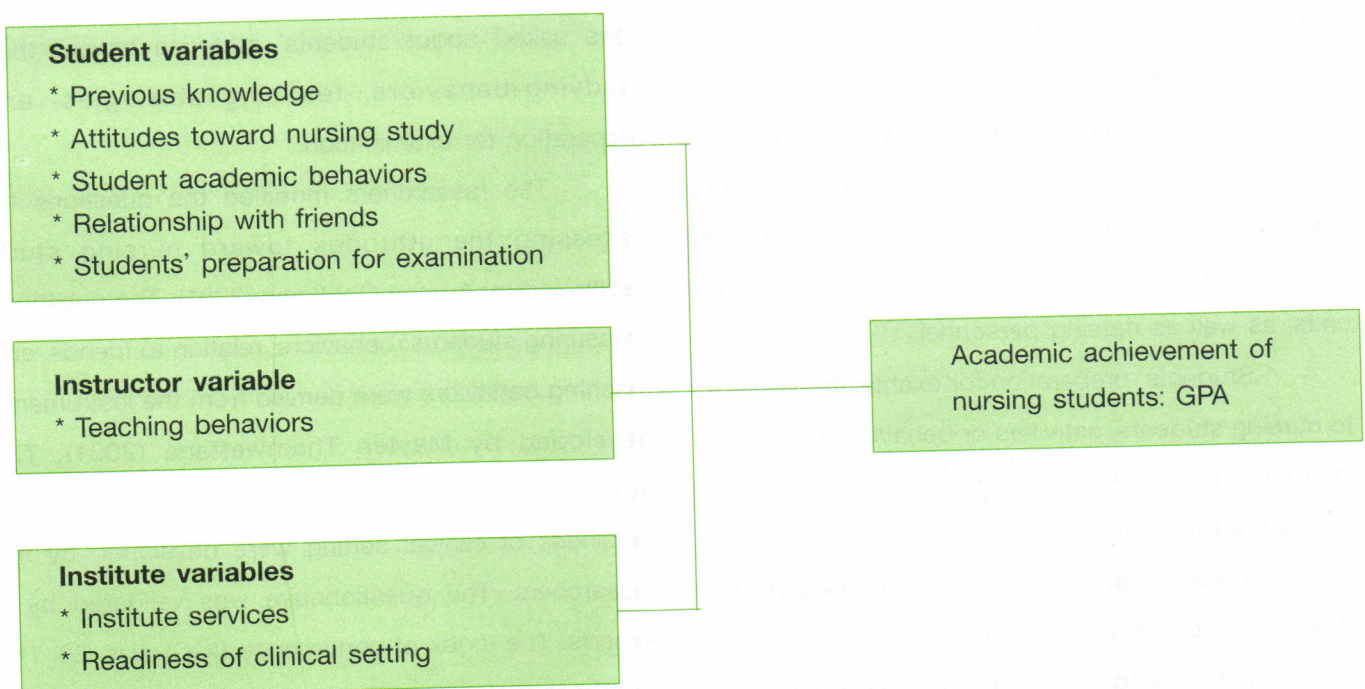


Figure 1 Conceptual Framework of the Study

Definition of Variables

Previous knowledge referred to the students' academic achievement. In this study, the GPA at the high school level was used.

Attitudes toward nursing study referred to the students' thoughts and feelings about instructors, curriculum, and nursing educational administration.

Student studying behaviors referred to the academic activities usually performed by the nursing student including time management, review the lessons, doing assignments, intention to the studying, and continuous attending class.

Relationship with friends referred to the characteristics of students related to their friends showing by the adaptation to friends, and helping each other.

Teaching behaviors referred to the strategies of teaching to facilitate learning processes. The behaviors included teaching activities, media use, reinforcement, assignment, and counseling.

Institute services referred to the facilitation of comfort and benefit to students. The facilitation includes the environment of classroom, library, internet, number of instructors, and the educational administration that promotes student learning process.

Readiness of clinical setting referred to the characteristics of clinical settings, which facilitated learning processes and nursing skills, and authentic learning. The readiness consisted of the appropriateness of cases, places, equipments, climate of the nursing units, as well as nursing personnel.

Students' preparation for examination referred to nursing students' activities or behaviors performing in order to meet the requirements of each examination during studying nursing.

Academic achievement of the nursing student referred to the GPA of the students from the beginning of studying nursing to the second semester of the academic year 2007.

RESEARCH METHODOLOGY

Population and sample

The study population was 2,562 fourth year nursing students in the academic year 2007 of 29 colleges of nursing under Praboromarajchanok Institute.

The study sample was recruited using cluster sampling. There were 15 colleges of nursing included in this study. All students in these colleges participated in this study. There were 1,708 students.

Instruments

A questionnaire with two parts of questions was used in this study. There were closed ended and opened ended questions. The part of closed ended questions called 'factors affecting academic achievement of nursing students' asking about factors that might affect academic achievement. A Likert type scale with 5 responses was used. It consisted of 8 sections: 1) students' personal information; 2) attitude toward nursing study; 3) students' academic behaviors; 4) relationship with friends; 5) preparation for examination; 6) teaching behaviors; 7) institute services; and 8) readiness of clinical setting. The opened ended questions asked about students' attitudes toward their studying-behaviors, teaching strategies, and preparation for examination.

The researchers modified the questions for assessing the attitudes toward nursing study developed by Arunee Oopkaew (2001). The questions measuring students' behaviors, relation to friends, and teaching behaviors were derived from the instruments developed by Maytee Thamwattana (2001). The questions assessing preparation for examination and readiness of clinical setting were developed by the researchers. The questionnaire was validated by 5 experts. The index of congruence (IOC) was .86. The Cronbach's alpha coefficient for each sections of the

questionnaire were .727, .709, .608, .828, .925, .840, and .905 respectively.

Data Collection

After permitted by the directors of each college, the researchers sent the questionnaires via postage mail to the coordinators in order to distribute the questionnaires to the students. Then, the coordinators collected the questionnaires and sent back these questionnaires via postage mail. The responding rate was 82.50 percent.

Data Analysis

Data were analyzed by a computer program using descriptive statistics: mean and standard

deviation. Pearson Correlation Coefficient and Stepwise Multiple Regression were also analyzed to answer the research questions.

RESULTS

The analysis showed that 20 – 25 years old age range had the most percent composition respondents, 96.76 percent. The majority of respondents were female, 93.51 percent. The majority ranges of GPA at high school level were 3.00 – 3.49, 43.65 percent and 2.50 – 2.99, 42.29 percent. The average scores of each domain in the questionnaire entitled 'factors affecting academic achievement of nursing students' were demonstrated in Table 1.

Table 1 Mean and Standard Deviation of Each Domain of Factors Affecting Academic Achievement of Nursing Students

Domain	Range	X	S.D.
Attitudes toward nursing study	1-5	4.04	.35
Students' academic behaviors	1-5	3.49	.32
Relation to friends	1-5	3.91	.40
Preparation for examination	1-5	3.63	.52
Institute services	1-5	3.69	.58
Teaching behaviors	1-5	3.94	.46
Readiness of clinical setting	1-5	4.04	.43

Pearson's product moment correlation coefficient and stepwise multiple regression were analyzed to investigate the relationships of variables and predicting factors. The results were as follows:

1. Factors significantly ($p < .05$) correlated with academic achievement of nursing students were students' academic behaviors ($r = .378$), preparation for examination ($r = .351$), friend relationship ($r = .250$), and grade point at high school ($r = .182$).

2. Factors significantly ($p < .05$) predicting academic achievement of nursing students were students' academic behaviors ($\beta = .842$), preparation for examination ($\beta = .566$), and friend relationship ($\beta = .409$). Students' Student studying behaviors, preparation for examination, and friend relationship were accounted for 61.90 percent of variance in academic achievement of nursing students, $F(1, 1076)$, $p < .05$.

DISCUSSION

The results showed factors correlating and affecting academic achievement of nursing students at Boromarajonani Colleges of Nursing under the jurisdiction of Praboromrajchanok Institute for Health Workforce Development. Students' attitudes toward nursing study correlated to and affected academic achievement. According to Bloom's Teaching – Learning Process, it might be explained that positive attitudes toward study creates good study habits, which in turn led to academic achievement.

The preparation for examination behaviors correlated to and affected academic achievement. There were various activities of preparation for an examination. For example, reading books, reviewing lessons, practicing the tests, or tutoring with friends promoted the understanding of lessons. The more the students performed these activities, the better they had high scores of the examination.

Relationship with friends correlated to and affected academic achievement. Barr (2008) found that extrovert students usually have many friends and like to meet other people, which may facilitate them to share information and knowledge with each others. Then, they had knowledge and can enable them to have academic success.

Previous knowledge used in this study was measured by GPA at high school correlated to academic achievement. Many studies supported this finding (Kansiri, 2006; Amawan, 2002; Manee, 1998). The GPA is accepted for indicators of qualified students at any academic levels. Therefore, nursing students who have high GPA are more likely to enhance academic achievement.

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