

## A Study on Emotional Quotient of the First Year Nursing Students of Boromarajonani College of Nursing, Chang Wat Nonthaburi

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### บทคัดย่อ

การวิจัยครั้งนี้เป็นการวิจัยเชิงบรรยาย (Descriptive Research) มีวัตถุประสงค์เพื่อศึกษาความฉลาดทางอารมณ์ของนักศึกษาหลักสูตรพยาบาลศาสตรบัณฑิต ชั้นปีที่ 1 ปีการศึกษา 2550 วิทยาลัยพยาบาลบรมราชชนนี จังหวัดนนทบุรี จำนวน 340 คน เครื่องมือที่ใช้ในการวิจัย คือ แบบประเมินความฉลาดทางอารมณ์สำหรับประชาชนไทยอายุ 12-60 ปี ของกรมสุขภาพจิต (2544) ข้อมูลที่ได้นำมาวิเคราะห์โดยคำนวณหาค่าความถี่ ร้อยละ ค่าเฉลี่ย ค่าเบี่ยงเบนมาตรฐาน  $t$ -test chi-square และ ANOVA

ผลการวิจัยพบว่า คะแนนเฉลี่ยความฉลาดทางอารมณ์โดยรวม องค์ประกอบหลักและแต่ละองค์ประกอบย่อยของนักศึกษาอยู่ในเกณฑ์ปกติ ยกเว้นองค์ประกอบด้านดี องค์ประกอบด้านสุข และองค์ประกอบย่อยควบคุมอารมณ์และความต้องการของตนเอง ซึ่งได้คะแนนเฉลี่ยสูงกว่าเกณฑ์ปกติ จากการเปรียบเทียบคะแนนเฉลี่ยของความฉลาดทางอารมณ์ในองค์ประกอบรายด้าน โดยภาพรวมของนักศึกษาทั้งในหลักสูตรปกติและในโครงการผลิตพยาบาลวิชาชีพเพิ่มเพื่อแก้ปัญหาจังหวัดชายแดนภาคใต้แตกต่างกันอย่างไม่มีนัยสำคัญทางสถิติ ในแต่ละองค์ประกอบย่อย มีเพียงองค์ประกอบย่อยพึงพอใจในชีวิตขององค์ประกอบด้านสุขที่แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 โดยคะแนนเฉลี่ยนักศึกษาในโครงการผลิตพยาบาลวิชาชีพเพิ่มเพื่อแก้ปัญหาจังหวัดชายแดนภาคใต้สูงกว่านักศึกษาในหลักสูตรปกติ

จะเห็นได้ว่า ผลการวิจัยในการศึกษาครั้งนี้ได้ให้ข้อมูลพื้นฐานที่เป็นประโยชน์สำหรับผู้วิจัย อาจารย์คนอื่น ๆ และทุกหน่วยงานในวิทยาลัยที่เกี่ยวข้องกับนักศึกษา ซึ่งสามารถนำไปใช้ในการจัดการเรียนการสอนโดยการปรับปรุงบทเรียนหรือสอดแทรกกิจกรรมการเรียนการสอน รวมทั้งการจัดกิจกรรม หรือโครงการในการพัฒนาหรือส่งเสริมความฉลาดทางอารมณ์ในแต่ละด้านให้แก่นักศึกษา และการทำวิจัยต่อไป

### Abstract

The purpose of this descriptive research was to study the emotional quotient of the first year nursing students of Boromarajonani College of Nursing, Chang Wat Nonthaburi. The sample was composed of 340 first year nursing students who were enrolled in the academic year 2007. The instrument used was the Thai Emotional Intelligence Screening Test. The data were analyzed using descriptive statistics,  $t$ -tests, chi-square and ANOVA.

The results showed that the mean scores of emotional quotient in overall, main structures and substructures of the first year nursing students were in the normal range, except the mean scores of the goodness structure, happiness structure, and self-controlling substructure which were in the higher range. There were no statistically significant differences in the mean scores of emotional quotient in all

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main structures of the students in both groups. However, for the substructures, the life-satisfaction substructure was statistically significant ( $p < 0.05$ ), and the mean scores of the students in the supplementary production of professional nurses for solving the problems in the southernmost provinces project were significantly higher than the students in the regular program ( $p < 0.05$ ).

The results of this study provide useful basic data to instructors to enable them to modify and improve their lessons, provide additional teaching activities, and launching projects for promoting the emotional quotient of the students.

**Keywords:** emotional quotient, nursing students

## Background

Although we live in an era of advancement in science and technology, economic and social situations are deteriorating and have consequent effects on all aspects of human society including daily living, working, studying and running businesses. Therefore, advancements in science and technology do not mean that the mental health of the people in the society will be consequently developed. If people cannot adjust and cope with encountered problems, stress will increase and other mental health problems will occur. These problems are exacerbated in people with a low emotional quotient.

The Act of National Education legislation, 1999, category 1 section 6, defined the goal and the principle of education administration as “education administration has to proceed in order to develop Thai people to be perfect humans in all physical, mental, knowledge and virtue aspects, having morality and culture, and living with other

people happily.” Previously, the scholars believed that the intelligence quotient (IQ) was an important factor for achievement, having good lives and happiness. In recent years, psychologists have found that people with high IQ have not necessarily had successful lives. Intelligence quotient attributed only 20% towards success whereas the remainder (80%) was influenced by other factors, especially emotional quotient (EQ). Thus, educational administrators should aim to develop both EQ and IQ simultaneously to improve students’ success and quality of life.

The first year nursing students are in the age group (18 – 21) between late adolescence and early adulthood. Thus they are physically mature with development approaching that of adults. They can control their movement, behavior and emotion better than that of teenagers. Moreover, they are more tolerant to disappointment and are able to solve problems using more appropriate strategies. They have ability to cope with stress, are more realistic, and use less impulsive defense mechanisms than young teenagers. They have more understanding about themselves and interest in the activities that are more specific to their personalities. In addition, they have had to make the decision to choose and train in the professions that are suitable to them. On the contrary, if they do not have maturity of emotion or do not receive appropriate development of emotional skills, they cannot adjust and have low thresholds to the stress resulting in mood disorders, physical and mental illnesses (Gallagher & Kreidler, 1987, Department of Mental Health, 2007).

Nursing is a profession that provides health

care services to people in all age groups, both healthy and sick. The important goals of nursing services focus on four dimensions which are health promotion, health prevention, treatment and rehabilitation for clients to live happily and have a good quality of life. Nowadays, nursing colleges under the jurisdiction of Praboromarajchanok Institute, Ministry of Public Health, use the integrated nursing science curriculum 2002 for teaching and learning management. The curriculum aims to produce graduates who have essential individual desirable characteristics for working in the nursing profession, as follows: (1) respect for individual values and rights, (2) service minded, (3) having good health and maturity of emotion, (4) persistence in virtue, morality and professional ethics codes, (5) having critical and creative thinking, (6) having leadership skills and being able to manage themselves and responsibilities appropriately, (7) being able to work independently and work with other people, (8) always searching for new knowledge and have a love for life-long learning, and (9) being a good member of the profession, being a good citizen of society and living with happiness. To meet the curriculum objectives, therefore, teaching-learning management needs to focus on the holistic development of nursing students, including physical, mental, emotional, social and spiritual aspects. It can be concluded that emotional quotient (EQ) is one of the key factors to help students to attain the goals. The persons with high EQ will be more caring, have morality, motivation and awareness of the public benefits. These will have positive effects on their work quality and happiness at work. In addition, people who have strong personalities and emotional maturity, and

can adjust with the environment properly, will be able to solve encountered problems better than the persons with weak personalities and immature emotions.

Mental health and the emotional quotient (EQ) of humans have a close correlation and are important elements for developing mental stability and appropriate adjustment abilities, and having happiness in lives (Department of Mental Health, 2007). People who have good mental health will have a high EQ. The development of EQ is necessary for mental health promotion and prevention. Therefore, the researchers, as the nursing instructors, were interested in studying the emotional quotient of the first year nursing students of Boromarajonani College of Nursing, Chang Wat Nonthaburi. The results can be useful for instructors and all relevant units in the college to utilize in teaching-learning management by modifying lessons learned, adding teaching activities, launching projects for developing or promoting the emotional quotient of the students. The desirable outcome is thus for students to develop good mental health, live happily in current social situations and be good nurses in the future.

### **Objectives**

The purposes of this descriptive research were to:

1. study the emotional quotient of the first year nursing students of Boromarajonani College of Nursing, Chang Wat Nonthaburi,
2. compare the emotional quotient of the students identified by sex and age,
3. compare the numbers of sample identified by the ranges of emotional quotient scores, and

4. compare between the emotional quotient of the students in the regular program and the students in the supplementary production of professional nurses for solving the problems in the southernmost provinces project.

## Research Methodology

A descriptive study was conducted by using a self-administered questionnaire.

### Sample

The non-probability, purposive sample consisted of 340 first year nursing students who enrolled in academic year 2007. There were 140 students in the regular program and 200 students in the supplementary production of professional nurses for solving the problems in the southernmost provinces project.

### Data Collection

The data were collected by distributing the instrument to the students. The instrument was composed 2 parts: (1) Demographic data included sex, age and classroom; and (2) the Thai Emotional Intelligence Screening Test for Ages 12 to 60 of the Department of Mental Health, Ministry of Public Health, Thailand (2001). This test consisted of 52 items with 4 rating categories (not true, true sometimes, rather true and very true). The Thai Emotional Intelligence Screening Test was divided into 3 main structures: goodness, smart and happiness with Cronbach's alpha coefficient reliabilities of 0.75, 0.76 and 0.81, respectively. The goodness structure consisted of 3 substructures: self-controlling, empathy and responsibility. The smart structure consisted of 3 substructures: self-understanding and motivation, decision making and problem solving, and

relationships. The happiness structure consisted of 3 substructures: proud of self, life-satisfaction and peacefulness.

### Data Analysis

The data were analyzed by using descriptive statistics, *t* - tests, chi-square and ANOVA.

## Research Results

The results of the study can be concluded as follows:

### 1. Demographic Data

The majorities of the students were female (88.5%) and aged between 17-34 years with mean age 19.7 years. In the regular program, there were 140 students. Almost all students were female (97.9%) with mean age 18.7 years. In the supplementary production of professional nurses for solving the problems in the southernmost provinces project, there were 200 students. 82% of them were female with mean age 20.4 years.

### 2. Emotional Quotient of the First Year Nursing Students

2.1. The mean scores of emotional quotient in overall, main structures and substructures of the first year nursing students were in the normal range, except the mean scores of the goodness structure, happiness structure, and self-controlling substructure which were in the higher range.

2.2. Sex and age of the students had no statistically significant differences in the mean scores of emotional quotient.

2.3. The mean scores of emotional quotient in overall, main structures and substructures of the students in both the regular

program and the supplementary production of professional nurses for solving the problems in the southernmost provinces project were in the normal range, except the mean scores of the goodness structure, happiness structure, and self-controlling substructure which were in the higher range.

2.4. When comparing the numbers of sample identified by the ranges of emotional quotient scores, the students in the regular program and the supplementary production of professional nurses for solving the problems in the southernmost provinces project had the scores at the higher range in the goodness structure 61.4 and 59.0 percent and the happiness structure 52.9 and 50.0 percent, respectively. Furthermore, the students in both groups had scores in the normal range for the overall 57.9 and 61.5 percent, and the smart structure 72.1 and 75.5 percent, respectively. However, there were no statistically significant differences in the overall and all main structures. For the substructures, the students in both groups had scores in the normal range for almost all substructures, except self-controlling substructure which had the scores in the higher range 67.1 and 60.5, respectively. In addition, only the relationship substructure was statistically significant ( $p < 0.05$ ).

2.5. There were no statistically significant differences in the mean scores of emotional quotient in all main structures of the students in both groups. For the substructures, only life-satisfaction substructure was statistically significant ( $p < 0.05$ ), and the mean scores of the students in the supplementary production of professional nurses for solving the problems in the southernmost provinces project were higher than

the students in the regular program.

## Discussion

This discussion is divided into 3 parts as follows:

1. The emotional quotient of the first year nursing students

The first year nursing students of Boromarajonani College of Nursing, Chang Wat Nonthaburi had the mean scores of emotional quotient in overall, main structures and substructures in the normal range and the higher range. Moreover, when comparing the numbers of sample identified by the ranges of emotional quotient scores, found that the mean scores of emotional quotient in overall, main structures and substructures of the students in both programs were also in the normal range and the higher range. Similarly, Wimonmas Janchuea (2000) studied the emotional quotient of nursing students and found that most students had the mean scores of emotional quotient of all 3 main structures in the normal range and the higher range. Although the sample in the Wimolmas Chunchau's study consisted of different year classes from the present study, the results from both studies were similar. Also, Pimpimol Ruangrit (2001) studied the emotional quotient of nursing students comparing among the different year classes and found that most students (72%) had the emotional quotient in the normal range. In addition, there were no statistically significant differences in the overall and all main structures of the emotional quotient of the students in different year classes.

It can be described that most first year

nursing students of Boromarajonani College of Nursing, Chang Wat Nonthaburi were the persons who had the emotional quotient fully followed of the 3 main structures. Therefore, the instructors and all relevant units should understand and promote students to have opportunities to use their knowledge and show their individual abilities in order to increase their self-esteem and enable them to be proud of themselves. Ultimately, the students will feel that they are able and diligent to develop themselves and the profession.

## 2. Comparison of the emotional quotient of the students identified by sex and age

Sex of the first year nursing students had no statistically significant differences in the mean scores of emotional quotient. Similarly, the Department of Mental Health (2001) found that sex had no statistically significant differences in the mean scores of emotional quotient in both overall and the three main structures. The researchers of the Department of Mental Health had discussed this finding and suggested that this may imply equality between men and women. Especially, when comparing with 50 years ago, there was no clear separation about treating, establishing popularity, attitudes and giving opportunities to boys and girls to act out. Furthermore, both men and women have more freedom in education and to earn a living. Likewise, in nursing education, the numbers of male students have been gradually increasing. Therefore, the mean scores of emotional quotient of male and female students were not much different as shown in the results of this study.

Although most mean scores of the

emotional quotient with regards to overall, main structures and each substructure of the first year nursing students with older ages were higher than the students with younger ages, there were no statistically significant differences in the mean scores of emotional quotient. This finding was different from the finding of the Department of Mental Health (2001) which found that the groups with younger ages had mean scores of emotional quotient in overall and main structures lower than the groups with older ages that differed significantly. The result came out this way may be because of the students' ages did not differ much from each other. In this study, the students aged between 17-34 years and most students (83%) aged 18-20 years. From the literature review, it was found that emotional development of humans will increase and mature as they get older. The persons in late adolescent, early, middle and late adulthood will be able to recognize and understand self and others' emotions. They will also be able to adjust with situations and manage various problems. These showed that the emotional maturity of the persons has increased (Stewart, Perlmutter & Freidman, 1988; Turner & Helms, 1995).

## 3. Comparison between the emotional quotient of the students in the regular program and the students in the supplementary production of professional nurses for solving the problems in the southernmost provinces project.

The students in the regular program and the students in the supplementary production of professional nurses for solving the problems in the southernmost provinces project had the mean

scores of emotional quotient in overall and main structures at the normal and higher ranges. However, there were no statistically significant differences in the overall and all main structures. It can be said that the students in both groups had no significant differences in the level of emotional quotient, and they had fully followed of the 3 main structures. It was essential that the instructors and all relevant units in the college should be aware of and promote the students' emotional quotient to be in the normal range. In addition, instructors should help the students to continuously develop their emotional quotient and give opportunities to them to show their individual abilities.

When comparing the numbers of sample in the regular program and the supplementary production of professional nurses for solving the problems in the southernmost provinces project identified by the ranges of emotional quotient scores, only relationship substructure was statistically significant ( $p < 0.05$ ). There were 4 students in the regular program and 10 students in the supplementary production of professional nurses for solving the problems in the southernmost provinces project who had emotional quotient scores in the lower range. Most students had emotional quotient scores at the normal range, 97 students in the regular program and 158 students in the supplementary production of professional nurses for solving the problems in the southernmost provinces project. There were 39 students in the regular program and 32 students in the supplementary production of professional nurses for solving the problems in the southernmost provinces project had the emotional quotient scores in the higher range. It can be

concluded that most students of both groups had the emotional quotient scores of the relationship substructure at the normal and higher ranges. This was a desirable result, especially for the nursing profession because relationships with others is one of the important roles in nursing practice. Nurses have to be able to build good relationships with their clients and health care teams. However, for 14 students with the scores at the lower range, it did not mean that they had emotional-mental abnormality. Such students had lower than normal emotional quotients in the aspect of relationships with others, and needed to be solved and improved (Department of Mental Health, 2001; Nuntawadee Worawasuwut, 2004).

When comparing the mean scores of emotional quotient of each substructure, only life-satisfaction substructure was statistically significant ( $p < 0.05$ ), and the mean scores of the students in the supplementary production of professional nurses for solving the problems in the southernmost provinces project were higher than the students in the regular program. It can be described that although there were problems related to terrorism in the areas affecting the mental health status of the students, they still felt that they had been given good opportunities and were proud for joining the supplementary production of professional nurses project which received the full expense support from the government, resulting in them having more satisfaction in their lives.

### **Conclusion and Suggestions**

It can be seen that the results of this study have given useful basic data for the researchers,

other instructors and all relevant units in the college to utilize in teaching by modifying lessons taught, adding teaching activities, launching activities or projects for developing or promoting the emotional quotient of the students.

Further studies in this area are still needed, for instance, comparing the emotional quotient of the students in all year classes, comparing the emotional quotient of the students in each year class with the students in other institutes, identifying other related factors affecting the students' emotional quotient, and developing the activity models for improving the emotional quotient of the students who had emotional quotient scores in the lower range.

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